

Inflation Report

November 1999

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.

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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.

Overview

Economic growth in the United Kingdom has picked up sharply, while inflation has remained subdued. Since last year's global economic turbulence, robust domestic consumption and capital investment have contrasted with weak net trade and stockbuilding. But with activity in the world economy recovering and stocks in better balance, the dampening effect of these latter factors has moderated. So too have downward international price pressures—indeed producer input prices are now rising—though sterling has again strengthened. The labour market is tightening, and nominal pay growth is no longer easing. Nevertheless, inflation on the RPIX measure has been below the 2½% target for the past six months.

The international economic outlook has improved further since the *August Report*. Robust growth with low inflation—but with a still widening trade deficit—has continued in the United States. Forward-looking indicators point to strengthening activity in the euro area, and there are further signs of recovery in Japan. Prospects for many emerging market economies have also improved. Substantial risks remain—for example from the possibilities of asset price falls—but the overall picture is brighter. Partly in view of this, a number of commodity prices have picked up further, notably oil. And since the *August Report*, monetary policy has been tightened in the United States and in the euro area.

Output in the UK economy is estimated to have grown by 0.9% in the third quarter, significantly higher than expected three months ago. Estimated growth in the first half of the year has also been revised up. The annual rate of GDP growth is now 1.8%. Growth has been strongest in service sector industries, but manufacturing output has also risen in recent months.

Final domestic demand—especially household consumption—has continued to grow strongly, and was 4.5% higher in the second quarter than a year before. Having significantly lowered overall demand for UK output since mid 1997, net trade—exports less imports—made a positive contribution to growth in Q2, and exports have continued to grow since then as world trade has picked up. Rising demand has been met in part by a rundown in stocks. If net trade and stockbuilding

stabilise, the growth rate of final domestic demand will need to ease in order to keep overall demand in line with the economy's supply capacity.

The recovery from last autumn's low points in a wide range of business survey indicators, including manufacturing as well as services, has been maintained. Reports from the Bank's regional Agents confirm expectations of a positive near-term outlook for most business sectors. However, a number of recent surveys point to a pick-up in cost pressures.

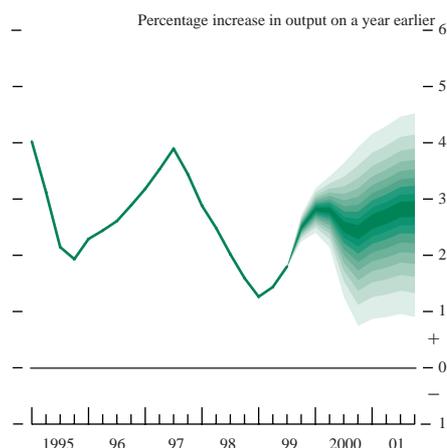
Narrow money growth remains firm, but broad money growth has weakened further, to its lowest rate on record. This weakness is largely accounted for by a sharp reversal of the previous expansion of deposits by non-bank financial corporations. Household borrowing—to finance house purchase and other consumption—has been buoyant, and housing market strength appears increasingly broad-based. The Bank's official interest rate was increased by 0.25% to 5.25% in September, and by a further 0.25% to 5.5% in November.

Unemployment has fallen further—to 5.9% on the Labour Force Survey measure and to 4.2% on the claimant count. Employment growth, total hours worked, vacancies, and measures of employment intentions have all picked up. Survey evidence and reports from the Bank's regional Agents suggest that recruitment difficulties have increased in some areas and for some types of skill, but not uniformly. Overall, however, labour market conditions have tightened in recent months.

Nominal pay growth as measured by the Average Earnings Index rose to 4.9% in the three months to August, largely on account of higher growth in private sector pay in the services industries. However, wage settlements have on average remained broadly flat. Pay growth in real terms has been rising for some time on most measures, but this might in part reflect lower-than-expected price inflation, as well as labour market tightness.

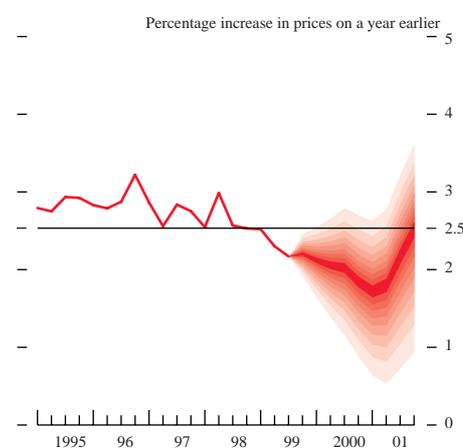
Sterling has again strengthened since the summer, and the starting-point for the projections below is an effective exchange rate index (ERI) of 105.6, which is about 3% above the central path assumed in the *August Report*. As before, there is considerable uncertainty about exchange rate prospects. The projections below assume,

Chart 1
Current GDP projection based on constant nominal interest rates at 5.5%



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 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.

in the central case, that sterling’s ERI declines to 101.8 at the two-year forecast horizon. This is half the decline that would be implied by interest rate differentials. Exchange rate assumptions are discussed further in Section 6.

On the assumptions agreed as the MPC’s best collective judgment, the prospects for GDP growth—with the official interest rate remaining at 5.5%—are as shown in Chart 1. The chart reflects the sharper-than-expected recovery in growth that has occurred so far this year. Otherwise the profile is broadly similar to the August projection, though consumption is stronger, and net trade is weaker because of the stronger exchange rate. In the central projection, annual growth is somewhat above trend—between 2.5% and 3%—throughout the two-year forecast period.

On those same assumptions, 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 just below 2% over the next year or so, before rising to the 2½% target by the two-year forecast horizon. Relative to the August projection, upward pressure on inflation from stronger domestic demand and earnings growth is broadly offset by downward pressure from the higher exchange rate path and declining price-cost margins.

There are considerable uncertainties surrounding these projections. Particular uncertainties exist in relation to the path of the exchange rate, earnings, and price-cost margins. Alternative judgments about these issues led some Committee members to prefer a profile for inflation that would be higher or lower than that shown in Chart 2—by ¼% to ½% at the two-year forecast horizon.

The economy is currently enjoying stronger growth and lower inflation than previously anticipated. But the medium-term outlook for inflation is less benign. Because monetary policy decisions take time to work through the economy, interest rates must be set with a view to influencing prospective inflation, uncertain though that is. Delivering price stability is the contribution that monetary policy can make towards sustained growth. That requires vigilance to keep prospective inflation on target. To that end, monetary policy has been tightened pre-emptively since the summer to counter the prospect of inflationary pressures building in the medium term.

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Section 1

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

Section 2

The international environment
Quarterly Bulletin, November 1999, pages 344–52.

Section 6

Sterling's puzzling behaviour
Quarterly Bulletin, November 1999, pages 416–27.

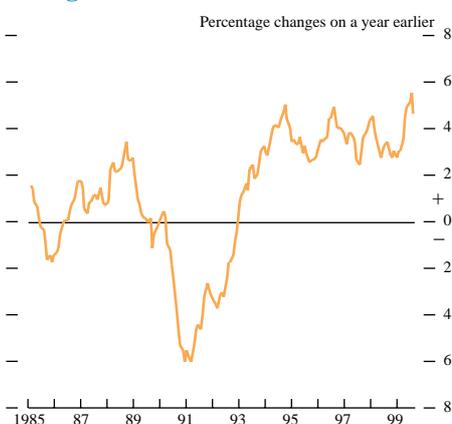
Table 1.A
Growth rates of notes and coin, M4 and M4 lending

Per cent		3 months (a)	6 months (a)	12 months
Notes and coin	Aug. 1999	8.8	8.4	7.6
	Sept.	6.4	7.4	6.7
	Oct.	6.4	7.8	7.3
M4	Q4 1998	6.2	7.7	8.2
	Q1 1999	3.5	4.8	6.9
	Q2	2.6	3.1	5.4
	Q3	-0.9	0.9	2.8
M4 lending	Q4 1998	5.6	7.6	7.7
	Q1 1999	7.0	6.3	7.2
	Q2	8.0	7.5	7.6
	Q3	6.6	7.3	6.8

Source: Bank of England.

(a) Annualised.

Chart 1.1
Real growth in notes and coin^(a)



Sources: ONS and Bank of England.

(a) Deflated by RPIX inflation.

The MPC voted to raise the Bank's repo rate by 0.25 percentage points to 5.25% on 8 September, and voted to maintain the rate at that level at its meeting in October. At its November meeting, the MPC voted to raise the Bank's repo rate by a further 0.25 percentage points to 5.5%. Since the *August Report*, short-term market interest rates have risen somewhat, although long-term rates are little changed.

The sterling exchange rate has appreciated by nearly 3% on a trade-weighted basis since the *August Report*, having risen against both the US dollar and the euro. House price inflation remains high, and that strength appears more widespread across regions than at the time of the *August Report*, but aggregate equity prices are at similar levels to those three months ago.

Growth in narrow money remains fairly strong, but aggregate broad money growth is historically low, owing in large part to a further contraction in the deposits of non-bank financial corporations. Secured lending to households has continued to grow strongly.

1.1 Money and credit

Narrow money

The value of notes and coin in circulation grew by 7.3% in the year to October (see Table 1.A), the same rate as at the time of the *August Report*.⁽¹⁾ Annual real narrow money growth has varied between 3% and 5% for much of the past five years, and is currently towards the top of this range (see Chart 1.1). Some of the recent rise in real narrow money holdings is likely to reflect the lower level of interest rates relative to a year ago, which has reduced the opportunity cost of holding cash. Growth in real narrow money may also signal future growth in real aggregate demand, so robust real narrow money growth seems consistent with the projection of strong output growth over the near-term forecast period.

Looking ahead, there are two special factors that are likely to raise the stock of notes and coin around the turn of the year. First, the winter allowance for pensioners

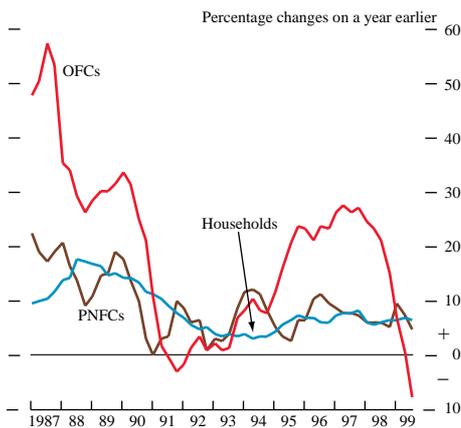
(1) After adjustment for the combined effect of the new £2 and 50 pence coins, the annual growth rate of notes and coin is estimated to have risen from 7.5% in July to 7.6% in October.

and those on Income Support for 1999 was raised from £20 to £100 in the Budget. Second, the Millennium is likely to add temporarily to narrow money holdings, mainly because of the extra bank holiday and additional celebration-related expenditure, although the quantitative impact of these factors is uncertain.

Broad money

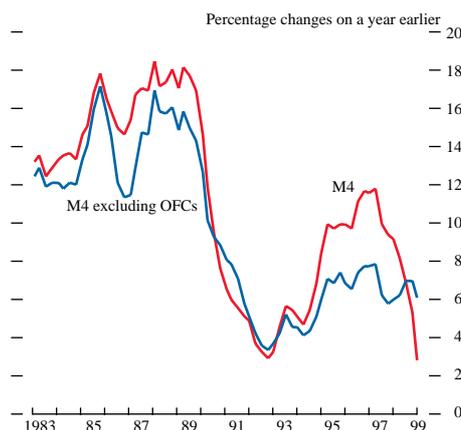
Broad money growth fell in the third quarter of 1999, lowering the twelve-month growth rate to 2.8%. Although the M4 measure was first adopted in 1987, it is possible to construct data back to 1963, and this shows that the current annual growth rate is the lowest on record. But significant sectoral differences persist. The deposits of households and private non-financial corporations (PNFCs) have been growing at a fairly steady rate since 1995, whereas growth in the deposits of other financial corporations (OFCs) has been extremely variable (see Chart 1.2). Having grown strongly between 1995 and 1998, OFCs' deposits have contracted so far in 1999. As discussed below, it seems unlikely that the behaviour of OFCs' deposits has major implications for aggregate demand, so some caution is required when interpreting the aggregate broad money growth figures. Excluding OFCs from the M4 data, broad money growth was a little weaker in the third quarter, although the fall was much less marked than in the aggregate series (see Chart 1.3).

Chart 1.2
Growth in sectoral M4 deposits



Source: Bank of England.

Chart 1.3
Growth in M4 and M4 excluding OFCs



Source: Bank of England.

An alternative measure of broad money that may be more indicative of nominal demand is Divisia. Deposits that are more liquid are given a higher weight in the Divisia index, where liquidity is assumed to be inversely related to the rate of interest paid on the deposit. Aggregate Divisia grew by 4.9% in the year to 1999 Q3, 1.2 percentage points lower than in the second quarter. But annual growth in household Divisia has been higher—at around 7%—during the first three quarters of this year, which seems consistent with the relative strength of consumer spending over this period.

Bank and building society lending to the rest of the private sector (M4 lending) grew at an annualised rate of 6.6% in the third quarter, weaker than in the first half of the year. The twelve-month growth rate slowed to 6.8%, the lowest rate since 1995 Q1. But as with M4 deposits, the aggregate M4 lending data mask some important sectoral differences. As discussed below, borrowing by households remains strong, and the recent weakness in PNFCs' borrowing from banks and building societies has

been offset by higher borrowing from sterling capital markets.

Household sector

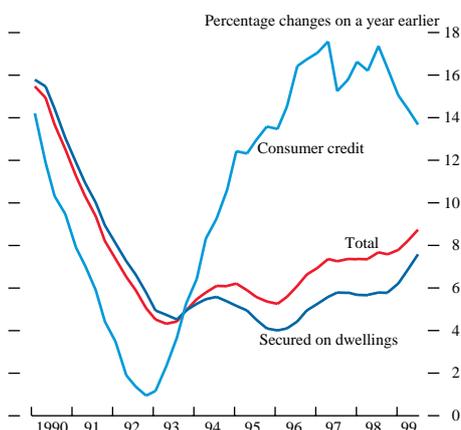
Household deposits grew by 6.4% in the year to 1999 Q3, 0.4 percentage points lower than in the second quarter, but little different from the growth rates seen over the past four years. Growth in households' borrowing from banks and building societies, on the other hand, has picked up strongly in the second and third quarters of 1999. In the year to Q3, households' M4 borrowing rose by 8.2%, the highest rate since the fourth quarter of 1991. A broader measure of lending to individuals, which includes lending by institutions other than banks and building societies, shows similar buoyancy (see Chart 1.4).

Secured lending has continued to grow rapidly, rising by 7.6% in the year to 1999 Q3. It seems likely that this strength will continue in the near future. There have been large additions to the stock of loan approvals during most of this year (see Chart 1.5), and it seems likely that this stock is around its highest level for a decade, even after adjusting for inflation. Unless loan cancellations pick up or there is a sharp rise in repayments of existing borrowing, a large stock of approved loans will result in higher net lending in the future.

New lending secured on housing that is not used for house purchase or home improvements is termed mortgage equity withdrawal (MEW). The Bank's estimate of MEW rose again in the second quarter, and as a proportion of post-tax income reached its highest level since 1992 Q1, although it remains well below levels seen in the late 1980s. Higher MEW might be associated with increased consumer spending, particularly on household goods and consumer durables (see Section 2). MEW is discussed further in the box on page 6.

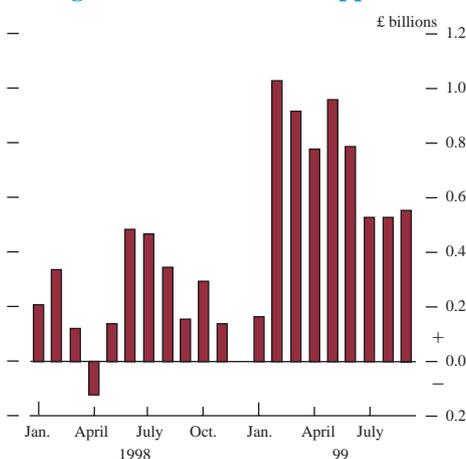
Annual growth in consumer credit remains strong in relation to nominal spending, but fell by 0.7 percentage points to 13.7% in the third quarter. The change in the registration date for new car sales—from once a year in August to twice a year in March and September—is likely to have affected the seasonal pattern of consumer credit. The flow of lending in August might be lower than in the past, while lending in March and September might be rather higher. But it will be some time before the quantitative impact can be gauged with any accuracy.

Chart 1.4
Net lending to individuals



Source: Bank of England.

Chart 1.5
Change in the stock of loan approvals^(a)



Source: Bank of England.

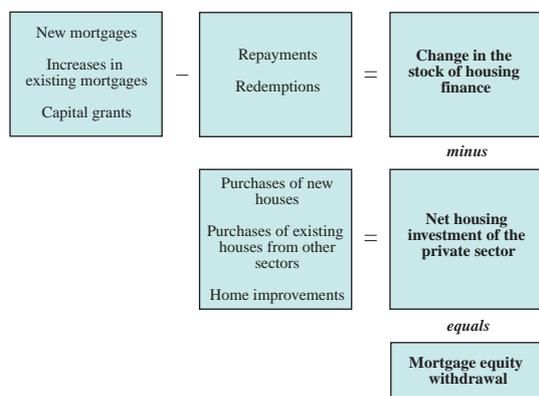
(a) Net of cancellations.

Mortgage equity withdrawal

Mortgage equity withdrawal (MEW) is new borrowing secured on housing that is not invested in the housing stock. The Bank's estimate of private sector MEW was positive in the first half of 1999, having been negative for much of the decade, although it remains well below levels seen in the late 1980s.

The figure below illustrates the factors that enter into the Bank's estimate of MEW. On the one hand, an increase in mortgage lending raises the stock of housing finance, as do capital grants paid to the private sector. Repayments and redemptions reduce the stock of housing finance. On the other side of the equation, the private sector's housing investment increases with purchases of new houses, purchases of existing houses from other sectors (such as council house sales), and with home improvements. The Bank estimates MEW as the difference between the change in the stock of housing finance and the private sector's net housing investment.

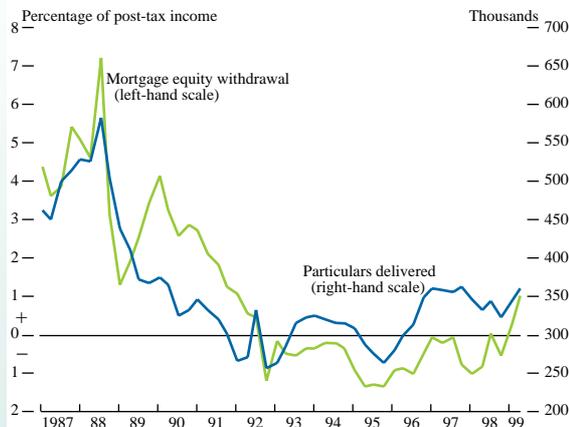
Components of private sector mortgage equity withdrawal



Because MEW is a form of household borrowing, it may be thought of as an alternative to personal loans, overdraft facilities and credit card borrowing. As such, some elements of MEW will be driven by the same influences as other forms of household borrowing, such as income, wealth and interest rates. But MEW will also depend on a number of housing market factors. For example, a household will be able to withdraw equity

through remortgaging only if the house has net equity above a certain minimum level. This suggests that MEW may rise following increases in house prices. (Note that although changes in house prices will affect the value of the housing stock—and therefore housing equity—they do not enter into the calculation of the flow of equity withdrawal.) MEW is also likely to be related to housing transactions. First, because there are fixed costs to arranging a mortgage, households may be more likely to withdraw equity when they are already engaged in a housing transaction. Second, if equity is released by 'last time sales' (eg sales that occur upon death or emigration, or sales of second homes), the withdrawal occurs simultaneously with a housing transaction. As the chart shows, MEW has in the past been positively correlated with housing transactions as measured by particulars delivered to the Land Registry.

Mortgage equity withdrawal and particulars delivered



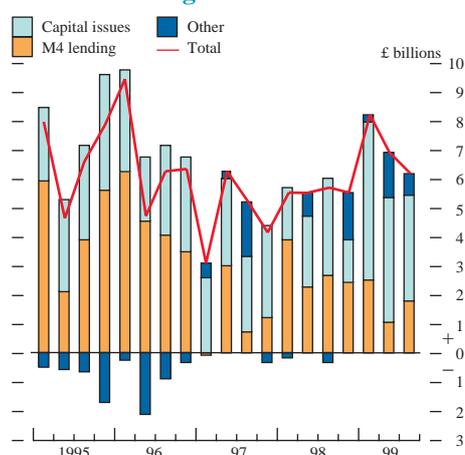
Sources: ONS, Bank of England and Inland Revenue.

Although some housing equity may be withdrawn with the specific purpose of funding consumption, funds raised through equity withdrawal could also be put to a variety of other uses, such as the purchase of financial assets, investment in businesses or transfers abroad. And because MEW is secured borrowing—and so generally incurs a lower interest cost than unsecured borrowing—households may use MEW to pay off unsecured debt.

Private non-financial corporations (PNFCs)

Annual growth in PNFCs' M4 deposits slowed further to 4.9% in the third quarter, almost half the annual growth rate six months earlier. The recent behaviour of PNFCs' deposits is likely to have been affected by the abolition of Advance Corporation Tax (ACT) that was announced in the 1998 Budget, and by the strength in PNFCs' capital issues. The abolition of ACT may have led firms to delay the payment of dividends until the 1999–2000 tax year, and this might account for some of the strong build-up in deposits in the first quarter of the calendar year and the rundown in the second and third quarters.

Chart 1.6
PNFCs' sterling external finance



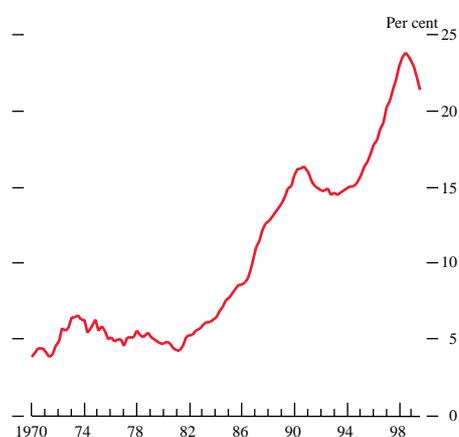
Source: Bank of England.

Annual growth in PNFCs' borrowing from banks and building societies fell to 4.2% in the third quarter, 0.5 percentage points lower than in 1999 Q2. But the relative weakness in PNFCs' sterling borrowing from banks and building societies in recent quarters was offset by sterling capital market issuance, which has been strong in each of the first three quarters of 1999 (see Chart 1.6). Funds raised in capital markets may be used as a direct substitute for borrowing from banks and building societies. And market contacts have suggested that some of the strength in capital market issues is the result of companies bringing forward planned capital issuance, owing to concerns about financial market liquidity around the turn of the year. Higher capital issuance may also be related to business investment, which remained relatively high in the first half of 1999.

Other financial corporations (OFCs)

OFCs' deposits contracted for the third consecutive quarter in 1999 Q3, and have fallen by 7.7% over the past year. Annual growth in M4 lending to OFCs slowed to 5.4% in the third quarter, down from 10% in Q2.

Chart 1.7
OFCs' share of M4



Source: Bank of England.

The share of OFCs' deposits in aggregate M4 has increased markedly over the past two decades, rising from around 5% in 1980 to its current level of more than 20% (see Chart 1.7). So movements in OFCs' deposits have a much greater influence on the aggregate M4 growth rate than in the past. This is problematic for two reasons. First, OFCs' deposits have been more variable than those of other sectors, raising the volatility of the aggregate data. Second, the usefulness of aggregate broad money as an indicator of nominal demand is diminished, as OFCs' activity involves little direct interaction with the markets for goods and services. (One exception to this is financial leasing corporations, but they account for only around 3% of OFCs' deposits.)

Around 60% of the stock of OFCs' deposits is held by other financial institutions and financial auxiliaries (OFIFAs), such as securities dealers and investment and unit trusts, with the remainder held by insurance companies and pension funds (ICPFs). The deposits of both of these sub-groups have contracted over the past year. Nearly 80% of the fall in OFIFAs' deposits can be accounted for by a fall in the deposits of securities dealers. Movements in the latter are a by-product of securities dealers' financial intermediation business, and have no obvious implications for aggregate spending. ICPFs hold deposits mainly for portfolio reasons, and their money holdings therefore depend on expected rates of return on an array of financial assets and on attitudes towards risk-bearing. Although there may be spillovers from ICPFs' deposits to those of the non-financial private sector if the former purchase financial assets from the latter, such transfers are usually hard to identify, even *ex post*.

Chart 1.8
Short sterling futures rates

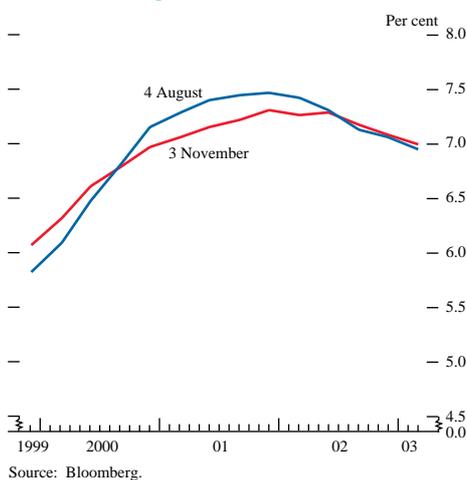
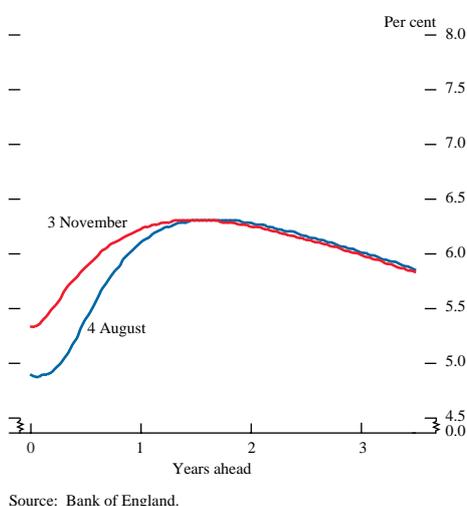


Chart 1.9
Two-week forward rates



1.2 Interest rates and asset prices

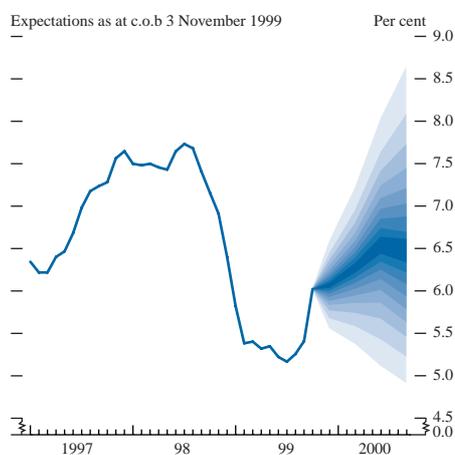
Short-term interest rates

The Bank's repo rate currently stands at 5.5%, compared with 5% at the time of the *August Report*. Market rates suggest that investors are expecting the official rate to rise further, but an accurate quantification of market expectations of official rates is not easy to obtain. Forward rates implied by short sterling futures prices are sometimes cited as the best guide to the market's view of the future profile of official interest rates. Three-month forward Libor rates implied by short sterling futures prices show a peak of around 7.25% in December 2001 (see Chart 1.8). But the relation between short sterling futures rates and official rates is not straightforward. Aside from the maturity mis-match—three-month Libor compared with the official rate which has a maturity of around two weeks—short sterling futures rates contain default and liquidity premia that are not present in the official repo rate.⁽¹⁾ These premia vary both with maturity and over time, and appear to have increased recently at the very short end of the curve, perhaps owing to concerns about liquidity and credit risk over the year end.

Chart 1.9 shows two-week forward interest rates derived from the prices of government bonds and gilt repo rates as at 4 August and 3 November 1999, using a new yield

(1) This relationship is discussed in the box on page 331 of the *Bank of England Quarterly Bulletin*, November 1997.

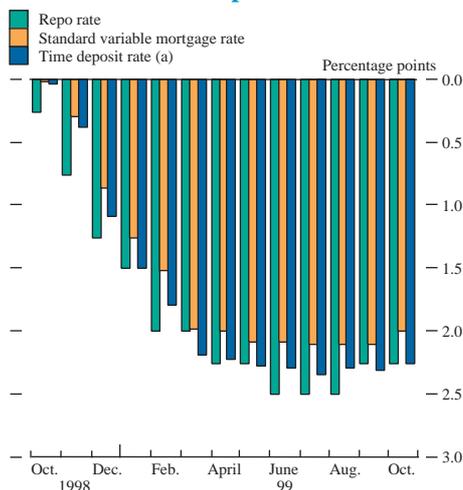
Chart 1.10
Implied distribution for sterling three-month interest rates



Sources: LIFFE and Bank of England.

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 a 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.

Chart 1.11
Cumulative changes in repo rate and selected retail rates since September 1998



Source: Bank of England.

(a) 90-day notice period.

curve estimation technique developed by Bank staff.⁽¹⁾ The new technique has improved the fit and stability of the yield curve, and provides more reliable estimates of forward rates at short maturities. The chart shows that forward rates have risen by around 50 basis points at the very short end of the yield curve since the August *Report*, with a peak just below 6.5% around 18 months ahead. Gilt repo rates are free of many of the risk premia contained in short sterling futures rates, so this curve is likely to provide a better guide to market expectations of future official rates. But technical factors mean that market gilt repo rates tend to be lower than the official repo rate, so that market expectations of official rates probably lie a little above those shown in Chart 1.9. Forward rates from the new yield curve, with an appropriate upward adjustment, are now used to measure market expectations of future official rates in the MPC's projections for RPIX inflation and GDP growth.

Chart 1.10 shows the risk-neutral probability distribution of three-month sterling interest rates derived from the prices of options on short sterling futures on 3 November 1999, using the contracts up to September 2000. Uncertainty about future short-term interest rates, as measured by the variance of the distribution, has fallen since the August *Report*. In the market's view, the risks to short-term interest rates are a little on the upside.

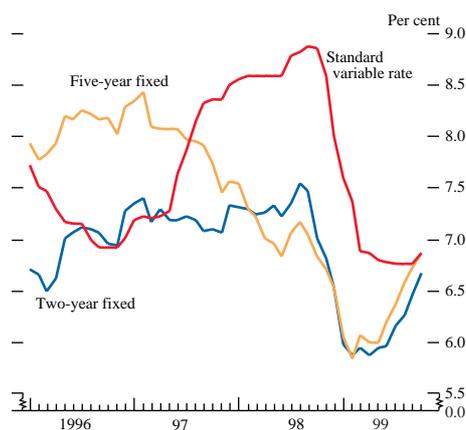
Previous *Reports* noted that there was relatively little movement in retail interest rates following the official repo rate cuts in April and June. Similarly, retail rates remained little changed following the September repo rate rise, so the cumulative change in retail rates over the past year is now broadly in line with repo rate changes over that period (see Chart 1.11). The Bank's measure of the average standard variable mortgage rate (SVR) has been relatively flat during 1999, but fixed mortgage rates have risen sharply (see Chart 1.12). Higher fixed rates might indicate that expectations of future SVRs have been revised upwards.

Long-term interest rates

Over the quarter as a whole, long-term bond yields are little changed. The ten-year nominal spot yield on gilts stood at 5.2% on 3 November, the same level as at the time of the August *Report*. US and euro-area long-term nominal bond yields have similarly shown little net

(1) See Anderson, N and Sleath, J (1999), 'New estimates of the UK real and nominal yield curves', *Bank of England Quarterly Bulletin*, November, pages 384-92.

Chart 1.12
Selected mortgage rates



Source: Bank of England.

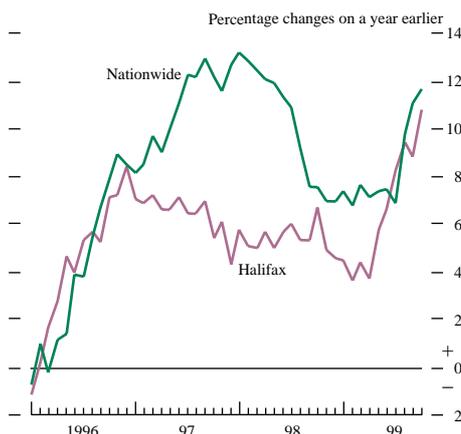
Table 1.B
Percentage changes in selected world equity indices to 3 November^(a)

From:	End 1998	4 August 1999
FTSE 100	6.8	0.7
FTSE All-Share	9.3	-0.3
S&P 500	10.2	3.8
Nikkei 225 (b)	32.6	3.7
Euro Stoxx	12.8	8.8

Source: Bloomberg.

(a) In domestic currency terms.
(b) To close of business 4 November.

Chart 1.13
House price inflation



Sources: Halifax plc and Nationwide Building Society.

movement over this period. And the real ten-year spot yield implied by the prices of index-linked gilts was 2.1% on 3 November, again the same level as in August.

Equity prices

Aggregate UK equity prices are around the same level as at the time of the August *Report* (see Table 1.B). Other major world equity markets have been more upbeat. Equity prices rose by nearly 4% in the United States, and by nearly 9% in the euro area. Japanese equity prices were 4% higher than in August, and have now risen by more than 30% since the start of the year.

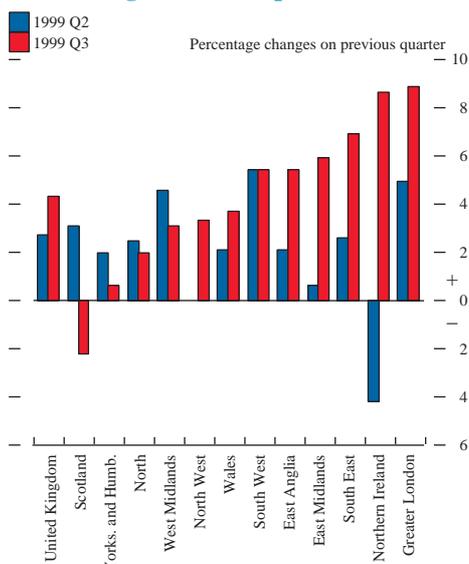
Property prices

House price inflation remains high. The Halifax and Nationwide house price indices show increases of 10.8% and 11.6% respectively in the year to October 1999 (see Chart 1.13). Although marked regional differences remain, house price inflation appears more broadly based than at the time of the August *Report*; according to the Halifax, six of the twelve regions saw house prices rise by more than 5% in 1999 Q3, compared with only two regions in the second quarter (see Chart 1.14).

Some of the recent rise in house prices is likely to be related to reductions in mortgage rates around the turn of the year. To the extent that there are lags in the transmission from lower mortgage rates to higher house prices, house price inflation may remain high for some time. Moreover, employment and labour income continue to grow, and consumer confidence remains high (see Section 2). These factors may support further house price increases. But the rise in fixed mortgage rates discussed above may have some dampening effect on house prices. The MPC has maintained the assumption in its central projection that house prices will grow at around twice the pace of average earnings over the next two years.

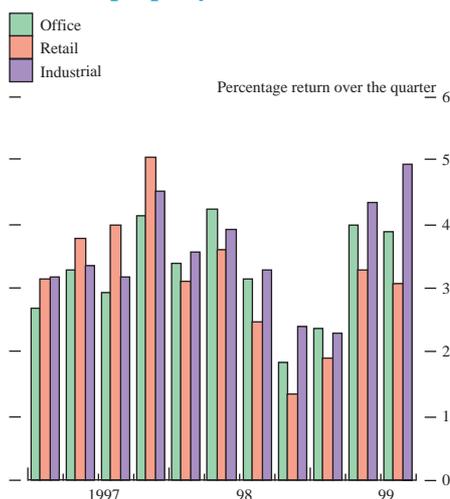
Commercial property returns have continued to recover. According to Investment Property Databank Ltd, aggregate property returns were around 4% in the second and third quarters of 1999, double the figure for the fourth quarter of 1998. The recovery has been strongest for offices and industrial property, with a slightly less pronounced recovery in retail property returns (see Chart 1.15). The Merrill Lynch survey of UK fund managers continues to show a positive balance of those increasing their holding of UK property.

Chart 1.14
Halifax regional house price inflation



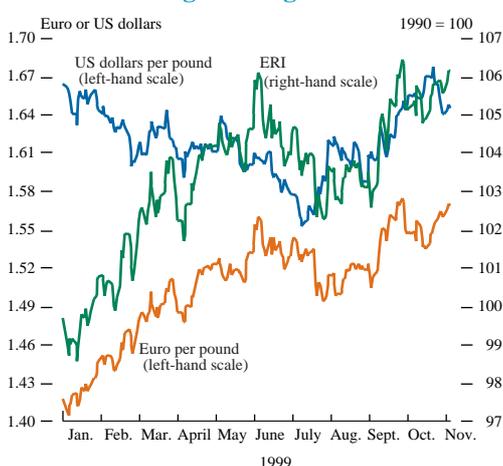
Source: Halifax plc.

Chart 1.15
Sectoral property returns



Source: Investment Property Databank Ltd.

Chart 1.16
Selected sterling exchange rates



Source: Bank of England.

Exchange rates

The sterling effective exchange rate index (ERI) is nearly 3% higher than at the time of the *August Report* (see Chart 1.16). In bilateral terms, sterling rose by 4% against the euro and by 1.3% against the US dollar, but fell by 7% against the yen. The MPC's decision to increase the Bank's repo rate on 8 September came largely as a surprise to the financial markets, and the sterling ERI rose by nearly 1% on that day, and has since risen by a further 2%.

1.3 Summary

Short-term interest rates have risen and the sterling exchange rate has appreciated since the *August Report*, but long-term nominal and real interest rates are broadly unchanged. Fixed mortgage rates have risen, suggesting that expectations of future standard variable rates have been revised upwards, and this may have some dampening effect on housing market activity. Nevertheless, house price inflation remains strong, and commercial property returns have continued to recover. UK equity prices, on the other hand, are little changed.

Narrow money growth remains fairly strong. Broad money growth has fallen to its lowest recorded level, although movements in the aggregate figure continue to be dominated by the non-bank financial sector. Secured lending to individuals remains robust, and this strength seems likely to continue in the near term.

Table 2.A
IMF projections for GDP and trade growth

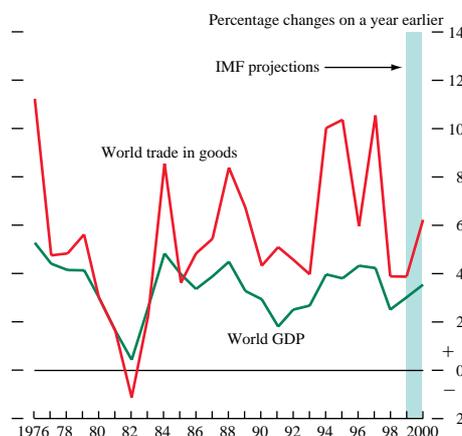
Per cent

	Share of world GDP	1998 (a)		Projections			
		Outturn	Revision	1999 (a)		2000 (b)	
				New	Revision	New	Revision
GDP:							
World		2.5	0.3	3.0	0.8	3.5	0.1
G7	44.4	2.2	0.1	2.6	1.1	2.4	0.4
of which, Japan	7.4	-2.8	0.0	1.0	1.5	1.5	1.2
NIEs (c)	3.2	-1.8	0.8	5.2	4.7	5.1	0.6
Developing economies	39.8	3.2	0.4	3.5	0.0	4.8	-0.1
Countries in transition	4.8	-0.2	0.6	0.8	2.7	2.8	0.3
World trade		3.6	0.3	3.7	-0.7	6.2	0.4

Source: IMF *World Economic Outlook* (WEO), October 1999.

- (a) Differences from December 1998 WEO.
(b) Differences from May 1999 WEO.
(c) Korea, Singapore, Taiwan and Hong Kong.

Chart 2.1
World GDP and trade growth



Source: IMF.

GDP rose by 0.9% in 1999 Q3. Economic activity has strengthened more quickly than expected at the time of the *August Report* and the recovery in consumer and business confidence has proved to be resilient. Final domestic demand has increased rapidly this year, underpinned by buoyant consumer spending. But the impact of strong final domestic demand on activity was dampened by a further weakening of net trade in the first quarter and a rundown in inventories in the first half of the year. Activity has picked up as those effects appear to have moderated. In particular, net trade has stabilised and made a positive contribution to GDP growth in Q2, for the first time in seven quarters.

2.1 External demand⁽¹⁾

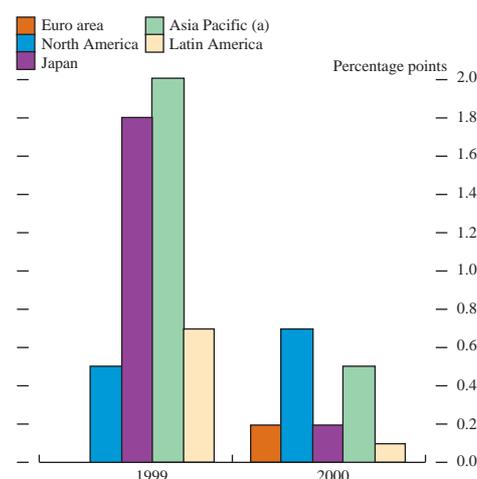
Two main developments have affected external demand for UK exports over the past three years. First, the appreciation of sterling which began in the second half of 1996 depressed demand for UK exports. Second, the contraction of activity in emerging markets in late 1997 and in 1998 reduced world demand and world trade growth, and that had a further impact on UK exports. Export volumes were 1.4% lower than a year earlier at the beginning of 1999 but have risen since then as world activity and trade have improved.

The slowdown in world activity was less pronounced than expected towards the end of 1998, and the recovery has begun earlier than expected at the time of the *May and August Reports*. Growth this year in the industrial countries has been stronger than expected by the IMF (see Table 2.A). The contraction of activity in emerging market economies has been less than projected at the end of 1998 and the return to growth has been faster than anticipated, though conditions in a number of emerging economies remain fragile. These developments have prompted many forecasters—including the IMF—to forecast higher world growth for 2000 than for 1999 (see Chart 2.1).

Turning to the major industrialised countries, growth in the United States picked up in 1999 Q3 to 1.2% from

(1) For a detailed discussion of international economic developments, see 'The international environment' article in the *Quarterly Bulletin*, November 1999, pages 344–52.

Chart 2.2
Forecasts for GDP growth: changes to projections since March



Note: Euro-area projection for 1999 has not changed since March.

Source: Consensus Economics.

(a) Includes Japan, Australasia, North East and South East Asia.

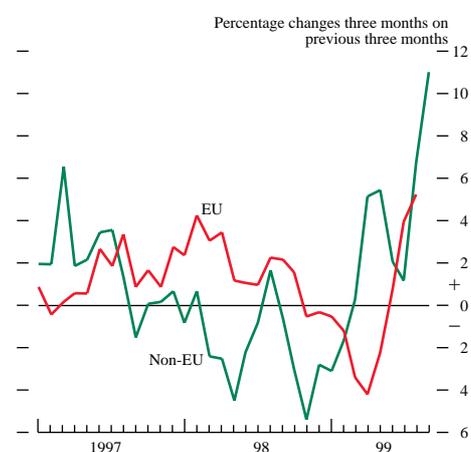
Table 2.B
Destination of UK exports of goods and services^(a)

Regional shares, per cent

	1996	1997	1998
European Union	52.0	50.5	52.2
Other European countries	8.0	8.1	8.0
North America	15.8	16.6	17.6
Latin America	2.2	2.5	2.9
East Asia including Japan	9.7	9.6	7.6
Saudi Arabia	1.9	2.4	2.0
Rest of the world	10.4	10.4	9.7

(a) Current prices.

Chart 2.3
UK export volumes of goods to EU and non-EU countries^(a)



(a) Excludes oil and erratics.

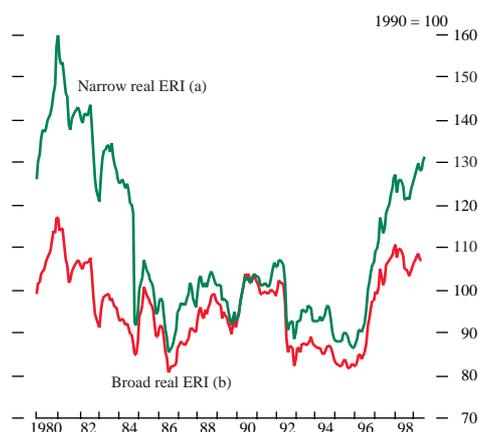
0.5% the previous quarter, as inventories grew at a faster rate and investment strengthened. Final domestic demand growth remained above 1% for the fourth quarter in a row. Net trade detracted from growth as imports again increased rapidly. Euro-area growth was a little higher than in the previous quarter in Q2 and surveys point to stronger growth in the second half of the year. Growth resumed in Japan in the first half of 1999, primarily as a result of higher private consumption. Although the recovery remains fragile, growth forecasts for Japan have been revised up substantially for 1999 and 2000, accounting for much of the upward revision to the Asia Pacific region (see Chart 2.2).

Consistent with the information from external forecasts of world growth and the improved prospects for emerging markets, the MPC's central projection for world activity is a little higher than at the time of the *August Report*. The risks around the central projection for world activity, however, are judged to be on the downside, as in August. For example, one risk is the possibility that the slowdown in the US economy might be more pronounced than assumed in the central case.

The fall in UK exports of goods and services in 1998 was largely accounted for by a contraction of exports to East Asia. As a result, East Asia's share of UK exports fell to 7.6% in 1998 compared with an average of close to 10% in the previous five years (see Table 2.B). In recent months, however, exports to the Asian economies have recovered significantly, exports to North America have grown at a fast pace, and—since June—export volumes to EU countries have also risen (see Chart 2.3). Therefore, overall export volumes have begun to rise. UK export volumes of goods and services rose by 2.1% in 1999 Q2 following two quarters of decline, and monthly data suggest that export volumes rose again in 1999 Q3.

The prospects for UK exports depend on developments in the exchange rate as well as world activity. Sterling's real effective exchange rate index has risen since the beginning of the year (see Chart 2.4), and the nominal effective rate has risen by around 3% since August. That would tend to moderate the growth of exports over the next year or so. But recent surveys of exporters suggest that, to date, the strengthening of world demand has had a larger effect on measures of business export prospects than recent exchange rate developments. The BCC manufacturing survey balances pointed to an increase in export orders in Q3. The falls in export orders reported

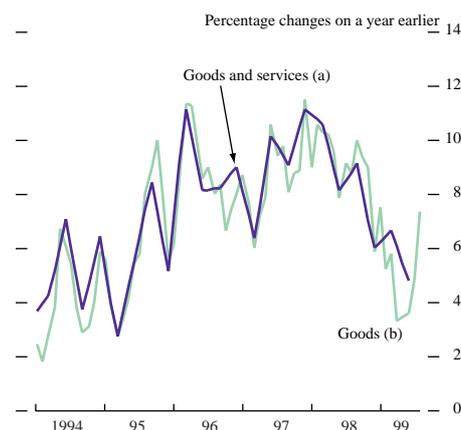
Chart 2.4
Sterling real effective exchange rate^(a)



Sources: IMF, International Financial Statistics.

- (a) The narrow real ERI is a trade-weighted index of 20 countries' exchange rates against sterling calculated using relative normalised unit labour costs in manufacturing.
- (b) The broad ERI is constructed using 49 countries' exchange rates using relative consumer prices.

Chart 2.5
Import volume growth of goods and services



- (a) Quarterly data: monthly data points interpolated.
- (b) Three-month moving averages.

Table 2.C
GDP and expenditure components^(a)

Percentage change on a quarter earlier

	1998		1999	
	Q3	Q4	Q1	Q2
Consumption:				
Households (b)	0.2	1.1	1.6	1.1
Government	0.4	0.8	1.7	0.7
Investment	4.0	1.9	0.4	0.3
of which, business investment	5.5	4.6	0.2	0.8
Final domestic demand	1.0	1.2	1.3	0.9
Change in inventories (c) (d)	0.0	0.4	-0.7	-0.6
Domestic demand	0.9	0.8	1.2	0.2
Net trade (d)	-0.5	-0.8	-1.0	0.5
GDP at market prices	0.5	0.0	0.2	0.6

- (a) At constant 1995 market prices.
- (b) Includes non-profit making institutions serving households.
- (c) Excludes the statistical alignment adjustment.
- (d) Contribution to quarterly growth.

by the CBI survey has moderated since the end of 1998, and optimism about the prospects for exports in the year ahead has become less negative.

UK import volume growth for goods and services has slowed since the end of 1997 and the annual growth rate dipped to 4.8% in 1992 Q2, the lowest since the beginning of 1995. The slowdown in import volume growth appears surprising given the strength of consumers' expenditure and earlier falls in import prices relative to the prices of domestically produced goods. The relative weakness of import volume growth may have reflected a desire by firms to reduce inventory levels, and importers may have underestimated the strength of UK demand in the first half of the year. The slowdown in import volume growth looks to have been temporary. Chart 2.5 shows that import volumes of goods have picked up in recent months, and this has occurred across all major commodity groups.

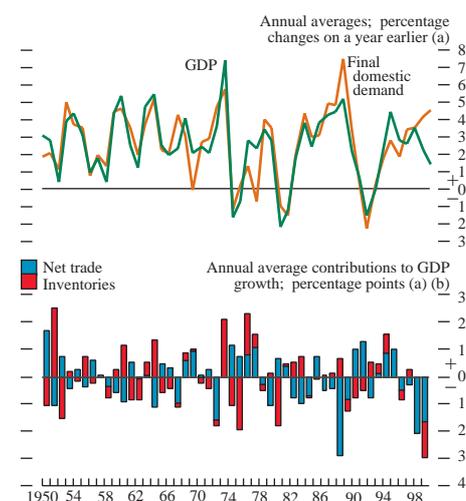
In 1999 Q2, the marked pick-up in export volumes and relatively weak import volume growth meant that net trade made a positive contribution of 0.5 percentage points to quarterly GDP growth, the first positive contribution since 1997 Q3. Faster growth of export volumes than import volumes in recent months is likely to have resulted in another positive contribution from net trade in Q3. Looking further ahead, the MPC expects UK export volumes to continue to rise reflecting the strengthening of world demand, though the recent rise in sterling is likely to restrain rates of growth. Import volumes are expected to increase at a faster rate, in line with stronger domestic demand. Net trade is therefore expected to make negative contributions to GDP growth in 2000 and 2001, though less so than in the recent past.

2.2 Domestic demand

UK final domestic demand, which excludes inventories, was 4.5% higher than a year earlier in Q2. It grew by 0.9% in 1999 Q2, following an increase of 1.3% the previous quarter. That contrasted with slower growth of domestic demand of 0.2%, as inventory levels were run down sharply (see Table 2.C).

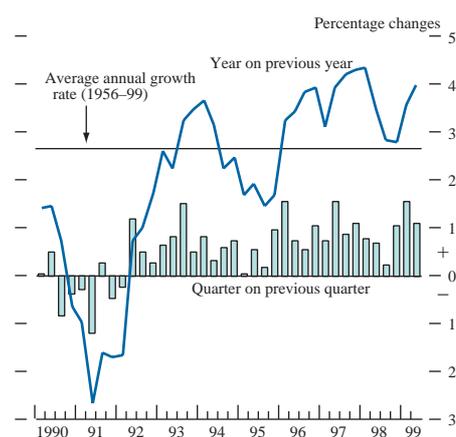
Final domestic demand can be met from domestic production, imports or a change in inventory holdings. Growth in final domestic demand can therefore diverge substantially from GDP growth when there are large movements in net trade or when there are substantial

Chart 2.6
GDP growth, final domestic demand and the impact of net trade and inventories



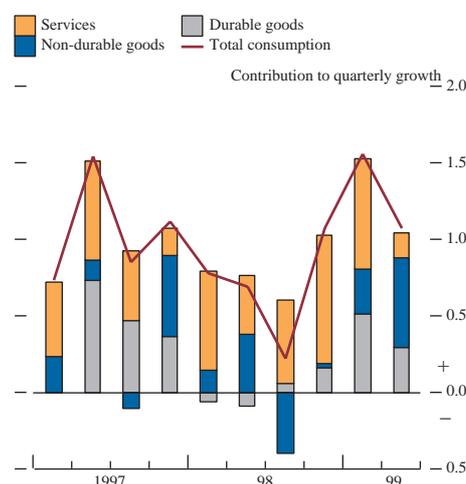
(a) The data for 1999 are for 1999 Q2 compared with a year earlier.
 (b) The contributions from net trade and inventories may not add up to the difference between GDP growth and final domestic demand where a 'statistical discrepancy' has been included in the National Accounts. This affects the data prior to 1985 and in 1998, 1999 (as the accounts for 1998 and 1999 have yet to be balanced).

Chart 2.7
Household consumption growth^(a)



(a) Includes non-profit making institutions serving households.

Chart 2.8
Consumers' expenditure quarterly growth rates



shifts in inventory holdings. Chart 2.6 shows that the annual average growth of final domestic demand has been at or above that of GDP since 1995. The gap between final domestic demand and GDP growth has widened over the period to reach 3 percentage points in the year to 1999 Q2. Alongside 1988 Q1, that was the biggest annual difference in any quarter since the 1950s. Net trade made large negative contributions to annual average GDP growth between 1996 and 1998 as exports slowed in response to the higher exchange rate and weaker world growth. In recent quarters the negative contribution from net trade has moderated and strong final domestic demand has been met partly by a sharp rundown in inventories. Inventories now appear to be closer to desired levels. The gap between final domestic demand growth and that of GDP should consequently narrow in future quarters.

Consumption

Consumers' expenditure has risen rapidly since 1998 Q3, with quarterly growth above 1% in each of the past three quarters. The pick-up has been faster than the MPC expected at the time of the *August Report* and the annual growth rate reached 4% in 1999 Q2 (see Chart 2.7). Although consumption growth was again fairly broadly based (see Chart 2.8), part of this strength was accounted for by an erratic factor. The seasonal pattern of vehicles spending has been affected by the change of registration date for new car sales from once a year in August, to twice a year in March and September. That is likely to have boosted spending growth by around $\frac{1}{4}$ – $\frac{1}{2}$ percentage point in 1999 Q1. It is likely to have had less of an effect in Q2, but it may reduce consumption growth in Q3. In total between January and September, a comparison which should be less affected by the change of registration date, total car registrations were 1.3% lower than in the same period in 1998.

Evidence from monthly indicators points to continued growth of consumption in the second half of the year. Retail sales volume growth has increased markedly since the beginning of 1999, with quarterly growth rates rising to just above 1% a quarter. Volume growth has risen for most categories of retail sales since the start of the year (see Chart 2.9). Sales by food stores have risen but volume growth remains low compared with the past and that may have been one factor, alongside competitive developments, prompting sharper price discounting.

Chart 2.9
Annual growth rates of retail sales

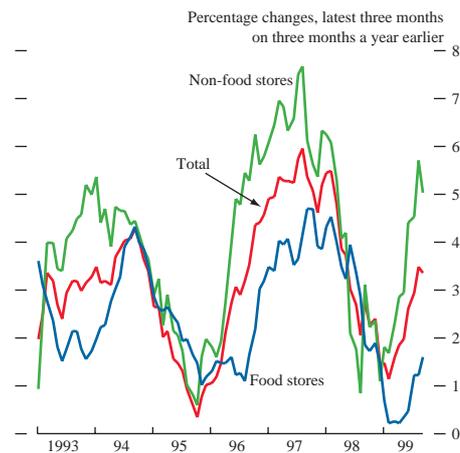
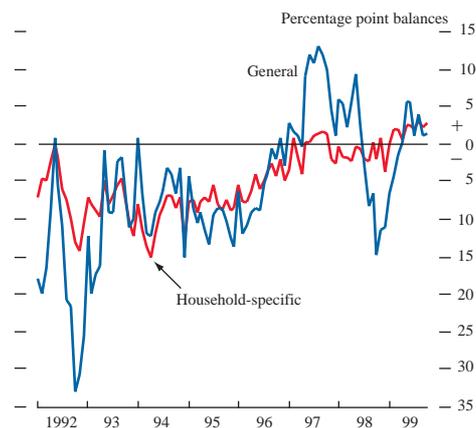
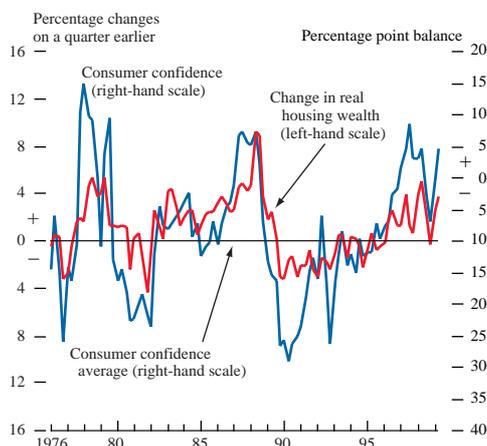


Chart 2.10
Consumer confidence about general and own economic situation



Source: GfK.

Chart 2.11
Housing wealth and confidence



Source: GfK.

The strengthening of consumers' expenditure so far in 1999 has been underpinned by the past buoyancy of labour income, housing and financial wealth. And the improvement in confidence since the start of the year is likely to have boosted expenditure. The outlook for consumption remains robust given the prospects for income and wealth. Real earnings growth, on a number of different measures, increased through 1998 and has remained high in 1999. Unemployment has continued to fall (see Section 3). Housing wealth has continued to pick up, and consumer borrowing—including mortgage equity withdrawal—has risen. Financial wealth has risen very strongly in recent years, though equity prices have fallen since July and are at around the same levels as at the time of the *August Report*.

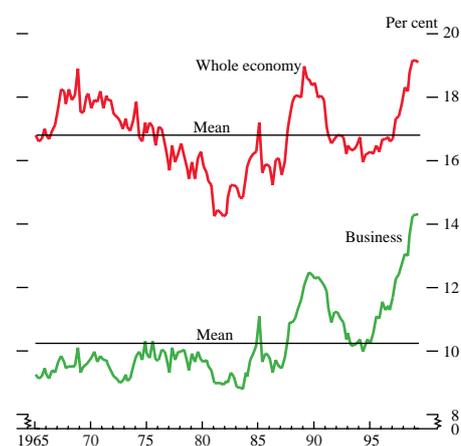
Changes in expectations about future income, which may be reflected in measures of consumer confidence, are likely to have affected the profile of consumption over the past year and a half. Since August, overall consumer confidence measured by the GfK survey has remained positive, and well above its long-run average. Chart 2.10 shows the contrast between household expectations of their own financial situation and expectations about the general economic situation. The latter has a noticeably greater amplitude. Survey respondents report bigger swings in confidence about the general economic outlook, in reaction to economic events and the reporting of events, than in expectations about their own circumstances. Confidence about the general economic situation over the next year has fallen back a little in recent months, whereas confidence about households' own circumstances has remained steady. Consistent with strong income expectations, employment prospects over the next twelve months have improved, according to the GfK and the new Consumers' Association surveys.

Although the sharp rise in financial wealth in recent years has supported higher consumer spending, housing wealth is likely to have provided an additional impetus to spending this year, as noted in the *August Report*. House prices, housing wealth and consumers' expenditure are linked in a number of different ways. Chart 2.11 shows that changes in housing wealth and confidence tend to be closely related. Rising house prices and housing wealth might therefore be echoed in other signs of consumer confidence. Spending could also be boosted if homeowners are able to use their house as collateral against borrowing; that is reflected by mortgage equity withdrawal—which is discussed in the box on page 6. An increase in housing transactions

could also influence consumers' expenditure by changing the replacement cycle for housing-related durable goods. Spending on durables rose by 10.3% in the year to 1999 Q2, though that was boosted in part by vehicles spending.

The MPC has assumed that consumers' expenditure growth will generally be higher over the forecast horizon than expected at the time of the *August Report*, given stronger labour income growth and higher housing wealth. But growth may slow temporarily in 1999 Q3, as the erratic effect of vehicles spending unwinds. Against the background of a generally stronger central projection for consumption, the risks are judged to be balanced.

Chart 2.12
Investment as a share of GDP^(a)



(a) At constant prices.

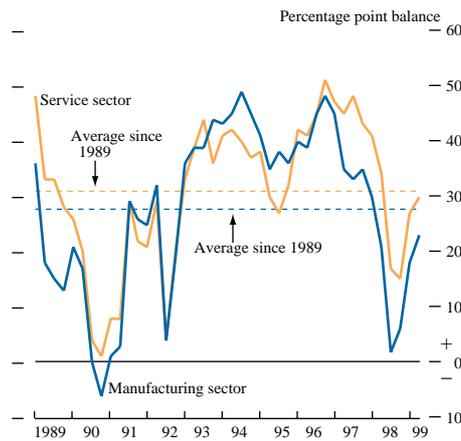
Investment demand

Whole-economy investment rose by 0.3% in 1999 Q2 and was 6.8% higher than a year earlier. Though the ratio of investment to GDP remained at historically high levels (see Chart 2.12), overall investment growth slowed in the first half of 1999 from the fast rates of growth in the previous two years. Business investment was 11.5% higher than a year earlier in 1999 Q2, but growth slowed to less than 1% per quarter in the first half of 1999, following increases of more than 3% a quarter in the previous two years. Investment in the energy and utility sectors and the distribution services sector weakened in the latest quarter, but investment in the 'other services' sector, which includes business and financial services, continued to grow rapidly. General government investment fell in Q2.

Investment takes place as firms' adjust from their current levels of capital stock towards desired levels. The desired capital stock cannot be observed but it, and therefore investment, are influenced by a number of factors. These include current profits, future expectations of output and profits, capacity constraints, changes in technology and the real cost of capital. The rapid growth of investment over the past two years is likely to have narrowed the gap between the current and desired capital stock. That might tend to lead to slower investment growth over future quarters. But since the *August Report*, other factors may have raised investment intentions relative to earlier plans.

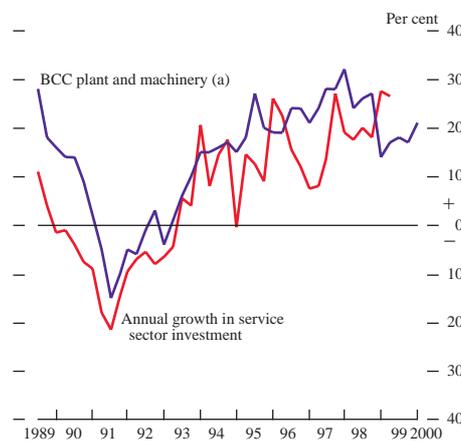
The current level of profits will affect investment to the extent that companies are credit-constrained. Total company profits in 1999 Q2 were 8.9% lower than a year earlier. However, expectations about future profitability

Chart 2.13
Confidence in profitability



Source: British Chambers of Commerce.

Chart 2.14
Service sector investment intentions



Sources: ONS, British Chambers of Commerce and CBI.

(a) Survey balance determined by subtracting the percentage of companies reporting decreases from the percentage of companies reporting increases. The survey balance has been advanced two quarters, as it relates to intentions.

have recovered since the end of 1998 for both the manufacturing and service sectors, and both are close to their long-run averages (see Chart 2.13). Higher-than-expected demand would also be expected to raise investment intentions somewhat, relative to earlier plans.

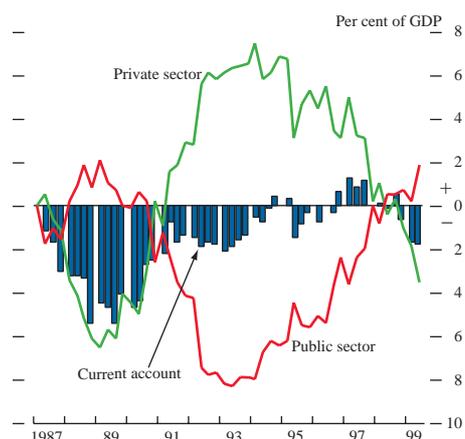
The survey evidence on future investment intentions point to overall growth in investment, but at a slower rate than over the past year. Service sector investment has recently accounted for over two thirds of total business investment. The BCC survey of investment intentions for the service sector indicated continued growth in investment, but at a slower rate than in 1998 (see Chart 2.14). Survey measures of investment intentions for the manufacturing sector have been mixed. The BCC manufacturing survey pointed to an increase in investment intentions in the latest quarter, but the CBI survey reported a larger fall in investment intentions than in the previous quarter.

Government fixed investment (general government plus NHS trusts) accounts for around one tenth of total investment. Real government investment fell in the first half of the year but was some 8% higher than a year earlier in 1999 Q2. The Government's stated nominal investment plans are to raise net public sector investment—that is gross investment less depreciation—as a ratio of GDP from 0.6% in the current financial year to 1% by financial year 2001–02. On average over the latest four quarters, net investment of the public sector was just under 0.6% of GDP at current prices. Though volatile from quarter to quarter, net public sector investment has been broadly in line with the Government's announced plans.

Bringing this evidence together, the MPC has assumed that whole-economy investment rises further as a proportion of GDP, though prospective growth is slower than in 1998.

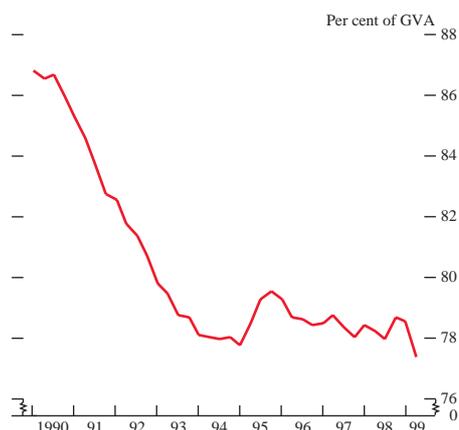
The financial position of the private sector will also affect future consumption and investment. If households run into financial difficulties they may cut back on spending. Similarly, firms in financial difficulty may cut back on investment. Final domestic demand has strengthened relative to the income of households and companies. That has resulted in a financial deficit for the private sector as a whole, as borrowing has exceeded savings since mid 1998. The household sector savings ratio has remained relatively low since 1998 and company profits have weakened. The public sector

Chart 2.15
Net financial position of the private sector, public sector and current account^(a)



(a) The private sector includes households, non-profit making institutions serving households, PNFCs and financial companies. The net lending/borrowing position is also net of investment.

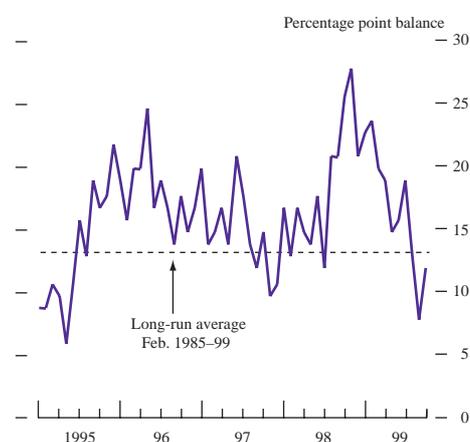
Chart 2.16
Ratio of whole economy inventories to Gross Value-Added (GVA)^(a)



Note: Gross Value-Added is the output measure of GDP.

(a) At constant 1995 basic prices.

Chart 2.17
Inventories in the manufacturing sector^(a)



Source: CBI.

(a) Balance of responses to the question: 'Do you consider your stocks of finished goods to be more than adequate?'

surplus and an inflow of foreign savings to finance the current account deficit have made up for lower private sector savings (see Chart 2.15). In 1999 Q2 the financial deficit of the private sector rose to 3.5% of GDP, the largest deficit since 1990. That was the result of a large deficit for the private non-financial corporations sector (PNFCs). However, this was exaggerated in Q2 by the sharp increase in dividend payments that had been deferred from the previous two quarters, ahead of the abolition of Advance Corporation Tax. While the private sector has moved into a substantial financial deficit and debt/income ratios have risen, other indicators of financial performance have improved. The household sector debt/wealth ratio has declined since 1993. PNFCs' debt/capital stock ratio (measured at market value) has also fallen back.

Inventory investment

Whole-economy inventories fell by £1.2 billion in 1999 Q2 and detracted almost 0.7 percentage points per quarter from annual GDP growth in the first half of the year.⁽¹⁾

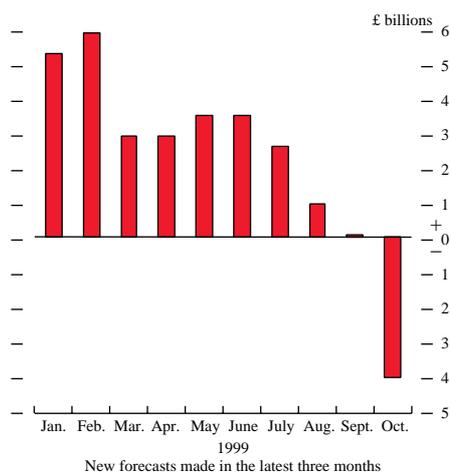
The whole-economy inventories to output ratio has been broadly flat since 1995, but it fell in the first half of the year (see Chart 2.16). There is some evidence from the CBI industrial trends survey that inventories rose to higher-than-desired levels in 1998 and that they have been cut back since then (see Chart 2.17), perhaps aided by discounting and the strengthening of demand. Furthermore, while manufacturing firms expected to continue to reduce inventories in the next four months, they expected to do so at a slower rate than in the previous four months. In the retailing and wholesale sector, inventories relative to sales were a little above their long-run averages. The MPC has assumed that there has been a temporary correction to inventories, which has brought stocks more in line with desired levels. In the next few quarters inventories are likely to be run down at a slower pace and so make small positive contributions to GDP growth. And in the long run, the ratio of inventories to output is expected to decline.

Public sector demand

Nominal public sector net borrowing amounted to £2.6 billion between April and September 1999. Thus far in the current financial year, net borrowing has been £3.9 billion lower than the same period in 1998, and has

(1) This excludes a statistical alignment adjustment that is used by the ONS to help to balance the growth of the expenditure and income accounts within calendar years.

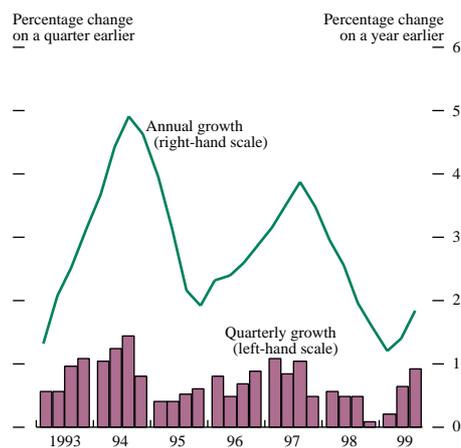
Chart 2.18
Forecasts of public sector net borrowing for 1999–2000^(a)



Source: HM Treasury.

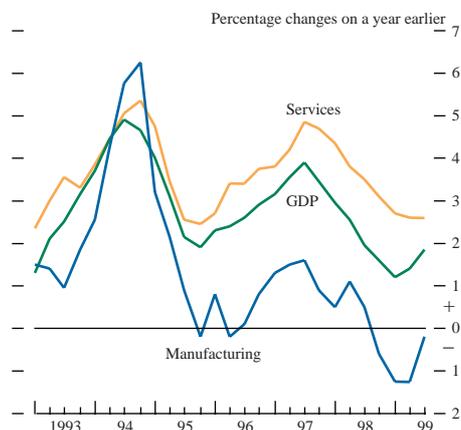
(a) Average of independent new forecasts.

Chart 2.19
GDP growth rate^(a)



(a) At constant 1995 market prices.

Chart 2.20
Annual growth rate of GDP



Note: GDP at constant 1995 market prices, manufacturing and services output at constant 1995 basic prices.

run well below the expectations of independent forecasts formed at the time of the Budget. Most forecasters have revised down their projections for net borrowing and, on average, now project a surplus for 1999–2000, as Chart 2.18 shows. Revenues have been particularly buoyant, largely because economic growth has been higher than expected. Employment has risen, and unemployment has continued to fall rather than rise, as projected by the independent forecasters earlier in the year.⁽¹⁾ As a result, income tax and corporate tax receipts have increased, and VAT receipts have risen above earlier expectations, as a result of stronger consumers' expenditure.

Nominal government consumption grew by 3% in the year to 1999 Q2. The Government's current spending plans are for an increase in spending on goods and services of 5.3% in this financial year. The growth rate of real government consumption is therefore likely to rise over the remainder of the financial year. The MPC has also assumed that any shortfall of government spending, relative to plans in this financial year, will be made up gradually over the following two years, as provided for in the Comprehensive Spending Review.

2.3 Output

According to the preliminary estimate, GDP grew by 0.9% in 1999 Q3. The annual growth rate rose to 1.8% (see Chart 2.19), somewhat higher than the MPC's central projection at the time of the *August Report*. Growth in the service sector has remained robust over the past year. Manufacturing output has increased in the latest two quarters, following its earlier falls, and grew at a similar rate to service sector output in Q3 (see Chart 2.20).

Construction output was just 0.7% higher than a year earlier in 1999 Q2. Relatively low annual growth in the construction sector as a whole contrasts with the more buoyant outlook for the residential housing market. The box on pages 21 and 22 discusses developments in the construction sector.

Service sector output rose by 1% in 1999 Q3 and the annual growth rate remained at 2.6%. Survey data for the service sector as a whole point to continued growth over the period ahead. Confidence about turnover in the

(1) The Government's projections for social security spending in the March Budget were based on the average of outside independent forecasts for claimant unemployment as projected in *Forecasts for the UK Economy*, HM Treasury, February 1999. At that time, the average of the forecasts projected higher unemployment.

The UK construction industry

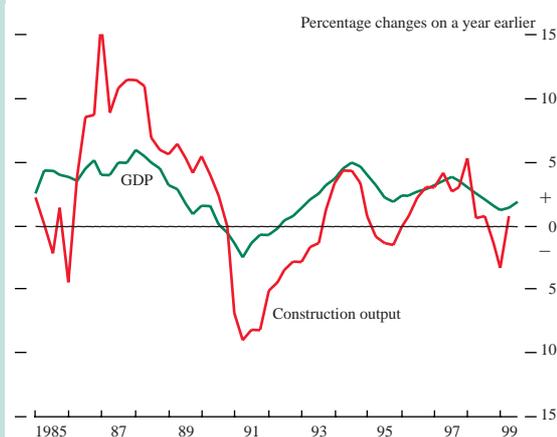
Construction accounts for around 5% of UK GDP but nearly half of whole-economy investment is construction-related. The sector is sensitive to general trends and cycles in total investment in the private and public sectors. Construction output fell in 1998 but picked up a little in the first half of 1999. Though new orders have fallen, other forward-looking survey indicators point to a firming of activity over future quarters.

Output

The construction sector in the United Kingdom employs 1.8 million people—around 6% of the labour force—and accounts for some 5% of GDP.

In the past, construction output growth has been sensitive to the cycles in private and public sector investment. The long lead times between the start and completion of construction projects, and the large sunk costs of investment, can result in sharp and delayed changes in output in response to changes in demand. For example, in the late 1980s there was a large build-up in the stock of commercial and industrial property. But the fall in demand in the early 1990s led to increased spare capacity and a fall in construction output. Special factors, such as spending on Millennium-related projects, may also influence the level and timing of construction activity. Given these factors, and the relative sensitivity of construction to changes in interest rates,⁽¹⁾ the growth of construction output has been more volatile than GDP as a whole (see Chart A).

Chart A
Construction output and GDP growth



Construction output was weak through most of 1998, with activity falling by 1.3% between the end of 1997 and the end of 1998. As the table shows, the decline partly reflected a lower volume of maintenance and repair work, which accounts for around half of construction output. It was also a result of less new housebuilding. Commercial and industrial construction-related investment grew strongly and contributed to the strength of whole-economy investment.

Construction output: by type^(a)

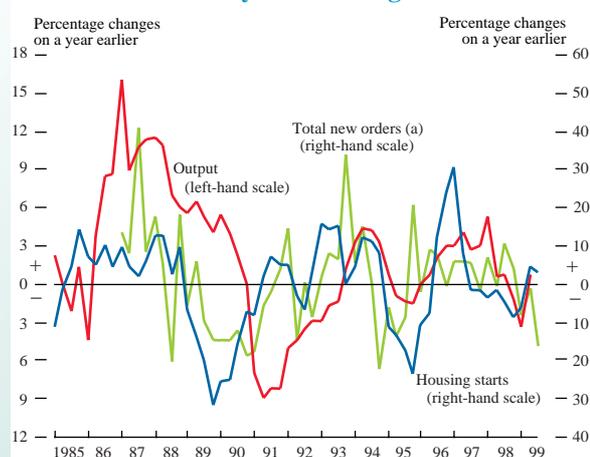
	Share	Percentage changes on a year earlier	
		1998 Q4	1999 Q2
Repairs and maintenance	49	-4.4	-2.3
Investment	51	3.2	4.9
of which:			
Housing	14	-10.7	-9.4
Commercial and industrial	26	13.3	13.5
Infrastructure	11	-3.3	0.8

Source: DETR.

(a) Data in the table cover Great Britain. The data are adjusted in the National Accounts to cover the United Kingdom.

Construction output has begun to recover in 1999, with output rising by around 0.5% each quarter in the first half of the year. Investment in construction-related assets picked up, and the decline in repairs and maintenance was less sharp. But total new orders have continued to fall sharply, as shown on Chart B. Commercial and industrial orders are substantially lower than a year earlier, though housing orders and starts have picked up.

Chart B
Construction activity and housing starts



Sources: DETR and ONS.

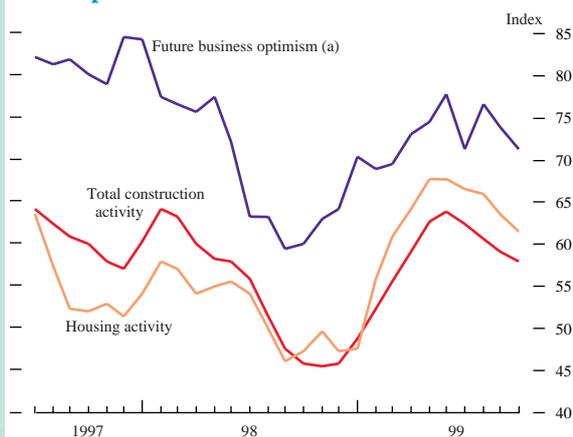
(a) Includes housing, commercial and industrial construction.

Surveys and other forward-looking indicators

Evidence from the surveys and other forward-looking indicators suggests a more buoyant picture (see Chart C), contrasting sharply with the latest data on new orders. The CIPS survey measure of total construction activity has been signalling relatively robust expansion in recent months and buoyant business optimism. The Construction Confederation survey also pointed to

(1) See 'The industrial impact of monetary policy', by Ganley, J and Salmon, C, *Bank of England Quarterly Bulletin*, August 1996, pages 288–98.

Chart C
CIPS report on construction



Note: An index level above/below 50 indicates a rise/fall.

Source: CIPS.

(a) Next twelve months.

higher output. Demand for new houses has picked up following the increase in house prices with the House Builders' Federation survey reporting that the balance of firms have recorded higher numbers of site visitors and net reservations since the middle of the year. Other indicators also point to strengthening investment. For example, commercial property returns appear to have picked up recently (see Section 1).

There are also indications that some capacity constraints are being reached. The labour market for skilled

construction workers has tightened since the beginning of the year, as a result of higher activity. Companies have reported shortages of a number of types of skilled labour, such as bricklayers, carpenters, electricians and plasterers. The CIPS and the Construction Confederation Surveys also report increasing cost pressures. Although the cost of construction materials has been subdued over the past two and a half years, tender price expectations have begun to pick up as unit labour costs have increased.

There are significant differences in capacity constraints across regions. While nearly all building companies in London report working at or near capacity, only 12% in Yorkshire do so. The Bank's regional Agents also report regional disparity in construction activity, with activity stronger in London and the South East.

The outlook for the construction sector is clouded by the mixed signals from the orders and survey data. Nevertheless, the buoyancy of the housing market and the general strength of demand should support construction output over future quarters. Non-cyclical factors, such as the continuation of Millennium projects, Government plans to raise public sector investment as a proportion of GDP, and Government regeneration programmes that will boost repairs and maintenance, may also help to underpin activity. Construction Forecasting and Research also project moderate growth in construction output in 2000 and 2001.

service sector, as measured by the BCC, has improved markedly since the end of 1998. The CIPS survey of the service sector pointed to growth in activity, though at a slower rate than earlier in the year. In the three months to October the business activity index averaged 56.7, well above the neutral level of 50, but just below its average since July 1996 when the survey began. Incoming new business, measured by the CIPS survey, was a little lower in the latest three months and business expectations for the year ahead eased back in October.

Manufacturing sector output rose by 0.2% in Q2 and by 1.0% in Q3 following three quarters of falling output. The manufacturing surveys indicate rising activity over coming months. In 1999 Q3, the BCC survey reported higher domestic sales and orders and it also pointed to an improvement in export activity. The October CBI survey pointed to a pick-up in total output and orders over the next four months. Business optimism continued to recover and recorded a positive balance of 13, the highest since early 1995. The CIPS survey has indicated rising activity each month since May.

2.4

Summary

GDP growth has strengthened more quickly than expected earlier in the year, and growth in 1999 Q3 was higher than expected at the time of the *August Report*. Final domestic demand has remained robust, as consumption has continued to grow at a fast pace. In the first half of the year domestic demand was dampened as firms reduced inventory levels. Looking ahead, the MPC has assumed that consumption continues to grow at a faster pace than expected at the time of the *August Report*. Domestic demand growth is projected to strengthen over the next year, as the rundown in inventories slows.

The prospects for world activity and trade have continued to improve since August. The MPC has assumed that this will help to sustain further growth of UK exports, though the impact is expected to be partly offset by the effect of sterling's higher exchange rate. The MPC's central projection is for GDP growth to rise more quickly than expected at the time of the *August Report* in the near term, reaching an annual rate of 2½%–3% around the turn of the year, and then levelling off at that rate.

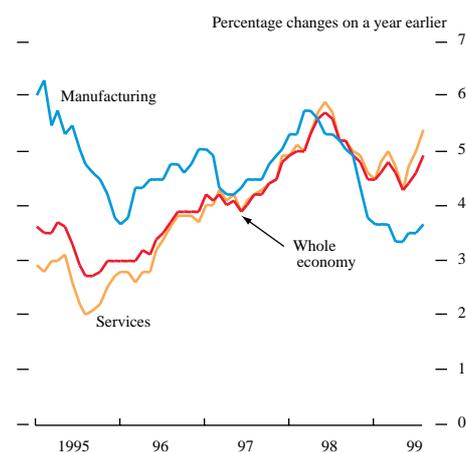
Labour market conditions have tightened since the *August Report*. Unemployment, already close to 20-year lows, has fallen further. Employment growth has picked up, and surveys of employment intentions rebounded strongly in Q3. Recruitment difficulties and skills shortages persist. Headline nominal earnings growth rose to 4.9% in August, according to the Average Earnings Index, although nominal pay settlements remain subdued. Most measures of real earnings growth have picked up over the past year.

3.1

Earnings

Chart 3.1

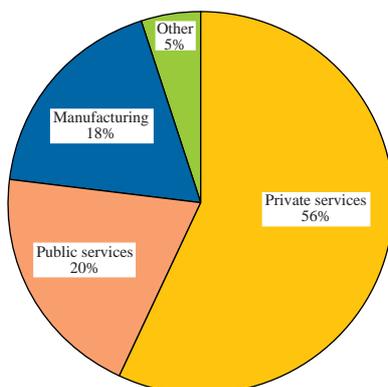
Headline growth in nominal earnings^(a)



(a) Annual growth in backward-looking three-month average of the AEI.

Chart 3.2

Composition of Average Earnings Index^(a)



(a) Shares do not sum because of rounding.

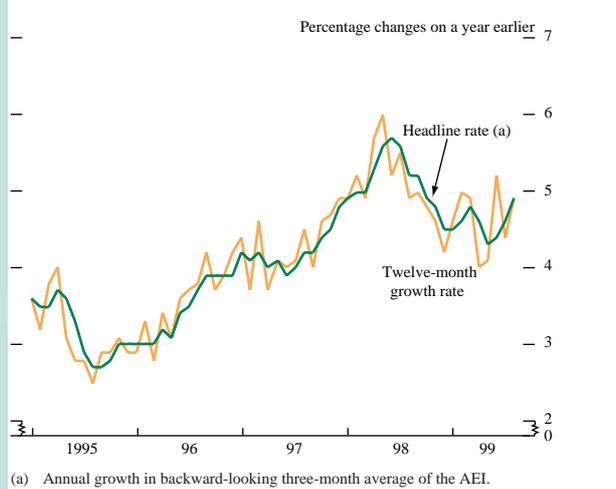
Nominal earnings growth, as measured by the official Average Earnings Index (AEI), has been stronger than expected at the time of the *August Report*. The AEI headline rate of annual earnings growth rose to 4.9% in August, 0.6 percentage points higher than its value a quarter earlier (see Chart 3.1). Some of this pick-up may reflect noise in the series, which has been volatile this year. But the headline rate in August was also 0.3 percentage points higher than the average annual rate since the start of the year, consistent with the possibility that underlying earnings growth may have edged upwards. Private sector indicators, based on much smaller samples, point in diverse directions. Data from the Federation of Recruitment and Employment Services (FRES) suggest that growth in average salaries for permanent and temporary/contract staff has picked up in recent months. But the Reward Index of annual earnings growth remains much lower than growth in the AEI.

The pick-up in whole-economy earnings growth largely reflects stronger growth in service sector pay, which, as Chart 3.2 shows, accounts for three quarters of the aggregate index. The headline measure of service sector earnings growth rose to 5.4% in August, 0.6 percentage points above the average annual growth rate during this year, and 0.5 percentage points below the peak in June last year. All of the latest rise in service sector pay growth reflected stronger growth in the private sector; the headline measure of public sector earnings growth fell between June and August. Earnings growth in manufacturing has been lower than that in the economy as a whole since the start of last year, reflecting the much

The new sample for the Average Earnings Index (AEI)

From October, the ONS has begun using an improved sample of firms to calculate the AEI. The official review of the index published earlier this year⁽¹⁾ found that the existing sample—largely drawn up in the late 1980s—had become unrepresentative. A comparatively large share of the index—which is weighted to reflect the structure of the economy as a whole—was based on returns from a comparatively small share of the sample, causing volatility in the series. Some interim remedies to this problem were adopted in the index that was reinstated in March this year. But, as the chart shows, AEI outturns remained volatile, complicating the task of drawing inferences about trends in earnings growth.

Annual growth in the AEI



In choosing the new sample, a key aim was to reduce the variance of annual growth in the AEI. The total sample size has been increased, from 8,037 to 8,285 firms. And a substantially higher share of the sample has been drawn from the service sector, bringing the sectoral distribution of firms much more closely into line with that in the whole economy (see the table). The ‘grossing factors’ and employment weights used to translate the sample responses into an estimate of whole-economy earnings have also been updated, and are now based on the ONS Inter-Departmental Business Register as of June 1999. Special adjustments introduced to tackle particular problems with the old sample in the education, health and financial intermediation sectors have been removed. ONS calculations show that the standard error of monthly AEI growth rates based on the new sample—a measure of the spread of estimates across firms, and the precision of the aggregate

estimate—is substantially lower than that under the old sample.

Proportion of businesses by sector^(a)

Per cent	Old sample	New sample	Whole economy
Services	47	67	67
Production	47	28	27
Other	6	4	6

(a) All figures refer to businesses with 20 employees or more. Changes in sample composition do not affect the employment weights used to construct the aggregate AEI from the separate sectoral indices.

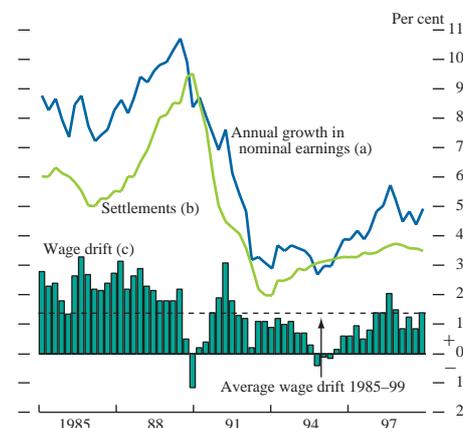
The introduction of the new sample has not caused a discontinuity in the level of the AEI between July and August, the first month to reflect information from the new sample. Each month’s AEI is calculated by applying a one-month growth rate to the previous month’s index. The one-month growth rates are calculated using returns from a ‘matched sample’ of employers reporting in both months. So growth between June and July was calculated using a matched sample based entirely on firms in the old sample reporting in both June and July. And growth between July and August was calculated using a matched sample based entirely on firms in the new sample reporting in both July and August. Though the old and new samples will not give identical estimates of one-month growth rates, part of the acceptance process for the new sample required the ONS to provide satisfactory explanations of significant differences in the historical series. It will, however, be a year before the published annual AEI growth rates are based entirely upon data from the new sample.

To reduce the likelihood of the sample again becoming out of date, the ONS will regularly refresh the set of reporting firms. All firms with more than 1,000 employees remain in the sample indefinitely. But, over the course of each year, 20% of smaller firms will be replaced. Grossing factors and employment weights will also be updated annually. And the ONS will keep the statistical performance of the index under review.

Updating the sample meets a key requirement of the Turnbull-King review, and, over time, should help to improve the quality of the annual earnings growth statistics. The ONS is continuing to work on other recommendations from the review, and is due to make a progress report to the Economic Secretary to the Treasury by the end of this year.

(1) *Review of the revisions to the Average Earnings Index*: Report submitted by Sir Andrew Turnbull and Mervyn King to the Chancellor of the Exchequer, prepared by Peter Sedgwick and Martin Weale, The Stationery Office Limited, March 1999. The findings of the review are summarised in the box on page 24 of the *May Inflation Report*.

Chart 3.3
Settlements, nominal earnings growth and wage drift



Sources: ONS, Bank of England, and Industrial Relations Services (IRS).
 The latest data point uses figures for August 1999.

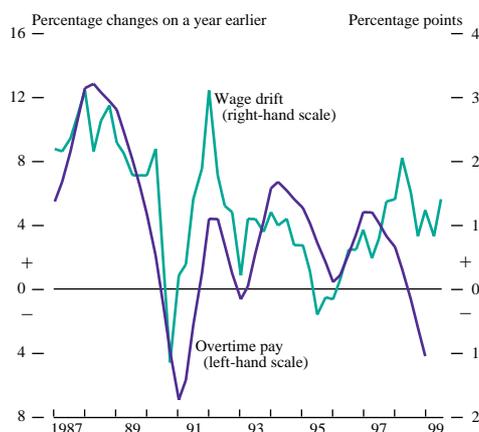
- (a) Based on wages and salaries per head until 1991, then AEI.
- (b) Based on IRS data until 1994, then Bank of England.
- (c) Difference between earnings growth and settlements.

weaker path of activity in that sector. But there have also been signs of a slight pick-up in manufacturing pay growth in recent months (see Chart 3.1).

One component of overall pay is the annual wage settlement. The Bank's twelve-month employment-weighted measure of whole-economy settlements has continued to edge down, reaching 3.5% in September, compared with 3.6% at the time of the *August Report*. Shorter-term measures have also been relatively stable, albeit at a slightly lower level: the Bank's three-month average measure has been at or around 3.2% since the late spring.

Aggregate earnings growth as measured by the AEI has been substantially stronger than settlements over the past year. Part of this probably reflects the continuing structural trend away from reliance on broad company-wide settlements and towards the use of bonuses, merit pay, overtime and other remuneration methods which allow greater flexibility with respect to individual performance and demand conditions. As Chart 3.3 shows, the gap between earnings and settlements—known as 'wage drift'—has been almost continuously positive in recent years, consistent with settlements accounting for a declining share of the overall pay bill.

Chart 3.4
Overtime pay and wage drift



Sources: ONS, Bank of England and Industrial Relations Services. Overtime data based on annual observations from the New Earnings Survey.

The path of wage drift through the year is also influenced by adjustments made by employers to their wage bills in response to changes in demand, profits and labour market conditions. Wage drift has been rather stronger over the past year than might have been expected given the path of activity alone. As Chart 3.4 shows, wage drift has tended to move in line with growth in overtime pay—the component of earnings most directly influenced by changes in demand conditions. But while overtime pay as measured by the New Earnings Survey fell in the year to April 1999, wage drift remained reasonably firm, at around its long-run average. More recently, there have been signs that overtime pay may have picked up again, consistent with the recovery in activity.

One way of assessing the impact of profitability and labour market conditions on wage drift is to examine the behaviour of bonuses, which are paid both to reward staff for past productivity and profitability gains, and to maintain and improve staff retention. Following a change in the AEI questionnaire earlier this year, official data on annual bonus growth are currently an unreliable

Table 3.A
Matched sample bonus growth^(a)

Percentage change on a year earlier

Whole economy	8.4
Of which:	
Services	11.7
Manufacturing	-9.0

(a) Estimated by ONS, using data from firms in the old AEI sample which paid bonuses in the period January-July in both 1998 and 1999. Firms' responses were combined using the relevant grossing factors and employment weights from the AEI.

Table 3.B
Survey-based inflation expectations^(a)

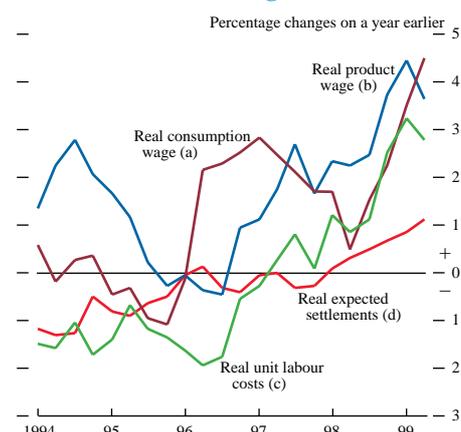
Expected inflation rate twelve months ahead

	1998		1999	
	Q2	Q3	Q2	Q3
General public	4.4	4.5	4.0	3.7
Trade unions	3.3	3.2	2.5	2.5
Finance directors	3.4	3.1	2.3	2.4
Business economists	3.1	2.6	2.2	2.4
Investment analysts	3.3	3.3	2.3	2.4
Academic economists	3.2	2.9	2.3	2.5

Source: Barclays Basix survey.

(a) Figures refer to RPI inflation, except for General public, for which the measure of inflation is not specified.

Chart 3.5
Growth in real earnings and labour costs



Sources: ONS, Bank of England, and Barclays Basix survey.

- (a) Wages and salaries per head divided by tax and prices index.
 (b) Wages and salaries and employers' social security contributions per head divided by GDP deflator at basic prices.
 (c) Real product wage (b) divided by productivity.
 (d) Bank of England twelve-month settlements measure minus Barclays Basix measure of trade unions' inflation expectations over the following year.

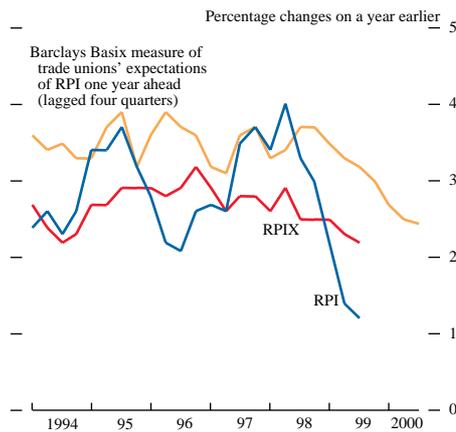
guide to the true contribution to annual earnings growth from bonuses.⁽¹⁾ And shorter-term growth rates can be misleading, given the strong seasonal pattern of bonus payments. However, the ONS has produced an alternative estimate of annual bonus growth, using data only from those employers who paid bonuses both this year and last, which should be less affected by the reporting discontinuity. These calculations suggest that bonuses in the first seven months of this year were some 8% higher at the whole-economy level than in the same period last year, as larger bonuses in the service sector more than offset lower payments in manufacturing (see Table 3.A). The uncertainties around this estimate are considerable. But, as with other components of wage drift, any growth in aggregate bonuses seems more likely to reflect the persistent tightness of labour market conditions, and the continuing structural trend towards more flexible pay, rather than recent profit growth, which has been subdued at the aggregate level (see Section 2).

Recent earnings growth will also have been influenced by the introduction of the National Minimum Wage (NMW) from 1 April. In previous *Reports*, the MPC assumed that the NMW would add around half a percentage point to its central projection for annual earnings growth in Q2 and Q3, and somewhat smaller contributions in subsequent quarters over the forecast period.⁽²⁾ Although it is still too early to make a full assessment of the overall effect on earnings growth, it seems likely that the initial impact has been smaller than previously expected. The MPC will continue to assess the situation in the light of further information. But, on the basis of currently available data, the Committee has decided to lower its estimate of the impact of the NMW on earnings growth by a third.

Although wages are typically agreed in nominal terms, wage-bargainers care about the real value of earnings—workers because it determines their ability to purchase goods and services, and firms because it determines the real cost of labour. While nominal earnings growth has fallen compared with a year ago, many measures of current and expected inflation have fallen by more (see Table 3.B and Section 4 of this *Report*). So most

- (1) Before February, employers were asked to report bonuses only when there had been a significant change in monthly pay. Since then, they have been asked to report all bonuses paid. This change affects the split of total pay between reported regular and bonus components, but has no impact on the overall value of the AEI.
 (2) Details of the MPC's previous assumptions are given in the box on page 30 of the August 1998 *Report*, and the text on pages 25–26 of the August 1999 *Report*.

Chart 3.6
Actual and expected inflation



Sources: ONS and Barclays Basix survey.

Chart 3.7
Growth in LFS employment and hours worked

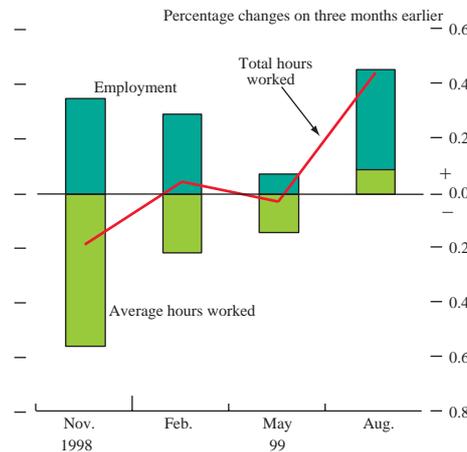


Chart 3.8
CIPS survey employment index^(a)



Source: Chartered Institute of Purchasing and Supply.

(a) Weighted index of data on manufacturing, services and construction. A reading of 50 indicates no change on the previous month.

measures of growth in real earnings and labour costs have risen over the past year (see Chart 3.5).

Rising real wage growth is consistent with tightening labour market conditions. When the demand for labour rises relative to its supply, workers are generally able to negotiate larger increases in expected real earnings during wage negotiations. As Chart 3.5 shows, the real expected value of wage settlements over the coming year continued to rise during this year's round, despite the substantial fall in their nominal value. But the real value of wages actually received by workers depends on the realised level of inflation. Inflation outturns have been lower than expected a year earlier, on both the RPIX and RPI measures (see Chart 3.6). So some of the rise in realised real earnings growth over the past year may have reflected a fall in inflation relative to that expected at the time the wages were initially agreed, rather than the direct impact of labour market tightness.

3.2 Employment and unemployment

There have been signs of a renewed pick-up in labour demand. According to the Labour Force Survey (LFS), total hours worked rose by 0.4% in the three months to August, having been broadly flat since last summer. As Chart 3.7 shows, the increase in total hours largely reflected a rise in employment growth. Average hours worked rose only slightly. It is possible that firms may have had less scope to raise the hours worked by existing employees in response to the pick-up in demand than previously assumed. This might reflect a range of factors, including a smaller build-up of spare capacity within firms last year than previously thought, or the impact of the Working Time Directive. The implications for the inflation projection are discussed in Section 6.

Employment growth in recent quarters has reflected the strength of recruitment in the service sector: in the year to 1999 Q2, the number of service sector jobs rose by 454,000, or 2.2%, according to the Workforce Jobs survey. The number of manufacturing jobs fell by 183,000, or 4.1%, over the same period. But there are signs that the rate of decline may now be slowing: the fall in manufacturing employment in 1999 Q2 was roughly half that in each of the previous two quarters.

More timely or forward-looking indicators of employment growth have also picked up since the August *Report*. The Chartered Institute of Purchasing and Supply (CIPS) employment index was 50.7 in

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

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

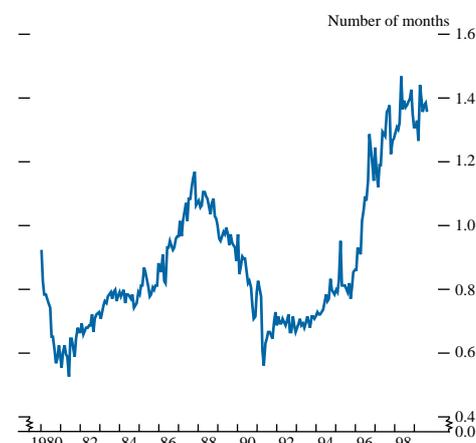
	Series average (c)	1998		1999		
		Q3	Q4	Q1	Q2	Q3
Whole economy						
Manpower	10	18	9	8	7	16
Services						
BCC	12	15	15	12	16	21
Manufacturing						
BCC	2	0	-6	-6	2	6
CBI	-17	-31	-31	-26	-22	-15

(a) Seasonally adjusted by the Bank.

(b) Next three months for BCC and Manpower; next four months for CBI.

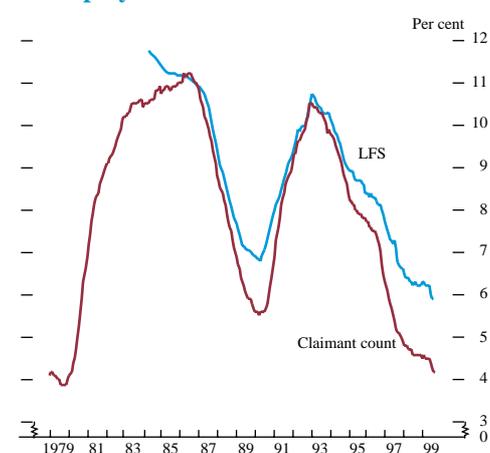
(c) CBI averages from 1979; BCC from 1989; Manpower from 1981.

Chart 3.9
Average duration of Jobcentre vacancies^(a)



(a) Defined as the stock of Jobcentre vacancies divided by monthly outflows.

Chart 3.10
Unemployment rates



Note: Pre-1992 LFS figures based on interpolated yearly observations.

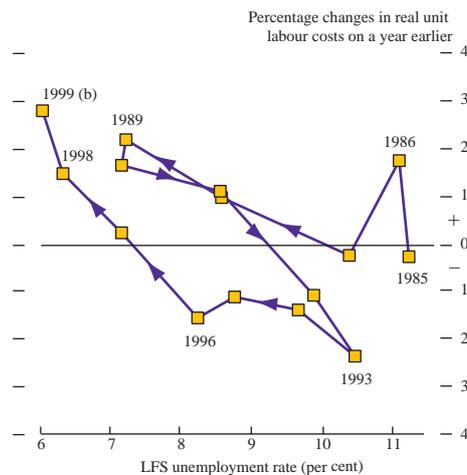
October, above the no-change value of 50, but still well below its levels in 1997–98 (see Chart 3.8). Business surveys of employment intentions rose quite sharply in Q3: all of the series shown in Table 3.C are consistent with above-average employment growth in the coming months. The Private Sector Job Advertising Index increased by 14% between April and September, and the number of vacancies at Jobcentres rose by some 7%, after adjustment for various reporting errors affecting the series.

The average length of time taken to fill vacancies has risen considerably compared with the previous cycle (see Chart 3.9). Vacancy duration is affected both by the degree of slack in the labour market, and by the efficiency with which workers are matched to jobs. While some factors, such as structural changes in the skills demanded by employers, may have caused some temporary fall in matching efficiency over the past ten years, other innovations, such as the growth in the number of recruitment agencies and the greater use of information technology to match workers to jobs, are likely to have worked in the opposite direction. Overall, therefore, higher vacancy duration probably reflects the relative tightness of labour market conditions.

Pay pressures are influenced by the balance between the demand for, and the supply of, labour. Net labour supply is most readily drawn from those who are already searching for, and available for, work. The LFS unemployment rate—a measure of the size of this group—has fallen from 6.2% at the time of the previous *Report* to 5.9% in the three months to August, the lowest since the series began in 1984. The claimant count rate—an alternative measure of unemployment based on the number of people receiving benefits—also fell, reaching 4.2% in September, the lowest since March 1980 (see Chart 3.10). Unemployment outturns have continued to be lower than expected earlier in the year, and most external forecasters—who had been anticipating a substantial rise in unemployment—now expect unemployment to be broadly flat in the coming months.

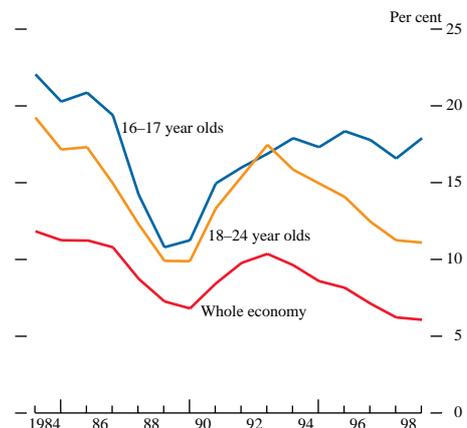
Although unemployment is lower than during the 1980s, the rate of unemployment consistent with steady inflation has also fallen, reflecting the impact of labour market reforms and structural changes in the economy over the past two decades. Thus growth in real unit labour costs for a given rate of unemployment

Chart 3.11
Unemployment and growth in real unit labour costs^(a)



(a) Real product wage divided by official measure of labour productivity.
 (b) Year to 1999 Q2.

Chart 3.12
Unemployment rates of younger age groups^(a)



(a) UK unemployment in March-May of each year, drawn from the LFS.

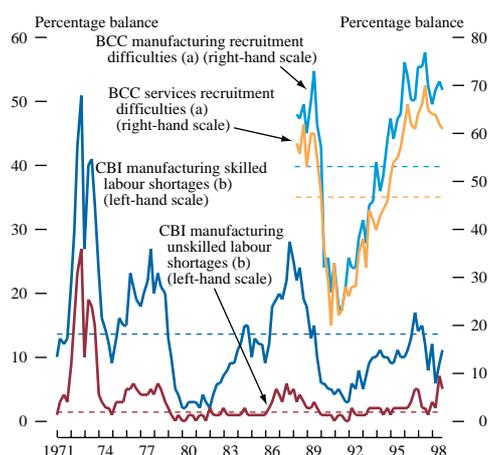
has been somewhat weaker during the 1990s recovery than at a similar point during the previous cycle (see Chart 3.11).

One factor that may have reduced the equilibrium unemployment rate is the decline in the number of young people entering the labour force, following the end of the ‘baby boom’ in the mid 1970s. Between 1984 and 1999, the 16–24 year old age group fell from 19% to 14% of the over-16 population, and from 23% to 15% of the active labour force, according to the LFS. The young have above-average rates of unemployment (see Chart 3.12), reflecting the fact that they tend to make more frequent movements into and out of unemployment than older workers. Several inter-related factors could account for this higher turnover. First, those entering employment for the first time may try several jobs before they discover the one best suited to their skills. Second, the young may be more likely to work in sectors characterised by relatively high turnover rates. And third, in as much as younger workers are less likely to have accumulated on-the-job experience and skills than older employees, they may be more likely to be laid off by firms facing a decline in demand. To the extent that the ageing of the workforce has put downward pressure on overall labour market turnover, it may also have lowered the equilibrium unemployment rate. One way of calibrating the possible importance of this effect is to compare the actual aggregate unemployment rate with a hypothetical value calculated using actual unemployment rates for each age group, but holding the age composition of the workforce constant at its level in some base year. Bank work based on calculations of this kind suggests that demographic change might account for about half a percentage point of the decline in the LFS unemployment rate over the past fifteen years, and a little over half of the fall since the previous trough in 1990.⁽¹⁾

Business surveys suggest that firms have continued to face difficulties in recruiting appropriately qualified staff, although labour shortages differ considerably by sector and skill type. The CBI measure of unskilled labour shortages in manufacturing and the BCC measures of general recruitment difficulties are both well above their longer-run averages; but the CBI measure of skill shortages in manufacturing remains relatively weak (see Chart 3.13). The Bank’s regional Agents report that

(1) These results are broadly similar to figures estimated on US data. For further details, see, for example, Lawrence F Katz and Alan B Krueger (1999), ‘The high-pressure US labor market of the 1990s’, *Brookings Papers on Economic Activity*, Volume 1.

Chart 3.13
Skill shortages and recruitment difficulties

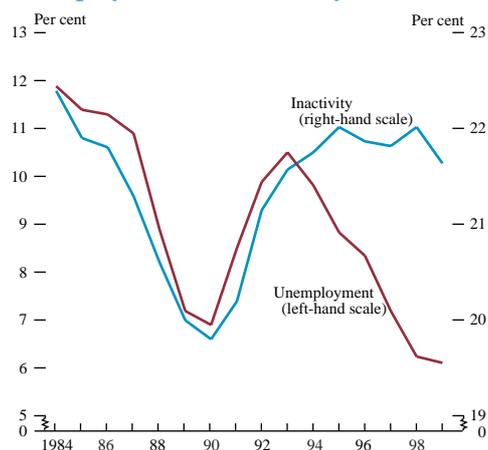


Note: Dashed lines indicate average balances over life of respective series.

Sources: British Chambers of Commerce and Confederation of British Industry.

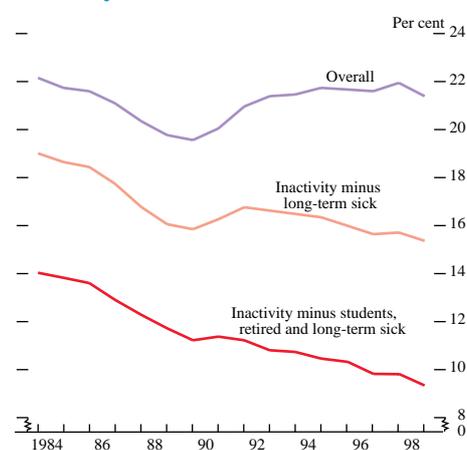
- (a) Question: 'Did you experience any difficulties over the past three months in finding staff in the following categories: skilled manual, technical/professional, managerial/clerical and un/semi-skilled?'
- (b) Question: 'Are shortages of skilled/unskilled labour likely to limit output during the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

Chart 3.14
Unemployment and inactivity rates^(a)



(a) UK unemployment and inactivity rates for those of working age in March-May of each year, drawn from the LFS.

Chart 3.15
Inactivity rates^(a)



(a) Inactivity in Great Britain in March-May of each year, drawn from LFS. The data have been adjusted for a discontinuity in the series in 1992.

skill shortages appear to be becoming more common in many areas, although in the North of England, Wales and Scotland shortages are still more likely to be limited to types of specialist skill. Consistent with these reports, the FRES survey has been reporting reduced availability of permanent and temporary staff since June, with particular shortages in IT and business services. Most employers facing skill shortages do not consider them to be temporary, according to a survey carried out by the Bank's regional Agents for the November pre-MPC meeting. Some contacts with recruitment difficulties intended to address their problems by increasing their own training efforts, constraining output growth, or cutting back on other costs. But 80% of those reporting shortages expected to have to raise pay rates to attract and retain appropriate staff.

The fall in LFS unemployment in the three months to August was associated with a small rise in inactivity. The inactive are those who are neither in employment, nor actively searching for, and available for, work. Broadly speaking, inactivity might be expected to follow a cyclical pattern, with higher demand growth reducing unemployment, increasing the probability of finding a job, and so causing some of the inactive to start searching for work; and lower demand growth having the reverse effect. Consistent with this, inactivity followed a similar path to unemployment during the 1980s and the early 1990s (see Chart 3.14). But the link between the two series has been much weaker in recent years. While unemployment has fallen substantially since 1993, the inactivity rate has remained broadly unchanged. The failure of inactivity to fall during the 1990s is largely accounted for by increases in the number of students, the early retired and the long-term sick. To the extent that these movements reflect structural changes, they might not be expected to be rapidly reversed. As Chart 3.15 shows, if these components are excluded, inactivity is at its lowest level since the series started in 1984. Over time, inactivity may be reduced further by Government initiatives designed to improve the incentives for the inactive to re-enter work, such as the Working Families Tax Credit, which came into operation in October.

3.3 Summary

Although nominal wage settlements have remained subdued, growth in total earnings—measured in either nominal or real terms—has been higher than expected at the time of the *August Report*. It is unlikely that this

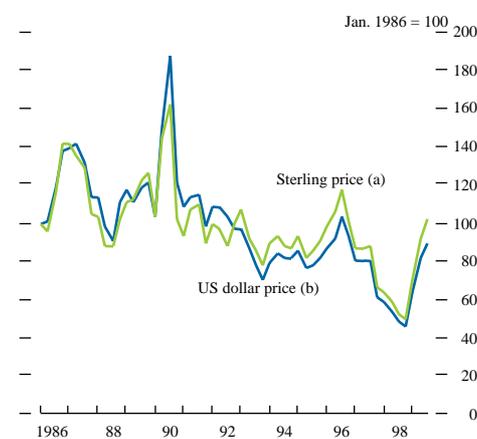
reflects the impact of the National Minimum Wage, which if anything appears to have had a somewhat weaker effect on aggregate earnings than had earlier been anticipated. Part of the pick-up in real earnings growth may have reflected unexpectedly low inflation outturns. But higher earnings growth may also signal a tightening in labour market conditions, as activity has recovered unexpectedly rapidly. Growth in both current and anticipated employment—as indicated by business surveys—has picked up, and the number of job vacancies has risen. Unemployment, already close to 20-year lows, has fallen further. Labour market inactivity remains higher than during the previous cycle, but much of this appears to reflect structural factors. Business surveys suggest that firms have been facing difficulties in recruiting appropriately qualified staff, although recent trends differ somewhat by sector and skill type. The implications of these developments for the Committee’s judgments on the outlook for earnings growth and inflation are discussed in Section 6 of this *Report*.

RPIX inflation has remained below the government's 2½% target since the *August Report*. The continued subdued growth of retail prices has reflected low inflation in a broad range of goods prices. That has been partly because of the lagged effects of past declines in import prices, but may also be the result of downward pressure on price-cost mark-ups in a number of sectors, owing to strengthening competition. However, the international price outlook has become less benign. Sterling import prices are no longer falling sharply and forecasts for world activity have been revised up modestly. Overall, world prices for commodities—particularly oil—have risen further, although agricultural commodity prices remain depressed.

4.1 Raw materials and commodity prices

World prices for crude oil have risen further since the *August Report*. The average of the one-month forward price of Brent crude oil was over \$21 per barrel in the four months to October, more than \$7 higher than in the first half of the year. The buoyancy of world oil prices has continued to be strongly influenced by supply restraints. In particular, the Organisation of Petroleum Exporting Countries (OPEC) agreed in September to retain its existing oil production restrictions until March 2000. Oil prices have also been supported by the outlook for global economic activity. The International Energy Agency projects a rise in world oil demand of 1.5% in 1999 and 2.4% in 2000, compared with growth of 0.6% in 1998.

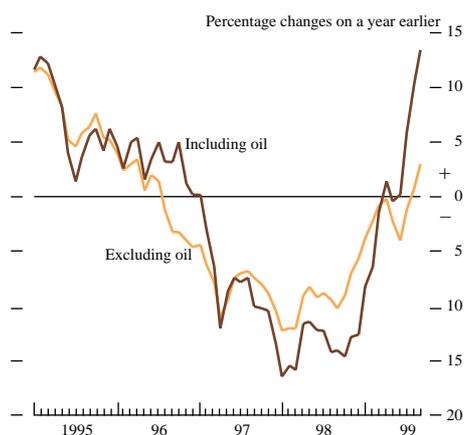
Chart 4.1
Real oil prices



- (a) Sterling price of Brent crude oil one-month forward, deflated by RPIX.
- (b) US dollar price of Brent crude oil one-month forward, deflated by OECD consumer prices.

Despite the recent rise in nominal oil prices, the real oil price—relative to price indices such as RPIX—has declined over the past two decades, even excluding the period of sharply falling prices in the mid 1980s which followed the world oil shocks in 1974 and 1979 (see Chart 4.1). Various factors influence the long-term trend in oil prices. As with other commodities that have a limited global supply, continued extraction of oil tends to increase the scarcity of the resource, and the marginal cost of extraction might also be inclined to increase over time. This would be likely to raise the relative price of oil in the longer term. However, that effect may have been weakened by upward revisions to estimates of the

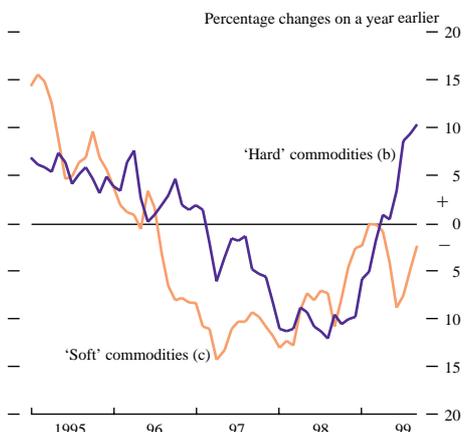
Chart 4.2
Bank sterling commodity price indices^(a)



Source: Bank of England.

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

Chart 4.3
Hard and soft commodity prices^(a)



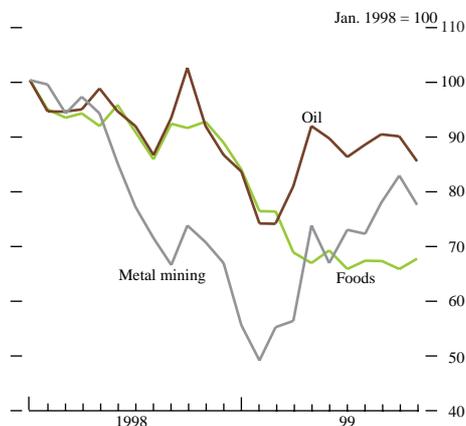
Source: Bank of England.

(a) Both series are constructed from components of the Bank sterling non-oil commodity price index, which is a monthly average of prices of primary commodities, weighted by their shares in UK demand.

(b) Includes non-oil fuels and metals prices.

(c) Includes prices for indigenous and non-indigenous foodstuffs and non-food agricultural products.

Chart 4.4
Sectoral equity prices^(a)



(a) Standard and Poor's sectoral equity price indices relative to the Standard and Poor's 500 Composite index, both denominated in US dollars.

world's available oil reserves in recent years, as improvements in exploration technology have reduced the cost of finding additional reserves. Changes in production technology may have further dampened real oil prices, as general improvements in energy efficiency and shifts towards oil substitutes have curbed the consumption of oil by developed industrial economies in recent decades.

Around any long-term trend in the oil price, however, there is significant volatility, owing partly to the fact that oil is traded as an asset as well as a physical resource. Reflecting the marked increase in nominal oil prices since the *August Report* and the effect of slightly stronger projections of world demand growth over the next two years, the MPC has revised up its assumptions of the outlook for the nominal oil price over the forecast period. However, the oil price is still assumed to fall back from present levels, to around \$18 per barrel over the next two years.

Moderate growth overall in the prices of non-oil commodities has continued. In the three months to September, the Bank's index of sterling non-oil commodity prices rose by 1.4% compared with the previous three months, and was on average 0.9% higher than a year earlier (see Chart 4.2).⁽¹⁾ But the divergent trends in soft and hard commodity prices have become more pronounced since the *August Report*.⁽²⁾ Strong rises in hard commodity prices have been largely offset by continued declines in prices of soft commodities, especially food (see Chart 4.3). The relative shifts in hard and soft world commodity prices in 1999 have been mirrored by movements in US equity prices for those companies most affected by the prices of these different types of commodity (see Chart 4.4). That might suggest that financial markets anticipate some persistence in the relative price trends, since equity prices partly reflect market expectations of future corporate profits.

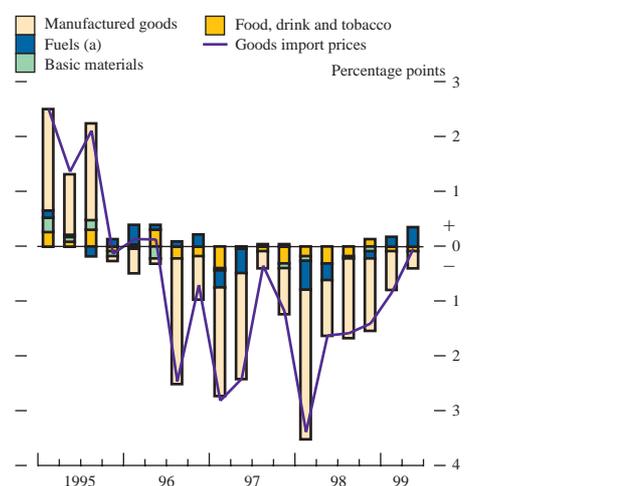
The recent divergence in hard and soft commodity prices highlights the fact that movements in soft commodity prices are less closely aligned to the global economic

(1) The Bank of England's non-oil commodity price index has been revised since the *August Report*, reflecting updated weights for its components. The new weights reflect each type of commodity's share in total UK consumption of commodities in 1995, compared with 1990 in the previous index. The level of the new index in 1999 is slightly lower than suggested by the old index when both series are rebased to 1995, though the pattern and direction of growth is little changed following the revisions. The lower level of the new index reflects a higher weight for food and lower weights for fuels and metals.

(2) Hard commodities include metals and fuels, whereas soft commodities include food (both UK-produced food and non-indigenous food) and other agricultural products.

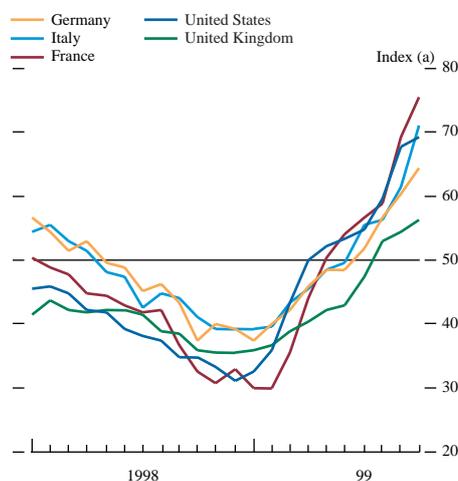
cycle than are hard commodity prices. Stronger global economic activity in the first half of 1999 might have been expected to raise demand and therefore put upward pressure on prices for all types of commodity. However, demand for food may be less sensitive to changes in economic activity than demand for industrial commodities such as metals. And prices of soft commodities—which are largely agricultural products—are more vulnerable to supply-side shocks that are linked to weather conditions. Moreover, the effects of supply shifts on soft commodity prices are accentuated by the fact that soft commodities tend to be more perishable than hard commodities, and are therefore less amenable to storage.

Chart 4.5
Contribution to quarterly change of sterling goods import prices



(a) Four fifths of UK fuel imports are accounted for by oil.

Chart 4.6
Survey measures of international manufacturing input prices



Sources: CIPS (United Kingdom), National Association of Purchasing Management (United States) and Reuters (Germany, France and Italy).

(a) An index level above/below 50 indicates a reported rise/fall in prices.

The continuing weakness of soft commodity prices means that the overall level of non-oil commodity prices in 1999 Q2 was lower than expected at the time of the *August Report*. However, reflecting the slightly stronger outlook for world growth, the Committee now assumes in its central projection a stronger rebound in total non-oil commodity prices from this lower level.

4.2 Import prices and the exchange rate

Sterling import prices of goods and services in 1999 Q2 were broadly unchanged compared with the first quarter of the year, and were 2.8% lower than a year earlier. Within the total, services import prices in Q2 were 0.6% higher than a year earlier, while goods import prices were 3.8% lower. The weakness of goods import prices reflects the past appreciation of sterling, and subdued export prices of the United Kingdom’s major trading partners. But sterling import prices for goods stabilised in Q2, after declining for almost three years. The rise in oil prices was a significant factor behind this, as shown by Chart 4.5. But even excluding oil, the rate of decline in other imported goods prices has eased since the end of 1998.

Though the MPC’s central projection assumes that oil prices rise no further, recent increases in oil prices are nevertheless likely to place additional upward pressure on UK import prices in the coming months, through their effect on world export prices. Rising energy prices have already been passed through to manufacturing input prices in the United Kingdom’s major trading partners (see Chart 4.6), and this will eventually be reflected in higher producer output prices and export prices in these countries. Somewhat improved prospects for world demand growth since the *August Report* have also

Oil prices and the UK economy

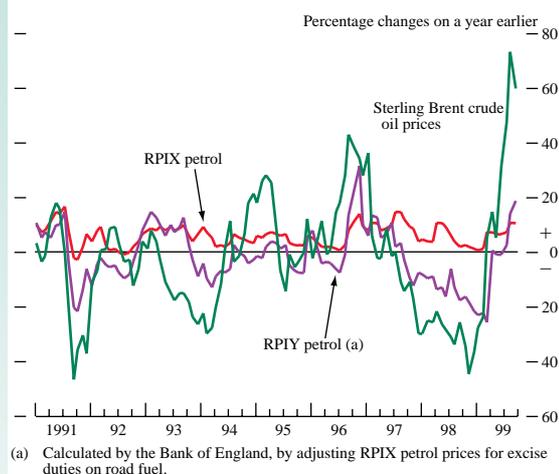
The demand for oil has declined over the past two decades in the United Kingdom, in common with most other G7 countries. That has reflected improvements in the efficiency of oil refining and usage, and the increasing use of non-oil energy sources. But oil still accounted for around one tenth of the goods used as inputs to manufacturing in 1995, and petroleum products accounted directly for nearly 3% of total household consumption expenditure in 1998. So changes in oil prices can have a significant effect on domestic costs and prices.

Movements in crude oil prices are closely matched by changes in the cost of inputs to the manufacturing sector. The effect of these changes in crude oil input prices on manufacturers' output prices for refined petroleum products is slightly less marked. For example, from the peak in world oil prices in late 1997 to their trough in late 1998, oil input prices fell by more than 50%, while output prices for petroleum products (excluding duties) fell by just under 35%. The maximum effect on oil output prices also tends to be seen one month after any change in input prices. These divergences between input and output prices reflect the costs of the non-oil inputs used to add value, and the time taken in producing the more highly processed petroleum products.

Retail prices for petrol are less directly exposed to movements in crude oil prices. The larger costs of distribution place an additional wedge between the price of oil used in manufacturing and the retail price of petroleum products. Furthermore, almost the entire share of oil goods in the RPI reflects consumption of road fuel, and around two thirds of the retail price of road fuel is accounted for by government excise duties, with a further proportion accounted for by VAT. These duties are fixed in each Budget, and—unlike VAT—do not vary with the price of oil itself. Instead, road fuel duties have been uprated in line with the rate of RPI inflation in September each year, plus an additional escalator which means that the retail price of petrol has risen in real terms, consistent with the government's environmental objectives. As a result of the weight of duties in the final retail price for road fuel, the observable effect of rises in crude oil prices is less marked in petrol prices within RPIX than in RPIY, which excludes duties (see chart).

However, the impact of a rise in oil prices on both producer and retail price indices is augmented through the use of oil as an energy input in the production of non-oil goods and services. Moreover, as higher oil costs similarly tend to raise the prices of goods and services in other countries, world export prices would also tend to rise following an increase in world oil prices,

Retail oil prices in the United Kingdom



all else being equal. Hence rises in crude oil prices would also affect domestic prices through the import prices channel.

The United Kingdom is a small net exporter of crude oil, and North Sea production (which includes gas as well as oil) accounts for about 2% of UK GDP. Hence developments in world oil prices also affect UK activity and expenditure. For example, rising oil prices raise the United Kingdom's export prices relative to its import prices, all other things equal, generating a positive terms-of-trade effect on the external balance of the United Kingdom. The profits of UK oil companies also tend to increase in the quarters following a rise in world oil prices, as the volume of oil sales is fairly insensitive to price changes in the short term. For instance, profits of companies operating on the UK Continental Shelf rose by 15% in 1999 Q2, reflecting the sharp rise in fuel prices in the first half of 1999. Oil companies may respond to such increases in prices and profits by increasing their rate of production from existing wells, and by expanding their capacity through additional exploration, higher fixed investment and higher employment. Rising oil prices also affect government revenues, through various types of tax on UK oil production. Apart from corporation tax, which is payable on the profits of all companies, the government also collects petroleum revenue tax and royalties from the older oil fields. Taxes on North Sea production accounted for just under 1% of total government receipts in 1998–99.⁽¹⁾

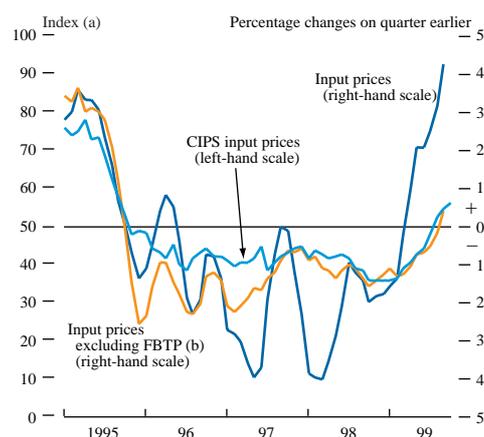
So although a substantial rise in oil prices would tend to generate global inflationary pressures and thus impose adjustment costs on the UK and the world economy, such a rise in prices could have smaller aggregate effects on activity in the United Kingdom than in non-oil exporting countries.

(1) Source: *Budget 99*, HM Treasury, March 1999, Table B10. Road fuel duties accounted for a further 6% of government receipts in 1998–99, though revenue from these duties is unaffected by changes in the underlying oil price, as noted above.

strengthened the outlook for world export prices. However, the recent appreciation of sterling has mitigated these influences. Hence although import prices are still projected to rise steadily throughout the forecast period, the MPC projection for UK import prices is lower than in the *August Report*.

4.3 Costs and prices in manufacturing and construction

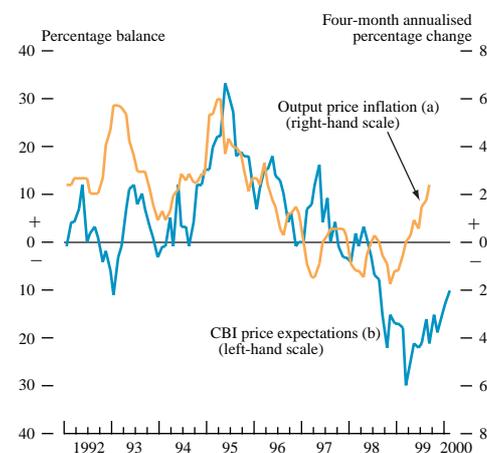
Chart 4.7
Manufacturing input prices



Sources: ONS and CIPS.

- (a) Index showing responses to CIPS manufacturing survey question: 'Please compare the price of your purchases (volume weighted) this month with the situation one month ago.' A reading of greater than 50 indicates expansion; below 50 indicates contraction.
- (b) Food, beverages, tobacco and petroleum.

Chart 4.8
Producer output price inflation and CBI average price expectations



Sources: ONS and CBI.

- (a) Excluding excise duties.
- (b) Balance of manufacturers expecting to increase prices over the following four months minus those expecting a reduction, adjusting for seasonal variation. This series has been advanced by four months, as it relates to producers' expectations of future prices.

Manufacturers' input prices have risen sharply in recent months. Annual inflation in input prices became positive in July for the first time in three years, and had reached 5.8% by September. That reflected pass-through to manufacturers of the rise in crude oil prices—UK producer input prices for oil in 1999 Q3 were more than 70% higher than in the same period a year earlier. Excluding petrol and other volatile components, such as food, drink and tobacco, input prices remain lower than a year earlier. But they rose slightly in the three months to September (see Chart 4.7), owing to a rise in the costs of imported materials, particularly those of metals and other non-oil commodities. This general strengthening in producer input prices was consistent with survey data. The input price index in the Chartered Institute of Purchasing and Supply (CIPS) manufacturing survey continued to rise, with respondents attributing higher prices to the recovery in world demand for commodities. The CBI quarterly industrial trends survey suggested that unit costs were still falling in 1999 Q3, but that the rate of decline had slowed further.

Manufacturers' output prices have continued to edge up in recent months, largely owing to higher prices for petroleum products. After recording negative inflation rates for nearly two years, producer output prices excluding excise duties were higher in August and September than a year earlier. Excluding petrol, food, drink and tobacco, output prices were 0.3% lower than a year earlier, but they rose a little during Q3. Survey data from the British Chambers of Commerce (BCC) suggest that this is a trend that is likely to continue, as in 1999 Q3 manufacturers reported expected price rises over the coming quarter. That was the first expected rise in output prices recorded by the BCC for more than a year, and was reported to reflect upward revisions to firms' expectations of prices for raw materials. The CBI quarterly industrial trends survey in Q3 continued to suggest expectations of falling output prices in the coming months, but the balance is now less negative than at any time since 1998 Q2 (see Chart 4.8).

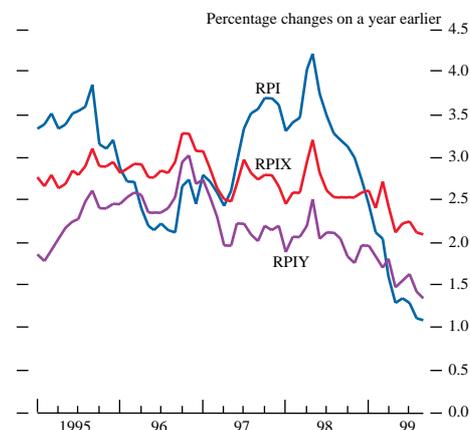
Table 4.A
BCC and CIPS surveys of service sector prices

	1998		1999			
	Q3	Q4	Q1	Q2	Q3	Oct.
BCC service prices balance	12	17	17	11	22	n.a.
CIPS service input prices	57.8	54.6	54.9	55.5	54.5	59.2
CIPS service prices charged	51.3	47.9	49.7	59.9	49.2	51.7

Sources: CIPS and BCC.

(a) The CIPS survey is a monthly series, and the quarterly values shown are averages over the relevant three months. The BCC survey is a quarterly series, so no value is available for October.

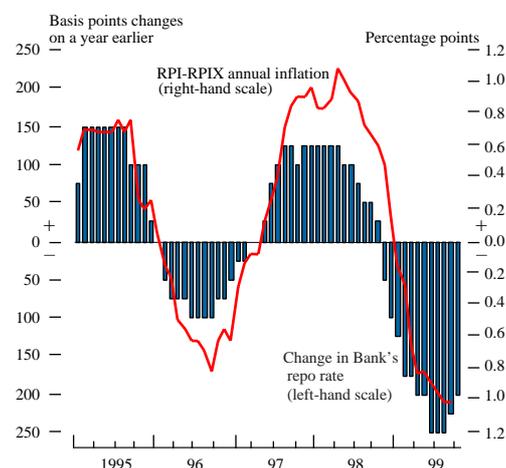
Chart 4.9
Retail price inflation^(a)



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

(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.

Chart 4.10
Difference between headline RPI and RPIX inflation and changes in interest rates



The CIPS report on the construction sector suggested that input prices continued to rise in 1999 Q3. As well as fuel input prices rising, most other inputs were also reported to have increased in price, reflecting stronger demand for construction supplies. This is consistent with stronger activity in the sector since the beginning of the year, though the CIPS survey suggests that the rate of expansion has slowed slightly since June. The box on page 21–22 discussed recent trends in the construction sector in more detail.

4.4 Costs and prices in the service sector

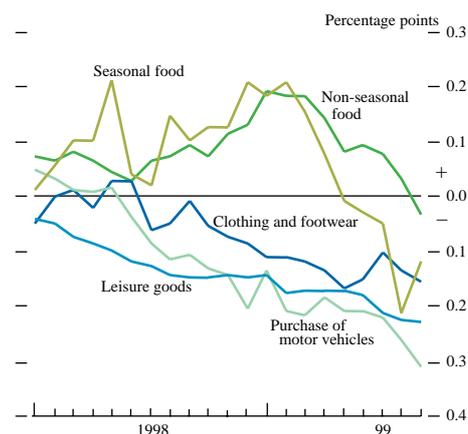
Survey evidence suggests that inflationary pressure in the service sector may have strengthened somewhat (see Table 4.A). In 1999 Q3, the BCC reported a marked increase in the proportion of firms intending to increase their prices in the following quarter. That reflected rises in a range of costs, including raw materials, labour and finance. The CIPS service sector survey also reported that firms had faced higher costs in recent months, particularly because of rises in labour costs. Its measure of prices charged was lower in Q3 than in Q2, and suggested a small net decline over the quarter. Competitive pressures were reported to have reduced the scope for translating higher input prices into higher output prices. But that was not sustained: in October, the CIPS survey reported that prices charged in the service sector had edged up in response to rising costs.

4.5 Retail prices

The rate of retail price inflation excluding mortgage interest payments (RPIX) has fallen further below the government's 2½% target in recent months. It stood at 2.1% in August and September, compared with 2.2% in June and July (see Chart 4.9). RPI inflation also slowed further, to 1.1% in August and September, from 1.3% in June and July.

The difference between RPI and RPIX inflation reflects changes in mortgage interest payments (MIPs), which are affected mainly by movements in mortgage interest rates. Growth in MIPs has slowed since mid 1998, as changes in official interest rates have lowered mortgage interest rates. However, the gap between RPI and RPIX inflation will tend to narrow in the coming months, as the effects of the earlier declines in mortgage interest rates drop out of the calculation of the RPI inflation rate. The most recent rises in official interest rates may also work to narrow the gap (see Chart 4.10).

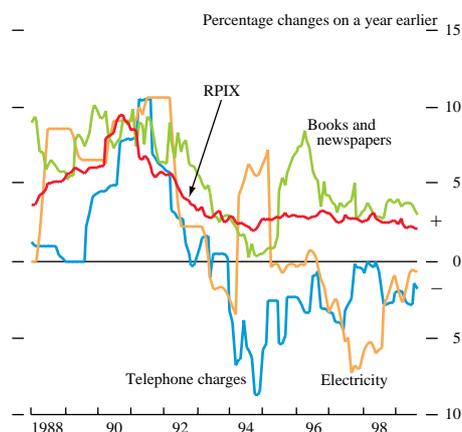
Chart 4.11
Contributions to RPIX inflation



Retail services price inflation rose to 3.6% in September, from 3.3% in June. The increase was primarily the result of higher prices in three sectors: foreign holidays, vehicle insurance, and telephone charges. The lower inflation of RPIX during Q3 therefore reflected movements in goods price inflation, which fell further despite the rise in oil prices this year.⁽¹⁾ The contribution of road fuel to RPIX goods inflation rose from 0.5 percentage points in Q2 to 0.7 percentage points in Q3, but this was more than offset by continued weakness in prices for a broad range of other retail goods. These included clothing and footwear, leisure goods, some household goods and both seasonal and non-seasonal food (see Chart 4.11).

The lagged effects of past declines in imported goods prices continue to have an impact on RPIX goods prices. But changes in retailers' pricing behaviour may also have contributed to the recent weakness of goods prices. The Bank's regional Agents have reported that more than half of their retail contacts were discounting their products more deeply than usual in 1999, particularly in the food, mixed goods retailing, cars, and clothing and footwear sectors. In some sectors, ONS price data suggest that there has been little deviation from normal seasonal price patterns, particularly those which appear after a period of slower demand growth, such as in 1998 Q4 and 1999 Q1. But in other sectors such as food and cars, deeper price discounting appears to represent a clearer break with past patterns.

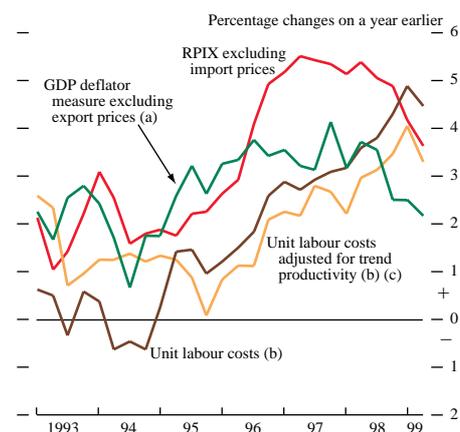
Chart 4.12
Retail prices affected by changes in competition



One third of those retailers reporting deeper price discounting to the Bank's regional Agents attributed the change in pricing behaviour to increased competition, whereas only a small proportion suggested that their lower prices reflected lower input costs. It is therefore possible that some of the decline in goods price inflation stems from changes in competitive behaviour in certain markets. Particular developments in competition and regulation have at different times in the past lowered the inflation rate of some products, such as electricity, telephone charges and books. Those changes had no obvious marked effect on RPIX inflation overall—perhaps because other changes in the prices of other goods and services happened to offset them (see Chart 4.12). However, the MPC judges that the current increase in competitive pressures is rather more widespread than has been observed in the past. The Committee has therefore assumed that there will be

(1) The box on page 36 contains more discussion of the links between oil prices and retail prices.

Chart 4.13
Measures of domestically generated inflation



(a) Using GDP measured at market prices.
 (b) Using National Accounts measures of employee compensation and productivity growth. The unit labour costs series are based on a measure of employees in the workforce, which has been adjusted by the Bank of England for a break in the series in mid 1995.
 (c) Adjusted using long-run trend productivity growth at 2%.

Chart 4.14
Retail sales deflator

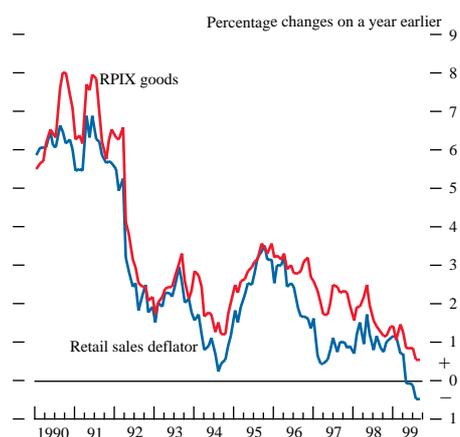
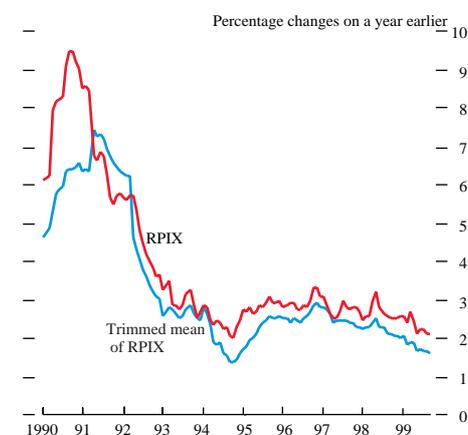


Chart 4.15
Trimmed mean of retail price inflation^(a)



(a) The trimmed mean measure of RPI inflation is calculated by removing the 15% largest and 15% smallest monthly price changes in the components of the RPI. The calculation takes account not only of the size of price changes in different items which are included in the RPI, but also the weight of each item in the index.

some overall compression in retailers' price-cost margins over the forecast period to reflect these pressures, as well as reductions in prices in some of the utilities sectors following decisions by the relevant regulatory bodies. Section 6 discusses the outlook for retail prices in more detail.

Measures of domestically generated inflation (DGI) suggest that domestic inflationary pressures have eased somewhat since the *August Report* (see Chart 4.13). The GDP deflator measure of DGI has fallen towards 2%, but the retail price and labour cost measures of DGI remain above the target of 2½% inflation for RPIX.

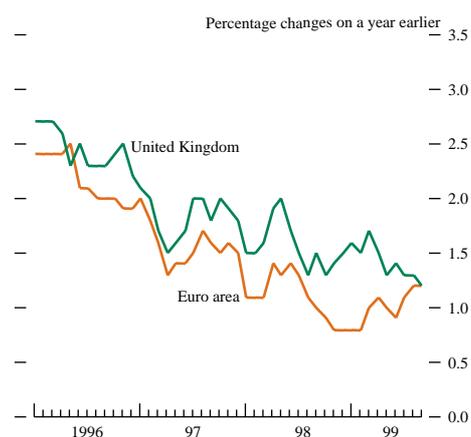
4.6 Other price indices

Annual growth in the GDP deflator was 1.8% in 1999 Q2, its lowest rate for more than four years. Inflation in the deflator for final consumption expenditure was particularly weak, dropping to its lowest since the series began in 1955. The annual rate of change in the monthly retail sales deflator has been negative since May and fell to -0.5% in September, which suggests that slow growth in the broader consumption deflator may have continued into Q3. Inflation in the retail sales deflator has been markedly weaker than the outturns in RPIX goods price inflation (see Chart 4.14) in recent years, despite the fact that RPI goods price data are used in the construction of the deflator. That has largely reflected differences in weights attached to the components of the two indices, and some divergence in coverage. For example, the retail sales deflator does not include cars or petrol.

Other measures of retail price inflation have also fallen in recent months. The trimmed mean measure of inflation declined further in 1999 Q3, to 1.6% from 1.8% in Q2 (see Chart 4.15). This measure excludes the largest and smallest weighted price changes in the individual components of the retail price index, to create a measure of underlying inflation that as far as possible excludes major shifts in relative prices.⁽¹⁾ Annual inflation in the UK Harmonised Index of Consumer Prices (HICP) also fell in Q3 and stood at 1.2% in September. That eliminated the gap between HICP inflation in the United Kingdom and in the euro area, where inflation rose from 0.9% to 1.2% between June and September (see Chart 4.16).

(1) Trimmed mean measures of inflation are discussed in more detail on page 10 of the May 1993 *Inflation Report*.

Chart 4.16
HICP inflation



4.7

Summary

Retail price inflation has remained subdued in recent months. Inflation in the service sector has strengthened, but there has been weakness in a broad range of goods prices. That has partly reflected the lagged effects of past declines in sterling import prices, but it may also have been the result of some downward pressure on the inflation rate from increased competition in the retail sector. Signs of stronger producer price pressures in manufacturing largely reflect the recent rises in world oil prices, though the broader international price situation has also become less benign. Non-oil commodity prices have risen and the outlook for world export prices has strengthened. Against this, the stronger exchange rate profile will dampen upward pressure on sterling import prices in future quarters. The balance between these international and domestic influences is key to the overall inflation outlook, as UK economic activity strengthens.

5

Monetary policy since the *August Report*

This section summarises the economic developments and monetary policy decisions taken by the MPC since the *August Report*. The minutes of the August, September and October meetings are attached as an Annex to this *Report*. The Bank of England's repo rate was increased from 5% to 5.25% in September, was maintained at that level in October, and was increased to 5.5% in November.

In the *August Report*, the MPC's central projection was for four-quarter GDP growth to pick up to around trend by early 2000, rising to about 3% at the two-year forecast horizon. The risks around the projection were on the upside in the first year, but on the downside thereafter. The Committee's best collective judgment was for RPIX inflation to fall slightly below 2% towards the end of 2000 before rising just above the 2½% target at the end of the projection, with slight upside risks throughout the forecast period. But there was considerable uncertainty surrounding the prospects for inflation, and some Committee members preferred to base their central projection on alternative assumptions. In particular, some Committee members preferred an assumption that the exchange rate stays constant, rather than declining on account of interest rate differentials. This lowered their projected profile for inflation. Some of these Committee members judged that there were further downside risks to inflation from the possibility of lower profit margins or weaker pay pressures, although these might be offset somewhat by greater upside pressure from higher oil prices. Other Committee members took the view that pay pressures were likely to be stronger than in the best collective projection, which raised their profile for inflation.

At its meeting on 7–8 September, the Committee noted the possibility that US growth might be less strong than assumed in the *August Report*. There were also signs of incipient inflationary pressures, and the Federal Open Market Committee had recently raised the Federal funds target rate by 0.25 percentage points. Prospects for the euro area were perhaps a little firmer than had been expected in August. Other forecasters' projections for Japanese GDP growth in 1999 had continued to be revised up, and the recovery in the rest of Asia had been stronger than previously expected. Although the most

recent data were not significantly stronger than a month earlier, overall the Committee was more confident about its projection of a robust recovery in world activity.

In the United Kingdom, a breakdown of expenditure for the second quarter of 1999 had shown stronger growth in final domestic demand than had been expected at the time of the *August Report*. Stronger consumption growth was a major contributing factor, and more timely monthly indicators suggested that this strength in consumption had continued into the third quarter. Recent household money and credit data were also indicative of faster growth in consumer spending. Consumer credit growth had been strong, and estimates of mortgage equity withdrawal were the highest for eight years. Housing market activity as measured by particulars delivered was greater than at any time since the early 1990s, and there remained a large stock of, as yet unused, mortgage approvals. House price inflation was around 10% on both the Halifax and Nationwide measures, and appeared to be more widespread—recent rises were not confined to a few isolated hot spots. The Committee judged that the demand and output indicators were almost universally stronger than a month earlier.

The Labour Force Survey measure of the unemployment rate had reached its lowest level since the series began in 1984, while the claimant count rate was at its lowest level since 1980. The Bank's regional Agents had also reported signs of tightness returning, even for some lower-skilled occupations. The Average Earnings Index had picked up markedly in June, although this was influenced by bonuses and the trend was hard to discern. The Reward Index had shown earnings growth continuing to slow and settlements had fallen slightly. But allowing for changes in inflation expectations over the previous year, real earnings growth had probably risen.

On costs and prices, the Committee noted that although some input prices were stronger, producer output prices and retail prices remained weak, and RPIX inflation had been below target for four consecutive months. The oil price was substantially higher than expected at the time of the *August Report*, and prices of a number of other commodities had also risen, perhaps reflecting stronger world demand. But the prospect of increasing competition, for example in food retailing, combined with regulatory effects in the water and electricity industries, might work to reduce the aggregate price level. Overall, the Committee concluded that there were

no strong reasons to change the general shape of the short-term projection for inflation contained in the *August Report*.

With regard to the immediate policy decision, some members, who had favoured a lower inflation projection than the best collective judgment in the *August Report*, preferred no change in interest rates. These members considered the recent data to be consistent with the view that competitive pressures on prices and margins were exerting a stronger downward pressure on inflation than in the past. Furthermore, they thought that a rate rise would probably lead sterling to appreciate, and that this would dampen the recovery that was needed to return inflation to target. Other members cited the unexpected strength in consumption, developments in the housing and labour markets and the oil price rise as providing a case for a rate increase. In addition, an early rate rise might lower the level at which interest rates might otherwise need to be set in order to achieve the inflation target. The Committee voted to increase the repo rate by 25 basis points to 5.25%.

At its meeting on 6–7 October, the Committee considered prospects for the world economy in the light of the most recent data. GDP growth in the United States had slowed in the second quarter, while headline consumer price inflation was increasing. Final domestic demand continued to grow strongly, and the Federal Open Market Committee had recently adopted a bias towards firmer policy in the future. In Japan, output growth in Q2 had been higher than expected, although the strong appreciation of the yen, if sustained, could weaken future growth prospects. Recent data for the euro area continued to show signs of a recovery. Taking these developments together, the Committee concluded that there had been little change in the outlook for world activity since its previous meeting.

Turning to the United Kingdom, the Committee discussed the month's financial market movements. Both short-term and long-term nominal interest rates had risen, and there was some evidence that real interest rates were also higher. Equity prices had fallen, and the sterling effective exchange rate had risen. These movements would tend to restrain demand.

Real quarterly GDP growth was stronger than previously estimated for both the first and second quarters. The most recent retail sales data indicated continued strength in final domestic demand in Q3, and this was consistent with reports from the Bank's regional Agents and the

CBI Distributive Trades Survey. But both the GfK consumer confidence measure and the CIPS services survey were slightly lower. The trade data suggested that the stronger export performance in Q2 might have continued into the third quarter, owing to stronger world demand. Overall, the evidence suggested stronger output growth than had been expected a month earlier, although some Committee members saw a few signs that domestic demand growth could perhaps be moderating.

In the labour market, employment growth was no longer slowing, while the Labour Force Survey and claimant count measures of the unemployment rate had again fallen. The headline growth rate of the Average Earnings Index had risen slightly, while pay settlements continued to fall. Real earnings growth had risen, which might indicate stronger labour market pressures, although higher real earnings might also have been the result of lower inflation than expected at the time that settlements were agreed.

Although higher oil prices had led to a rise in producer input prices, RPIX inflation in the year to August had been a little lower than expected. Goods price inflation as measured by the retail sales deflator was negative, and most measures of domestically generated inflation had fallen. A survey by the Bank's regional Agents had shown widespread discounting in response to competitive pressures. To the extent that some price reductions were temporary, inflation might be higher in the future. But if lower prices led to lower inflation expectations and so to lower pay settlements, the effects might be more persistent.

In considering the immediate policy decision, the Committee noted the likelihood that output would grow above trend in Q3. Stronger input prices and a tight labour market posed an upside risk to inflation. But developments in financial markets over the previous month would tend to restrain demand growth and inflationary pressures in the medium term. Some Committee members noted that the near-term inflation outlook remained weak, and structural changes that may have occurred in the labour and product markets might dampen the inflationary consequences of stronger activity. The Committee voted to maintain the Bank's repo rate at 5.25%.

At its meeting on 3–4 November, the Committee voted to raise the Bank's repo rate from 5.25% to 5.5%.

6.1 The inflation projection assumptions

The Committee approved this *Report* on 5 November. It contains the Committee's assessment of developments in the economy since August 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 5.5% during the next two years, and are conditioned on the assumptions described below.

There has been a further slight improvement in the prospects for world activity since the *August Report*. The near-term outlook in the United States remains robust. Over the next two years, output growth is expected to ease gradually, although the timing and extent of the slowdown remains difficult to gauge. Forward-looking indicators for the euro area have picked up, supporting the strengthening recovery built in to the projection at the time of the *August Report*. And though prospects for the Japanese economy remain uncertain, the outlook appears significantly brighter than it did three months ago, taking into account stronger-than-expected GDP growth in the second quarter of the year, indicators of economic activity covering the third quarter, and the recently announced fiscal package. There has been a pick-up in industrial production in a number of emerging market economies, and prospects have improved over the past three months. Interest rate spreads on emerging market debt over US Treasuries have fallen slightly since the *August Report*, although they remain at relatively high levels. Taking these developments together, the MPC has made a further small upward revision to its central projection for world activity. As world trade strengthens, the most likely outcome is that growth in UK-weighted export markets will rise from around 5% this year to over 7% in 2000, before falling back slightly in 2001.

There remain a number of risks to the world outlook and, although the central projection for world activity has been raised slightly, the Committee judges that the risks around this projection are again weighted to the downside. For example, the US economy could slow

more rapidly than expected, should asset prices fall and domestic demand growth falter. That would weaken global demand and world trade.

Upward pressures on world prices over the past six months have, on balance, been slightly stronger than projected at the time of the *August Report*. Manufactured export goods prices were a little higher in the second quarter of the year than expected three months ago. Moreover, oil prices have been stronger than assumed earlier, as market conditions have tightened further. In the other direction, the pick-up in non-oil commodity prices in the third quarter was somewhat weaker than expected in August—stronger industrial commodity prices were more than offset by weaker food prices, reflecting good harvests and structural overcapacity in some products.

Although global inflation is expected to remain low, world prices are likely to rise a little faster than projected in August, given the improved outlook for activity. Non-oil commodity prices are expected to rise slightly more quickly than assumed three months ago. The oil price assumption for the next two years has been raised given higher recent 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 by the end of 2001. Prices of manufactured goods and traded services are expected to edge up further, as higher commodity prices continue to feed through. Taking these elements together, the assumed profile for world prices is slightly stronger than in August, although the risks around this are weighted to the downside given the balance of risks on global activity. 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 over the past three months. The effective exchange rate index (ERI) averaged 105.6 in the 15 working days up to and including 3 November. This forms the starting-point for the exchange rate profile assumed in the projection. It compares with a starting-point of 103.1 at the time of the *August Report* and an implied level of 102.6 for November in the August central projection.

All Committee members agree that there is considerable uncertainty about the outlook for the exchange rate. The Committee reviewed the respective merits of alternative approaches (see the box on page 48). Based on this review, the Committee agreed to take the average of a

The exchange rate in forecasting and policy analysis

Of all the factors affecting inflation and growth prospects, the exchange rate is one of the most important and unpredictable. Though all agree that the future path of the exchange rate is highly uncertain, there are alternative benchmarks for assessing exchange rate prospects.

A constant exchange rate or random walk

Perhaps the simplest approach is to assume that the current exchange rate is the best predictor of the future rate. According to this view, a rise in the exchange rate is equally likely as a fall, and the best assumption is that the nominal exchange rate will be constant on average. In technical language the exchange rate follows a random walk. Some statistical tests on past data indicate that the random walk hypothesis has performed no worse than—indeed often better than—the uncovered interest parity theory described below. For this reason, and given the merit in a simple approach, some Committee members were inclined toward this benchmark.

Uncovered interest parity

The basic theory of uncovered interest parity (UIP) says that, on average, the exchange rate will evolve in line with interest rate differentials (but with random variation around this path as with the random walk hypothesis). This will be true if investment in sterling is expected to do neither better nor worse than investment in, say, euro or dollars.

The theory of risk-adjusted UIP says that investment in sterling can have a higher (or lower) expected return than investment in foreign currency if investors perceive investment in sterling to be more (or less) risky than foreign currency. Some Committee members were inclined towards UIP, in part because they could see no compelling reasons relating to risk to assume that the exchange rate will depreciate at a slower rate than implied by interest rate differentials.

Econometric equations

Finally, one can attempt to predict exchange rate movements on the basis of econometric analysis of past experience—see, for example, the recent paper on ‘Sterling’s puzzling behaviour’ by Sushil Wadhvani, a member of the Monetary Policy Committee.⁽¹⁾

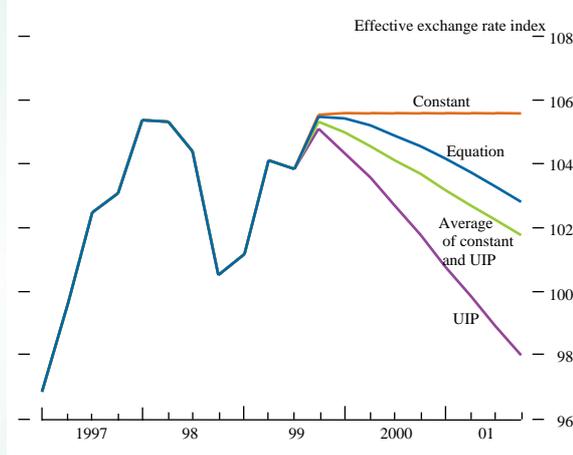
Econometric exchange rate equations are designed to fit past experience better than other approaches, but views may reasonably differ as to their robustness and hence their predictive power in relation to the future. Nevertheless, some members placed weight on the results of this work.

Both UIP and econometric equations offer explanations of some exchange rate movements. For example, according

to UIP, sterling will tend to increase if expected UK interest rates rise relative to expected overseas interest rates. UIP also implies that the current value of the exchange rate will rise if agents revise up their view of the likely future exchange rate. Economists typically assume that the expected value of the currency in the medium term represents some form of ‘equilibrium’.

The notion that the exchange rate adjusts towards equilibrium is also a common feature in all of the approaches to the exchange rate. The rationale is that, though exchange rates may depart substantially from their ‘fundamental equilibrium’ values for significant periods, there are forces which will tend to move the rate back towards equilibrium over time. But there are at least two difficulties: equilibrium is hard to measure and may change as fundamentals alter, and reversion towards equilibrium may take a long time.

Alternative exchange rate projections



The chart compares the forecast profile for the sterling effective exchange rate under alternative approaches.⁽²⁾ Expected UK interest rates exceed those overseas, and the UIP projection implies that sterling will depreciate by a total of 7.2% over the next two years. According to the projection based on Dr Wadhvani’s equation, sterling will depreciate by 2.6% over the next two years. This is rather less than the depreciation implied by interest differentials alone as, according to this particular model, sterling is close to its ‘intermediate equilibrium’.

The range of forecasts for sterling implied by these three methods is large, and reflects the major uncertainties surrounding the exchange rate outlook. For its central projection, the MPC decided to take an average between the current level, as implied by the random walk model, and the path implied by UIP. On this basis, sterling is assumed to depreciate by 3.6% over the next two years. This is broadly similar to the path given by the econometric equation.

(1) *Bank of England Quarterly Bulletin*, November 1999, pages 416–27.

(2) The projections based on UIP and the econometric equation are adjusted to reflect the forecast assumption that official interest rates remain at their current level of 5.5% over the next two years.

constant nominal rate and a path related to the pattern of market interest rate differentials for the central projection. On this assumption, the sterling ERI declines to 101.8 by the end of the two-year forecast period, consistent with bilateral sterling exchange rates of \$1.63 and 0.67 against the euro (equivalent to DM2.93). In selecting this assumption, some Committee members attached weight to the fact that the path produced by this method is also close to the projection implied by an econometric model of the exchange rate recently estimated by a Committee member. If, alternatively, the central projection is 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, holding the nominal exchange rate constant would lower inflation by some 0.3 percentage points at the two-year horizon.

All members agree that, whatever assumption is made for the most likely path for sterling, the likelihood of significant deviations from this trajectory is high. In the event of major changes from the assumed path, the Committee will, as always, review the possible reasons for the movement in the exchange rate and the potential implications for output and inflation.

Changes in equity prices affect household wealth and companies' cost of capital. The FTSE All-Share index averaged 2835 in the 15 working days up to 3 November, compared with 2960 in the equivalent period three months ago. The Committee has maintained the assumption that equity prices rise with nominal GDP over the forecast period, from the lower level.

The fiscal plans announced by the Chancellor in the March Budget remain the basis for the November projection, although the Committee assumes that some spending that was previously expected to take place in this financial year will now take place in subsequent years. An overall underspend is judged more likely than an overspend over the three years. The Committee was briefed by Treasury officials on the autumn Pre-Budget Report in advance of its November meeting.

Previous projections have already incorporated assumptions about the effects of the National Minimum Wage, the New Deal and the Working Time Directive. Preliminary analysis of the effects of the National Minimum Wage suggests that the impact on earnings has

been rather less than earlier judged. As a result, the Committee has reduced the assumed impact by a third. There is no change to the other assumptions on labour market policy measures in the current projection.

6.2 The output and inflation projections

Activity has strengthened more rapidly than expected three months ago. GDP growth in the first half-year was revised up moderately, and the preliminary estimate for GDP growth in the third quarter was 0.9%, rather higher than the central projection in the *August Report*. The implications for the medium-term inflation outlook are not straightforward, however, as the links between activity and inflation remain hard to gauge. Although activity again appears stronger than earlier expected, recent inflation outturns have once more surprised on the downside. The Committee revised its projections for activity and inflation against this background.

Full information on the composition of demand and output is only available for the first half of the year. Following a quarter of flat activity at the end of 1998, GDP growth at market prices is now estimated to have risen by 0.2% in the first quarter and by 0.6% in the second. Final domestic demand has grown surprisingly strongly throughout this period, underpinned by robust consumer spending. Two factors dampened the impact of strong demand on output growth in the first half-year. First, firms reported excess stock levels at the end of 1998 and have subsequently met part of the higher demand by reducing inventories. Recent surveys suggest that inventories are now more closely aligned with desired levels, suggesting that further strength in demand is likely to be translated into faster output growth. Second, there was a significant deterioration in the net trade position over the winter months, reducing the growth in overall demand for UK output. But this effect may now be unwinding as export growth has revived more quickly than expected: indeed the net trade contribution to growth in the second quarter was positive for the first time in almost two years. Drawing these elements together, the combination of higher-than-expected final domestic demand, the improvement in the inventory balance, and stronger net trade performance is consistent with the rather faster pick-up in activity in the second half of this year than in the August projection.

Consumer spending growth has again outstripped earlier expectations. Expenditure rose by over 1% in the

second quarter from an upwardly revised level in the first, and is now some 4% higher than a year ago. Although part of the growth in the first half-year is linked to the new seasonal pattern of spending on cars, which should unwind in the second half-year, the strength of consumer spending is quite broadly based. More timely indicators suggest that underlying consumer spending remains robust. Retail sales volumes rose by over 1% in the third quarter. Growth in consumer borrowing has picked up further, and loan approvals data suggest continued increases in the pipeline. The housing market has strengthened further, consistent with an improvement in consumer sentiment. And direct surveys of consumer confidence show higher balances in 1999, as fears of rising unemployment have receded and real income growth has remained strong.

Consumer expenditure has recently been rising more rapidly than expected in relation to variables such as labour income, wealth, interest rates and unemployment. Part of this buoyancy might prove temporary, but on balance the Committee concluded that the impact of housing wealth on consumer spending could be stronger than earlier judged, and consequently made a small upward adjustment to the forecast. Consumer spending is thought likely to remain strong over the next two years, underpinned by rising real labour income, although the Committee judges that growth will slow somewhat as the impetus from the very rapid increase in financial wealth over the past three years gradually fades. Risks to the spending outlook are assumed to be relatively evenly balanced: the possibility of a faster than expected rise in house prices and housing wealth is counterbalanced by the possibility of lower equity prices and financial wealth.

There has been little change to the outlook for whole-economy investment. Although investment was rather weaker than projected in the first half-year, the main reason is that public sector investment fell sharply. Government investment is very volatile from quarter to quarter and the central projection assumes that any shortfall in spending relative to plans this year will be spent over the next two years. Business investment remains relatively robust, up by more than 11% in the year to the second quarter, although there are some signs that growth may be slowing in line with previous forecasts.

Stock levels at the end of the second quarter were in line with the August projection. Firms have reduced excess

stock levels in the first half-year and inventories now appear to be much closer to desired levels. The Committee continues to expect that firms will find ways of economising on inventories over the medium term, and that the aggregate stock-output ratio will decline in the long run.

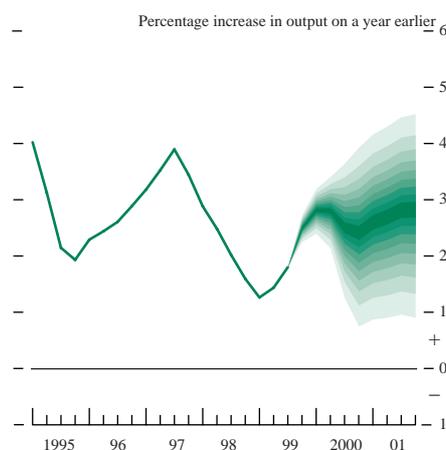
Export growth in recent months has been rather stronger than expected in August, although the volatility of monthly and quarterly data makes the trend hard to discern. On its own, the somewhat stronger outlook for the global economy would improve the prospects for UK exports, but relative to August this is counterbalanced by the assumed higher exchange rate profile over the next two years. The Committee judges that UK export growth is likely to be broadly in line with UK-weighted world trade.

An upward revision to the level of imports in the first half-year has brought import levels more closely into line with earlier expectations. Nonetheless, import growth was quite weak in the first half-year given the strength of final demand. One possible explanation is that import demand was temporarily reduced as firms ran down stocks substantially. If so, there may well be some recovery in import growth in the coming months as the inventory correction ends. Taking exports and imports together, the Committee judges that the positive net trade contribution to GDP growth seen in the middle of 1999 may be temporary and that negative contributions are more likely through next year.

Bringing the components of demand together, the Committee considers that the near-term outlook for economic activity has strengthened since August. Final domestic demand is rising more quickly than estimated three months ago, and prospects for the international economy have improved. Labour market indicators also support the stronger picture. Employment growth and total hours worked have both risen in recent months, while unemployment has continued to fall on both the LFS and claimant count measures.

Evidence from business surveys supports the improved outlook for short-term growth. Business confidence has strengthened as orders and output expectations have improved. Agents' contacts also report a relatively widespread improvement in business confidence over the past three months, although perhaps not to the extent of some of the surveys.

Chart 6.1
Current GDP projection based on constant
nominal interest rates at 5.5%



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.

Growth is consequently likely to be more rapid in the short term than anticipated in August. But these higher growth rates might not be sustained. Higher interest rates, a stronger exchange rate and rather lower equity prices than in the August projection will all act to moderate GDP growth during next year. Quarterly growth rates are expected to settle a little above trend in the current central projection: the four-quarter growth profile is less smooth as this is affected by the pattern of rapidly rising growth through 1999.

The central projection for the four-quarter growth rate of GDP at constant market prices shows the sharper recovery through 1999 than in the August projection (see Chart 6.1).⁽¹⁾ Growth may now reach the 2.5%–3% range around the end of the year. But, as in August, the four-quarter growth rate is then expected to level off around this level, as domestic demand growth moderates and world trade growth stabilises. However, because of the stronger growth through 1999 and the resulting higher level of output, the pressure of demand on supply capacity will be rather higher over the next two years than assumed in August.

As highlighted in the *August Report*, there are considerable uncertainties surrounding the links between the trends in economic activity and changes in inflationary pressure. Developments over the past three months underline that uncertainty. As in the previous quarter, the news on demand and activity in recent months has surprised on the upside. But although some indicators of inflationary pressure, such as nominal earnings growth, have risen by more than expected, measures of retail price inflation have fallen. In particular, RPIX inflation was again weaker than projected three months ago. The outturn in the third quarter was 0.1 percentage points lower than the central projection in the *August Report*, as RPIX inflation edged further below the target.

Monetary indicators provide mixed signals on the outlook. Official interest rates are higher than in August. Narrow money growth has moderated in recent months but remains fairly strong. Broad money growth has slowed to the lowest level since the current data series began in 1963, but the recent deceleration has again been largely accounted for by a contraction in deposits by financial companies, which may have little immediate implication for nominal demand. Household Divisia money growth remains strong, which is consistent with

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

robust consumer spending in the near term. Credit growth to households—especially secured lending—has risen further, and broad measures of private non-financial company funding, including capital issues as well as bank borrowing, remain quite buoyant.

Pay pressures appear rather stronger than expected three months ago. The headline rate of growth in the Average Earnings Index reached 4.9% in August, similar to the level six months ago, but some 0.6 percentage points higher than three months ago. Movements from month to month remain quite volatile and are consequently assigned limited weight by the Committee. But smoothing the series by taking longer-run averages suggests that underlying earnings growth may have edged upward in recent months. Supporting this view, the Federation of Recruitment and Employment Services reports a rise in pay growth for staff recruited through agencies. On the other hand, the Reward Index is indicating lower earnings growth, and pay settlements remain generally subdued.

Although bargains are typically struck in nominal terms, wage negotiators are ultimately concerned with the outcome for real earnings, as this determines employees' ability to buy goods and services and affects employers' ability to earn profit. On most measures, real earnings growth has picked up somewhat over the past year. Recent growth has been rather faster than projected three months ago, even after allowing for the stronger-than-expected labour market data. The Committee reviewed alternative explanations that may have different implications for the outlook for earnings. One potential explanation was that in the August forecast, the Committee had overestimated the extent of the improvement in the structure of the labour market in recent years, and so had underestimated real earnings pressure for a given level of unemployment. An alternative explanation was that recent inflation outturns had been much lower than expected, particularly on the RPI measure, but also in terms of RPIX. Some of the recent increase in real earnings might consequently reflect the surprising fall in inflation relative to expectations at the time wage contracts were agreed, rather than any impact of labour market tightness.

The Committee agreed that the recent evidence was particularly hard to read given the conflicting data and possible interpretations, and that there remained considerable uncertainty surrounding the prospects for earnings. Weighing the arguments, the Committee

considers that, while there may be some volatility in the recent outturns, the data are consistent with a higher profile for real earnings than in the August central projection, and an adjustment was made to the central projection to reflect this. Risks around the earnings profile are assumed to be evenly balanced. Some Committee members, who place greater weight on structural improvements in the labour market, prefer a weaker earnings profile which would lower RPIX inflation by 0.2 percentage points at the two-year horizon.

The impact of earnings on firms' unit costs is moderated by productivity growth. Following a period of slowing productivity growth last year as the economy cooled, there have been further signs of a rebound in recent months, as the recovery in activity gathers momentum. The Committee has maintained the assumptions from previous forecasts that productivity growth per hour will continue to pick up, returning to its long-run historical average over the next 18 months or so, and that structural improvements in labour market flexibility have reduced the variability of productivity over the cycle. Recent evidence does not, however, support the judgment from previous forecasts that average hours worked per person are likely to rise more quickly than in the past in the recovery phase of the cycle. The previous adjustment has been removed. The implication is that the level of employment is higher for any given demand for labour, which adds slightly to inflationary pressure overall.

Cost pressures have been rather stronger than expected three months ago, reflecting the pick-up in earnings growth and higher oil prices. But consumer price inflation has remained low. RPIX inflation has dropped further below target to 2.1%; and averaged around 0.1 percentage points lower in the third quarter than projected in August. Some of the unexpected weakness in inflation can be accounted for by the recent decline in seasonal food prices, which may not persist. However, price-cost margins also seem to have been rather lower than previously assumed, consistent with more widespread discounting and greater competitive pressure.

The Committee re-examined the prospects for price-cost margins over the next two years in the light of more evidence of downward pressures on margins and prices. Competitive forces appeared to be intensifying in a number of sectors, linked to factors such as greater

international penetration of domestic markets, as barriers to trade and to market entry have declined, and to information technology advances which were offering savings on distribution networks, more transparent pricing, and encouraging new business opportunities. The Committee recognises that these broad structural forces have been affecting economic conditions for some time, but judges that recent developments are consistent with an intensification of the trends, which could therefore affect the near-term inflation outlook. It was consequently agreed to incorporate an adjustment in the central projection to take account of a structural reduction in the level of margins in some sectors. Although there is considerable uncertainty about both the magnitude and duration of the impact, the adjustment in the central projection assumes that these effects take place throughout the forecast period, reducing measured inflation by around 0.2 percentage points in both the first and second years of the projection. Risks around the central projection for price-cost margins are viewed as symmetric. Some Committee members prefer an alternative assumption with the same downward adjustment to the price level and measured inflation in the first year, but with no further change thereafter. On this assumption, inflation at the two-year horizon would be higher by some 0.2 percentage points relative to the central projection.

Regulatory developments are also putting downward pressure on prices. The Committee reviewed these effects separately. The small downward adjustment to the level of margins from 2000 Q2 to reflect OFWAT recommendations on water prices was maintained. A further adjustment of a broadly similar size was made to reflect recent proposals on domestic electricity prices. These factors reduce the level of prices, and for a year lower measured inflation. Neither of these adjustments significantly affects measured RPIX inflation at the end of the two-year period. However, a further adjustment has been made to reflect lower electricity prices for business users, which, given the transmission lags, has some effect at the two-year horizon.

Putting these elements 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 5.5% is shown in Chart 6.2.⁽¹⁾ Alongside is the projection from the *August Report*, which was based on constant interest rates at 5% (see Chart 6.3).

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

Chart 6.2
Current RPIX inflation projection based on
constant nominal interest rates at 5.5%

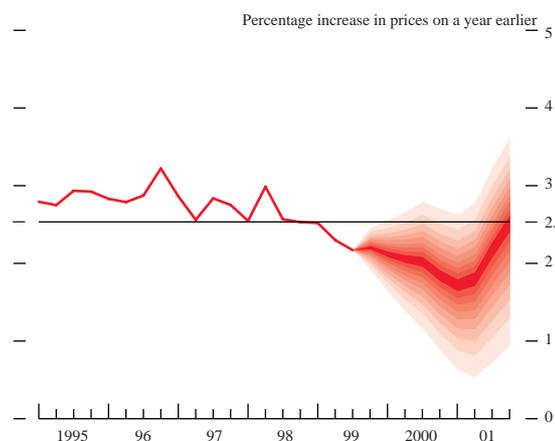
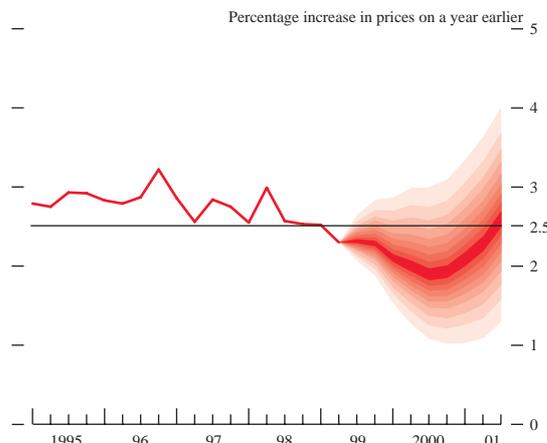


Chart 6.3
RPIX inflation projection in August based on
constant nominal interest rates at 5.0%



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*.

On the basis of the assumptions embodied in the central projection, the broad shape of the inflation profile is as before. Inflation is projected to remain below target for much of the forecast period, declining further to just below 2% over the next twelve to eighteen months, before picking up in the central projection to the target level by the end of 2001, as pressures build from the sustained period of above-trend activity growth and as the temporary effects on measured inflation from lower domestic water and electricity prices unwind. The differences from the previous projection are relatively small overall as a number of the influences have moved in offsetting directions. Relative to August, upward pressure on inflation from higher real earnings, higher world prices and rather stronger domestic activity are broadly counterbalanced by additional downward pressure from a stronger exchange rate, higher interest rates and lower price-cost margins. The starting-point is lower than in August, as inflation has fallen more rapidly than expected. The short-term profile is also a little weaker, and so the projected trough in inflation is rather lower than three months ago. The projected pick-up in inflation during 2001 from the deeper trough is a little sharper than in August as some of the benign influences which are temporarily suppressing inflation fade.

Risks around the central projection for both activity and inflation are weighted to the downside in both years, primarily reflecting the possibility of a weaker outlook

Chart 6.4
Current projection for the percentage increase in RPIX in the year to 2001 Q4

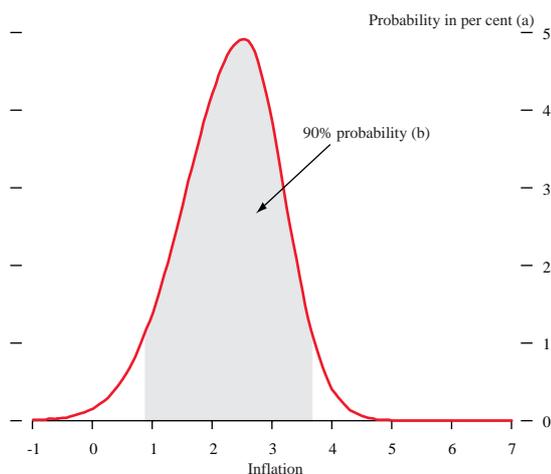
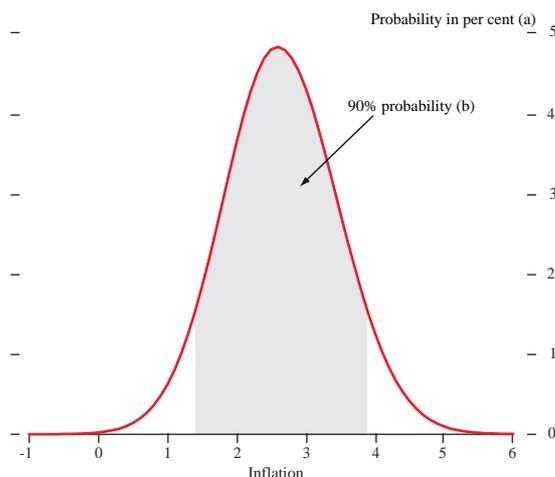


Chart 6.5
August projection for the percentage increase in RPIX in the year to 2001 Q3



Source: Bank of England.

- (a) Probability of inflation being within ± 0.05 percentage point of any given inflation rate, specified to one decimal place. For example, the probability of inflation being 2.5% (between 2.45% and 2.55%) in the current projection is around 5%.
- (b) The areas shaded light grey contain 90% of the probability, and are consistent with the widest bands shown in Charts 6.2 and 6.3. For further details see 'The *Inflation Report* projections: understanding the fan chart', February 1998 *Quarterly Bulletin*, pages 30–37, and the box on page 52 of the February 1999 *Report*.

Table 6.A
The MPC's expectations for RPIX inflation and GDP growth based on constant nominal interest rates^(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%
1999 Q4	<1	13	84	3	<1	<1
2000 Q4	29	35	26	8	1	<1
2001 Q4	17	18	22	23	14	6

GDP growth

Probability, per cent	Range:					
	less than 0%	0% to 1%	1% to 2%	2% to 3%	3% to 4%	more than 4%
1999 Q4	<1	<1	1	98	1	<1
2000 Q4	2	9	26	36	21	6
2001 Q4	1	7	19	32	27	14

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

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

Difference from central projection in percentage points

RPIX inflation

	Constant exchange rate	UIP exchange rate	Lower earnings	Higher margins
2000 Q4	-0.1	0.1	-0.1	0.0
2001 Q4	-0.3	0.3	-0.2	0.2

GDP growth

	Constant exchange rate	UIP exchange rate	Lower earnings	Higher margins
2000 Q4	-0.1	0.1	0.0	0.0
2001 Q4	-0.2	0.2	0.1	-0.1

for the world economy than in the central case, but with a small additional effect from a possible underspend on government expenditure plans. Other risks are judged to be broadly offsetting. 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 where difficult judgments are required to produce the projections. On some issues, certain Committee members prefer to take a different view 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. The table presents broad illustrative calibrations of the possible effects on RPIX inflation and GDP growth of the alternative assumptions.

These 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 gives rise to a range of views about inflation prospects, highlighting the uncertainties and difficulties in forming judgments on the outlook. These varying assumptions could either raise or lower the inflation rate at the two-year horizon by $\frac{1}{4}$ to $\frac{1}{2}$ percentage points.

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

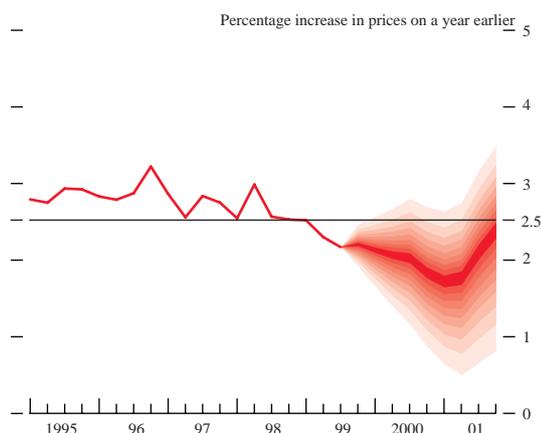


Chart 6.7
Current GDP projection based on market interest rate expectations

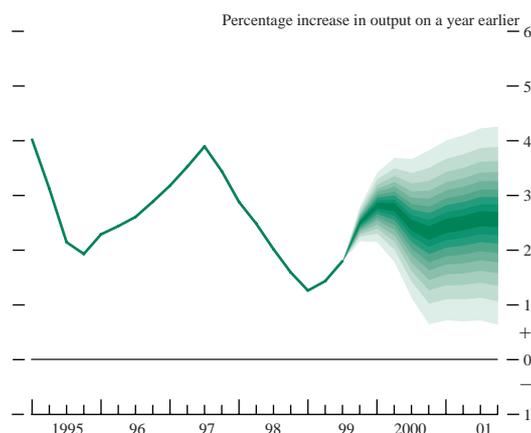
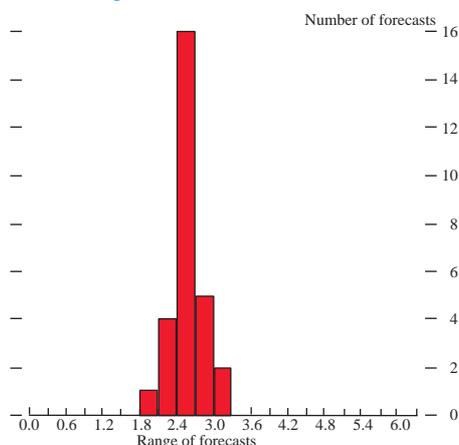


Chart 6.8
Distribution of RPIX inflation forecasts for 2001 Q4



Source: Forecasts of 28 outside forecasters as of 25 October 1999.

Since the *August Report*, an improved technique has been introduced to estimate the market expectation of the likely path of official interest rates, based on the interest rate available on gilt-edged securities used as collateral in short-term repurchase contracts.⁽¹⁾ This new curve is thought to provide a better guide to market expectations of future official rates than the short sterling futures curve. Forward rates have risen a little since the *August Report*. The latest evidence from this curve implies that market expectations are for official rates to rise over the next eighteen months to two years, peaking at around 6½%. As a result, the MPC's projections under the assumption that official rates move in line with market expectations are for significantly weaker activity and lower inflation than in the constant interest rate case (see Charts 6.6 and 6.7). If the short sterling futures curve were used instead to gauge the outlook for official rates, market expectations are that official rates would rise to around 7%. If rates followed this path, inflation at the two-year horizon would be lower by a further 0.1 percentage points relative to the projection in Chart 6.6.

6.3 Other forecasts

Chart 6.8 shows the distribution of central forecasts for the twelve-month rate of RPIX inflation in 2001 Q4, based on information from 28 forecasters surveyed by the Bank in late October. The mean forecast for inflation in the year to 1999 Q4 was 2.1%, rising to 2.3% in 2000 Q4 (with a range of 1.7% to 2.9%), and reaching 2.5% in 2001 Q4 (with a range of 1.8% to 3.1%). The

(1) See Anderson, N and Sleath, J (1999), 'New estimates of the UK real and nominal yield curves', *Bank of England Quarterly Bulletin*, November, pages 384-92.

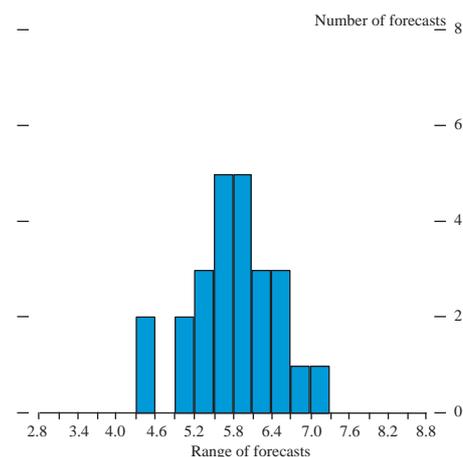
Table 6.C
Other forecasters' expectations of RPIX inflation and GDP growth^(a)

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%
1999 Q4	8	36	47	8	2	<1
2000 Q4	7	24	36	23	7	3
2001 Q4	6	16	33	29	12	5

GDP growth						
Probability, per cent	Range:					
	less than 0%	0% to 1%	1% to 2%	2% to 3%	3% to 4%	more than 4%
1999 Q4	<1	3	26	59	11	1
2000 Q4	1	5	20	44	25	6
2001 Q4	3	8	21	41	22	6

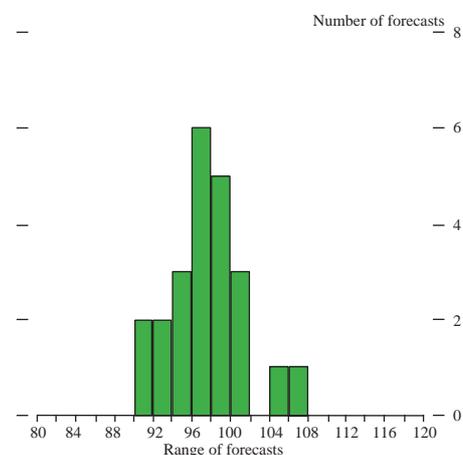
(a) 28 other forecasters provided the Bank with their assessment of the likelihood, at three time horizons, of expected twelve-month RPIX inflation and four-quarter output growth falling in the ranges shown above. This table represents the means of the responses for each range. For example, on average, forecasters assign a probability of 6% to inflation turning out to be less than 1.5% in 2001 Q4. Rows may not sum to 100 because of rounding.

Chart 6.9
Distribution of repo rate forecasts for 2001 Q4



Source: Forecasts of 25 outside forecasters as of 25 October 1999.

Chart 6.10
Distribution of sterling ERI forecasts for 2001 Q4



Source: Forecasts of 23 outside forecasters as of 25 October 1999.

estimates for 2000 and 2001 are slightly lower than the projections made at the time of the July survey. The forecasters assign a probability of around 45% to inflation being above target in the final quarter of 2001, and a probability of around 55% to it being below (see Table 6.C). These estimates have changed moderately since the August *Report*, with more weight placed on lower outturns for inflation.

The forecasters' average projection for GDP growth in the year to 2000 Q4 is 2³/₄% (with a range of projections from 1¹/₄% to 3¹/₂%), falling slightly to 2¹/₂% in the year to 2001 Q4 (with a range of 1¹/₄% to 3¹/₂%). The estimate for 2000 Q4 is slightly higher than at the time of the August *Report*.

For the first time, the forecasters provided the Bank with their central projections for the official interest rate and the sterling ERI. The forecasters' average projection for the official interest rate in 2000 Q4 is 6% (with a range of 5% to 6³/₄%), falling slightly to 5³/₄% by 2001 Q4 (with a range of 4¹/₂% to 7¹/₄%). On average, the forecasters assume that the sterling ERI will fall to 100.3 by 2000 Q4 (with a range of 93.0 to 107.5), and to 97.3 by 2001 Q4 (with a range of 91.0 to 107.0)—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*.

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



Minutes of the Monetary Policy Committee meeting on 4–5 August 1999

1 Before turning to its immediate policy decision, the Committee reviewed developments in the world economy, monetary and financial market conditions, demand and output, the labour market, and prices and costs in the context of finalising its latest projections for inflation and output growth.

The world economy

2 The Committee discussed whether there had been any material changes to the world economic outlook, or in the balance of risks, since its *May Inflation Report*. Recent data suggested that the US economy was slowing: GDP growth had fallen from 1.1% in 1999 Q1 to 0.6% in 1999 Q2, a weaker outturn than widely expected. Taken together with a lower equity market and a slight fall in consumer confidence, this suggested that the probability of a ‘soft landing’ had increased. Some doubts were, however, expressed about this. First, much of the fall in output growth between Q1 and Q2 was accounted for by inventory changes, which might unwind. Second, whether or not a soft landing was achieved might depend on labour market developments. There were signs that recent benign outcomes for productivity and unit labour costs might be fading. That could in turn lead to a tightening of monetary policy. Taking these points together, there remained a risk of the US economy slowing more sharply than assumed in the Committee’s central projection, particularly if equity prices fell.

3 In the euro area, the backward looking data generally remained weak. Area-wide industrial production had fallen again in May, although output growth in a number of the smaller economies—for example Spain, Netherlands, Belgium—was stronger than had been expected by most commentators. Forward-looking indicators had strengthened somewhat, but were still mixed. On the one hand, there were signs that business sentiment had improved in the largest economies; for example, the IFO survey in Germany and the INSEE survey in France had both risen strongly in June. On the other hand, surveys for each of France, Germany and Italy suggested that orders were still falling, implying that some downside risks persisted. The Committee noted that various ECB statements had been taken by the market to suggest that monetary policy was more likely to be tightened than eased. It seemed that this was against a background of stronger growth in the monetary aggregates and rising energy prices, and could reflect a judgment that the amount of cyclical slack in the euro-area economy was smaller than might be inferred from the level of unemployment.

4 It now seemed less likely that Japanese GDP growth would fall by as much in 1999 Q2 as had been thought the previous month. More generally, the downside risks were not yet materialising. It was also possible that, if they did, the Japanese government would employ fiscal policy to try to offset any weakening in aggregate demand. However, worries remained. It was unclear how potential problems in the insurance sector might be resolved and whether and how they might affect the economic outlook. Market commentators had expressed concerns about the yen, which had risen against the dollar over the previous month after the earlier efforts to hold it down via exchange market intervention.

5 Taken as a whole the crisis-affected emerging market economies continued to recover. But the environment remained fragile, as evidenced by the generalised rise in interest rate spreads since the *May Inflation Report*. Financial markets were, in particular, discounting some possibility of a Chinese devaluation, although on the whole commentators seemed to think that unlikely

this year. There also seemed to be renewed worries about Korea. Partly against a background of uncertainty about official policy towards corporate restructuring, the equity market had fallen around 10% following the announcement of problems at Daewoo, although the market had subsequently recovered. There remained a longer-term downside risk to the world economic outlook from the slow pace and gradual effect of corporate and financial sector reform in emerging market economies.

6 Overall, compared with May, the Committee had raised its central projection for world output growth, but the balance of risks was on the downside. Some risks to the outlook—for example, a sharp fall in world equity markets or a resumption of severe problems in emerging market economies—could not sensibly be anticipated by UK monetary policy, but rather the Committee would need to consider how to react if and when such contingencies occurred.

7 The Committee noted that world price inflation had typically been coming out lower than expected given the path of world output growth. This was partly attributable to there having for some time been stronger than expected falls in oil and commodity prices. That was less likely in the period ahead given the projected pick-up in world economic growth. Oil prices had already risen sharply.

Monetary and financial conditions

8 The twelve-month rate of aggregate broad money growth had fallen to 5.6% in June, the lowest since March 1995. However, the aggregate data masked considerable sectoral differences. Most of the slowdown was accounted for by a fall in sterling deposits held by other financial institutions. By contrast, annual household M4 growth, at 6.8% in 1999 Q2, was the highest for almost two years. Household borrowing was also accelerating; the 8% growth in the year to 1999 Q2 was the highest since 1990 Q1. Mortgage lending had picked up and approvals were still strong.

9 The twelve-month growth rate of M0 had reached 7.3% in July, with the annualised three-month rate at 8.8%. In part this was attributable to the earlier reductions in nominal interest rates, which would be expected to reduce the velocity of circulation of non-interest bearing money balances. But, taken together with the broad money and credit numbers, it also seemed to corroborate the quickening pace of household sector spending growth seen in recent consumption data and in surveys.

10 There had still been only limited pass through into headline mortgage and deposit rates of the Committee’s most recent interest rate reductions. Views differed on the reliability of headline rates as indicators of the interest rates at which lending and borrowing business was actually occurring, with some Committee members noting the apparent intensification of competition—and increases in special, non-headline deals—in these markets.

11 The sterling interest rate curve had continued to steepen out to around three years, so that it was now distinctly humped. Since April, the three-month interbank rate implied by the June 2001 short sterling futures contract had risen by about 150 basis points; the rate implied by the September 2000 contract had risen 50 basis points over the previous month. Market comment had suggested that the curve might have been distorted by some large transactions in thin markets, in which case it was possible that the effect would be temporary and that market rates were not accurately reflecting market expectations of the future path of official interest rates. Nevertheless, business was conducted at those rates, and so the

steepening represented a degree of tightening in monetary and credit conditions.

12 In this connection, it was suggested that the effect on the economic outlook of the increase in medium maturity market rates might be greater than reflected in the Bank's projections; it was unclear how the term structure of interest rates affected consumption and investment spending. Separately, the Committee noted that a projection for inflation using market interest rates was on this occasion materially below the one assuming a constant official interest rate.

13 The sterling exchange rate index stood at 103.3, compared with 103.5 implied by the May projection modal path. The fifteen day average—the starting point for the August forecast—was 103.1. As had been discussed at the Committee's previous meeting, it still seemed that sterling was less tightly tied to the dollar than a few months earlier. The euro had also continued to strengthen, for which two possible explanations were identified. First, expected euro-area monetary conditions might have tightened on account of stronger expected euro-area growth and ECB statements. Second, the euro's recent recovery might reflect a reduced risk premium. During 1998 the Committee had attributed part of sterling's strength against 'In' currencies to the inevitable uncertainties about how the single monetary policy would operate, with an expectation that some of this risk premium in sterling's favour would erode as familiarity with the ECB increased. If so, the euro might continue to strengthen against sterling, and by more than implied by interest rate differentials. In the view of some members, there were other reasons why sterling might depreciate by more than uncovered-interest parity implied. The increased UK trade deficit would put downward pressure on the real exchange rate which, given inflation prospects in the UK and abroad, implied the likelihood of a lower nominal rate.

14 However, views differed on the likely path of sterling. Most members supported continuing to use the convention of uncovered-interest parity in the central projection, under which the path of sterling would be linked to market interest rate differentials, adjusted for the forecast convention of a constant sterling interest rate. Some members, however, preferred to use the alternative convention of a constant sterling EM over the forecast period, on a view that the least-bad hypothesis for forecasting exchange rate behaviour was a random walk. It was noted that no methods or conventions for forecasting the exchange rate had a good record. The alternative approach would reduce the central projection for inflation by around 0.4 percentage points at the two-year forecast horizon, and the output growth central projection by about 0.2 percentage points.

Demand and output

15 There had been some significant changes to the National Accounts data. They now showed that the slowdown in 1998 Q4 and 1999 Q1, when output growth had been flat, was accounted for entirely by changes in stocks and net trade. Final domestic demand (ie excluding investment in stocks) had continued to grow strongly.

16 The quarterly rate of output growth was back to 0.5% in 1999 Q2, the same as from 1997 Q4 to 1998 Q3, and slightly faster than had been assumed in the Committee's May central projection. Manufacturing output had grown by 0.4% in Q2, the first quarterly increase for a year. Compared with May, there was thus harder evidence of the recovery since the winter. Forward-looking survey data had also continued to strengthen. The quarterly CBI Business Optimism balance had risen from -6 in April to +5 in July, above the long term average. The CIPS manufacturing output index was 55 in July, the fourth consecutive month it had been above 50 and its highest level since March 1998. The CIPS services output index was 58 in July, the highest since April 1998. Indicators of household expenditure were robust. For example, retail sales were

stronger than expected in the second quarter. House prices were rising faster than expected in May, although with considerable variation among the regions. For the country as a whole, the July Halifax index was up around 8% on a year ago, with most of the increase over the most recent period; the index was up 6% on a quarter ago and 2% on a month ago. Housing market activity indicators—particulars delivered and mortgage approvals—were also increasing. Not everything was strengthening, however. Consumer confidence, as measured by GfK, had fallen in July, for the first time since November 1998. The Bank's regional Agents had reported that their contacts indicated that consumer demand might not be as firm as suggested by recent official data.

17 The Committee discussed the possible implications of the very different picture that the official data now painted of the slowdown last year and the early part of this year. The persistent strength of final domestic demand was striking. It had earlier been thought that part of the background to the stock adjustment had been slowing consumer and business final demand. The latest data did not support that story. A number of possible explanations were identified. First, the latest data themselves might be revised. Second, monetary policy might have stabilised the path of final domestic demand growth. The tightening during 1997 and into 1998 might have dampened an acceleration otherwise underway; and the subsequent easing of policy in the US, UK and elsewhere might have offset the shocks from the emerging market crises and the sharp fall in business and consumer confidence in the autumn, by helping to prevent a credit crunch and restore confidence. Third, the monetary policy changes might not have had much effect at all, with confidence spontaneously recovering as the real economy adjusted to the autumn shocks. It was unclear which, if any, of these possible explanations was most plausible.

18 Connected to this, views differed on whether the evidence suggested that the lags in the monetary transmission mechanism were now shorter. On one argument, the greater credibility of the new monetary regime might mean that monetary policy changes have a stronger impact on confidence, which may translate more quickly into spending decisions and pricing behaviour. On another argument, it was difficult to conclude whether or not monetary policy changes had in fact made much difference to the recent path of the economy, let alone whether there was evidence of a permanent and general change in the transmission mechanism. The shocks to the economy last autumn had been highly unusual. It was possible that monetary policy could work quickly in averting a credit crunch—restoring financial market stability and wider confidence—in those particular circumstances, but that the transmission mechanism had not changed more generally.

19 Views also differed somewhat about the implications of the latest data for the outlook. On the one hand, it was possible that the economy was now on an even keel, recovering nicely towards trend. On the other hand, the economy could overheat if a recovery in stockbuilding, the planned pick up in public expenditure, and a smaller negative contribution to aggregate demand from net trade coincided with persistent final domestic demand strength, fuelled by rising house prices and official interest rates being significantly lower than before last autumn's disturbance.

20 Overall, given the latest data, the Committee assumed faster consumption growth in its central projection than in May; and also faster house price growth, which would itself increase consumption growth somewhat. The balance of risks to the consumption profile were judged to be on the upside over the next year or so.

Labour market conditions

21 The Committee had been predicting falling employment, but that had not happened despite the slowdown in activity. The unemployment rate had been almost flat, at around 6.2% on the Labour Force Survey measure, since the middle of 1998. Inactivity levels continued to fall.

22 The labour market prices data posed some difficult and important puzzles against that background. The twelve month mean of private sector pay settlements was 3.5%, compared with 3.8% at the end of 1998, and 4.2% a year ago. Earnings growth, as measured by the twelve-month change in the Average Earnings Index, had fallen sharply in April and May, although it was difficult to assess the significance of this given that a lot of bonuses were paid in these months and bonuses were thought to be lower this year than last year. Data in subsequent months might provide clearer information on the underlying picture.

23 While nominal earnings growth had fallen, it seemed that real earnings growth had been rising. This divergence between the paths of real and nominal growth might be explained by a fall in *ex ante* inflation expectations or by lower inflation outturns than were expected when wage bargains had been struck. However, although real earnings growth had risen relative to nominal earnings growth, it had still been lower than would have been predicted given the levels of employment and unemployment. This might suggest some degree of structural change in the labour market.

24 There was, however, a range of views on the outlook for earnings. While the Committee as a whole agreed that real earnings growth would be slower, for any given output path, than assumed in May, there were differences on the appropriate size of adjustment to the May projection assumptions, hinging on differences on the extent of any structural changes. On one view, the adjustment made in the best collective central projection was too big. Labour markets conditions were tight. The BCC had reported continuing recruitment difficulties. The CBI had reported a slight increase in skill shortages, and the balance of manufacturing companies reporting shortages of unskilled labour were at the highest since 1974. The Bank's regional Agents were also reporting that businesses were experiencing problems in hiring at the lower end of the skills range. On this view, the most likely outturn for RPIX would be 0.2 percentage points higher than the best collective central projection at the two year horizon.

25 Another view placed weight on the fact that neither nominal earnings growth nor RPIX inflation had picked up over the year or so during which unemployment had been stable at around 6.2%. This suggested that continuing structural reforms had had the effect of materially reducing the level of unemployment at which inflation would start to increase. In consequence, the outlook for earnings growth was more benign than assumed in the Committee's best collective central projection. On this view, the most likely outturn for RPIX at the two year horizon would be 0.2 percentage points lower.

Prices and costs

26 There had been continuing downward pressure on UK import prices from sterling's appreciation, but the rate of import price deflation was slowing. Non-oil commodity prices had, on the Bank index, risen by 0.6% in the year to June, so that there had now been price rises for three consecutive months after thirty-three months of falling prices.

27 Oil prices had increased by about 6% over the month to above \$19 per barrel, partly reflecting higher expected world economic growth. The Committee assumed a price of \$17 per barrel throughout the forecast period in the best collective central projection, higher than in May but with some unwinding of the most recent price increase. Some members preferred using \$19 per barrel either in the central projection or as an upside risk. This would add 0.2 percentage points to RPIX inflation at the end of the forecast horizon.

28 The Committee debated the outlook for pricing behaviour in the economy. A majority did not want to make any changes to the

assumptions made in the Committee's earlier projections. Some members, however, believed that there were significant changes underway in product markets via greater use of information technology in distribution, via the entry of large, low cost competitors, and via an intensification of competitive pressures driven by regulatory developments. They believed that these changes could bring about a structural reduction in the level of profit margins in some sectors. While the adjustment was occurring, inflation would be lower than would otherwise be the case for any given path of output growth and real earnings growth. On this view, RPIX inflation could be 0.2 percentage points lower at the two-year forecast horizon than on the best collective central projection.

The August inflation and growth projections

29 The Committee agreed the projections to be published in the *Inflation Report* on 11 August.

30 On the assumption of constant official interest rates of 5.0%, the best collective judgment of the central projection for output growth was for stronger growth than in the *May Report*. Growth was projected to get back to around trend by the end of this year, after which it continued rising to around 3%, where it levelled off.

31 The Committee's best collective projection for RPIX had broadly the same saucer shape as in May, but with a number of differences. There was a lower starting point, and the trough of slightly below 2% was lower than in May. Inflation was projected to rise to above the 2½% target by the end of the two-year forecast period, when it was still increasing. The balance of risks was slightly on the upside.

32 As already described, there was considerable uncertainty in the Committee about the inflation outlook, and there was a range of preferred assumptions for the central projection. Various members had different preferred assumptions for the path of the nominal exchange rate, earnings growth, pricing behaviour/profit margins, and the oil price; these were presented in Table 6.B on page 53 of the *Inflation Report* published on 11 August.

33 Different members preferred different combinations of these assumptions. Some preferred assumptions that would lower the central projection at the two-year horizon by between 0.2 and 0.6 percentage points. Some preferred an assumption (on earnings growth) which would raise the central projection by 0.2 percentage points at that horizon.

34 The Committee also reviewed the range of outside forecasts based on a variety of different assumptions. The mean forecast for RPIX inflation was 2.1% for the twelve months to 1999 Q4, 2.4% in 2000 Q4, and 2.6% in 2001 Q3. While the mean shorter run forecast was lower than in the April survey, the 2000 and 2001 forecasts were higher. The probability assigned to inflation being above 2½% in 2001 Q3 was just over 50%, higher than in May.

The immediate policy decision

35 The Committee agreed that there was much to welcome in the current conjuncture. Output growth was recovering back towards trend faster than had been expected. Unemployment was lower than for a long time. There was, however, great uncertainty in the Committee about the extent to which the recent improvement in the relationship between activity and price inflation would persist, and about whether the lags in the monetary transmission mechanism had become shorter. There was, accordingly, a wide range of views about the medium-term prospect for inflation, reflected in different members of the Committee having different preferred assumptions for the central projection; assuming a constant 5.0% repo rate, there was a difference of about 0.8 percentage points between the highest and lowest inflation rates

which individual members of the Committee thought most likely at the two-year forecast horizon.

36 Against this background, different members of the Committee emphasised different aspects in reaching their policy judgments. Some members emphasised that the quarterly forecasting round was the occasion on which, notwithstanding the considerable uncertainties, all the factors influencing the inflation outlook could be weighed together and expressed in a coherent quantitative framework, with a disciplined—although not mechanical—link between a member's assessment of the outlook and their policy judgment, given the Committee's remit of an explicit inflation target. Others placed emphasis in addition on the increased uncertainty about the relationship between activity and price inflation, and about the transmission mechanism.

37 For some members of the Committee, the question was whether or not there was a case for a further reduction in rates now. While most features of the conjuncture were welcome, inflation was below the target and set to remain so for some time. On this view, the most likely outlook for inflation was, furthermore, even weaker than implied by the best collective central projection. Those members taking this view placed weight, in different degrees, on alternative assumptions: a constant nominal exchange rate together with either weaker earnings growth or a downward adjustment to profit margins. One such member would also have preferred a number of other adjustments to the best collective central projection: in particular, slightly higher oil prices and slightly stronger consumption, offset to some extent by tighter than assumed monetary and credit conditions on account of the incomplete pass through of previous rate reductions and the steep rise in medium maturity market interest rates. Taken together, these considerations pointed towards a further reduction in interest rates. However, various arguments against an immediate reduction were identified. First, in the view of one member, the current nominal rate was around neutral, and the case for changing rates therefore had to be more compelling than usual given the inherent self-correcting characteristics of the economy. Second, nominal interest rates were lower than for many years so that, if there were residual inflation illusion or if borrowers were credit constrained, the upside risks to consumption growth might be greater than assumed. Third, there was considerable uncertainty about the outlook. That pointed towards caution in changing policy. In particular, there was a case for waiting to assess the extent to which the performance of the labour market had improved. Fourth, an immediate rate cut, which would be unexpected, might have a much larger-than-normal effect on house prices and sterling, which could have a significant impact on the resulting modal projection of inflation. Fifth, although some members preferred a modal projection for inflation a little below 2½% in two years' time, for some of them the balance of risks was on the upside. Overall, the best course this month was to leave rates unchanged.

38 For some other members of the Committee, the question was more whether or not there was a case for tightening policy this month. Domestic demand growth was already stronger than expected and was projected to increase, with clear upside risks to consumer spending, particularly if house prices continued to rise sharply. It was unlikely that net trade would continue to make a negative contribution to output growth for much longer. There was a risk that output growth would not level off over the next year or so but would continue to increase. In any event, there could be upwards inflationary pressure at the end of the forecast period,

when the best collective central projection was already above the 2½% target and rising. Some of the members who held these concerns about the risks to the inflation outlook would also have preferred a somewhat higher central projection for inflation as they thought the most likely path for earnings growth was faster than assumed. However, even with that adjustment the central projection would be below the target until 2001 Q3. Moreover, monetary and credit conditions had already tightened somewhat through the rise in medium term market interest rates. Taking these considerations together, although it seemed more likely than not that there would at some point need to be a tightening of monetary policy in order to meet the inflation target, the Committee was in a position to wait for more evidence. That might help to resolve some of the uncertainties about consumption; about earnings, where there would be data less affected by bonus payments; and about the length of the transmission lags and about pricing behaviour; as well as more evidence on the exchange rate. In consequence, there was time to take any restraining action later, if and when it was more clearly needed. Overall, for these members too, the best course this month was to leave rates unchanged.

39 Other members placed less weight on the arguments for a further reduction or for a pre-emptive tightening. On the one hand, a cut would take imprudent risks with the pace of increase in household spending and with house prices. It could well be taken badly by the financial markets, leading to a rise in longer term inflation expectations and nominal bond yields. While inflation was set to be below the target for a period, that largely reflected the unexpected shocks to the world economy last autumn; monetary policy could not sensibly try to offset the short-run effects of all shocks as it had to be forward looking. It was conceivable that the relationship between activity and price inflation had become substantially more benign, but more evidence was needed; some past UK monetary policy mistakes had stemmed in part from over optimism about the possibility of permanent changes in the economy. On the other hand, a tightening would be premature and overly cautious, and could even prompt questions about whether the target was truly symmetric. The economy was recovering nicely, helped by the earlier easing of policy; and inflationary pressures were fairly muted in the short run. There were risks further out, but there was time to gather more evidence before any action was needed to dampen any incipient inflationary pressure. On this view too, the best course this month was to leave rates unchanged.

40 The Governor invited the Committee to vote on the proposition that the Bank's repo rate be maintained at 5.0%. The Committee voted unanimously in favour of the proposition.

41 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 Wadhvani

42 Andrew Turnbull 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 30 July, in advance of its meeting on 4–5 August 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 the Annex.

I The international economy

2 GDP growth in the United States had slowed in the second quarter, according to the preliminary estimate. Following growth of 1.1% in the first quarter, GDP was estimated to have risen by 0.6% in the second, a weaker outturn than most commentators had been expecting. The recovery in industrial production had remained weak, although the twelve-month growth rate had picked up in June because of base effects from the 1998 strike at General Motors. Industrial orders and housing starts had also weakened, the latter possibly reflecting the rise in mortgage rates as well as earlier weather-related effects. Slowing retail sales growth had pointed to slower consumption growth. The labour market had continued to tighten however: employment growth had continued to be more rapid than growth in the working-age population, while employment costs had risen by 1.1% in 1999 Q2. This was the largest quarterly rise in employment costs since 1991 Q2 and was well above market expectations. However, this had followed much weaker growth in employment costs in 1999 Q1, and the two-quarter growth in employment costs still seemed subdued compared with the same two quarters of 1998. Broad money growth had weakened and producer price pressures had remained muted, but deflationary pressures from intermediate and crude producer prices had diminished.

3 In May the twelve-month growth rate of euro-area industrial production had remained negative. However, there had been signs that production was nearing a trough and forward-looking indicators had improved: the German IFO index and the French INSEE survey had both risen strongly in June. With business confidence improving but consumer confidence falling, the gap between business confidence and consumer confidence had continued to narrow in June. Broad money had grown by an annual rate of 5.1% in the three months to June, not far from the European Central Bank's (ECB) reference value of 4.5%. But private sector credit had continued to grow strongly, at an annual rate of 10.9%. Euro area headline inflation had fallen slightly in June, but inflation differentials within the euro area had persisted.

4 Japanese retail sales had remained weak, falling by 2.5% in the twelve months to June. However real disposable income had risen by 1.1% in the same period, and the fall in the annual growth rate of retail sales had masked a 0.2% quarterly rise in 1999 Q2. Moreover, household expenditure had grown more strongly than retail sales. Industrial production had grown by 3.0% in June; while this growth had been much stronger than most commentators expected, industrial output had still fallen by 1.0% in the second quarter. The Tankan survey had shown that firms could in principle obtain credit more easily, but investment plans had remained subdued. This might have explained why bank lending had continued to slow in June. The twelve-month growth rate of M1 had risen to 12.2%, but base money growth had slowed. Moreover, simple monetary policy rules had suggested that monetary policy might still be too tight.

5 In the financial markets the dollar had depreciated against the euro and the yen since the July MPC meeting. Equity prices in the United States, Japan and the euro area had fallen. Short-term yields had increased by around 25 basis points for the year 2000 in the United States over the month as a whole, and had risen in the

euro area, with the ECB highlighting the consequences of stronger growth. The outlook for emerging markets had generally improved, although Argentina looked if anything more fragile and problems at Daewoo had affected financial markets in Korea.

II Monetary and financial conditions

6 Narrow money growth had risen in July, notes and coin growing by 0.8% in the month. After adjusting for the introduction of the new 50 pence coin and the £2 coin, the twelve-month growth rates of notes and coin and M0 had risen, between June and July, from 7.0% to 7.4% and from 7.2% to 7.5%, respectively. In both cases, this had represented a rise of more than 2 percentage points since November 1998.

7 The stock of M4 had fallen by £4.2 billion (-0.5%) in June. Although one-off factors had distorted M4 flows in May and June, the underlying growth rate had been weak in both months. The growth rate of M4 in the year to June had been 5.6%, its lowest since March 1995. In contrast, aggregate M4 lending (excluding securitisations) had been strong in June, rising by £9.6 billion (1.0%), its highest flow since February 1998. The twelve-month growth rate of M4 lending had risen to 7.7% in June, from 6.8% in May. The excess of M4 lending over M4 deposits had been financed predominantly by non-residents.

8 The twelve-month growth rate of household sector M4 deposits had risen to 6.8% in Q2, a pickup of 1 percentage point since 1998 Q2. Household M4 lending had also strengthened in Q2, rising by £3.7 billion (0.7%) in June and by an average of £3.6 billion a month (0.7%) during the quarter. The twelve-month growth rate had picked up from 6.9% in 1998 Q2 to 8.0% in 1999 Q2; stronger secured lending had more than accounted for this rise. The flow of total net secured lending to individuals had picked up in June to £3.0 billion (0.6%), and the twelve-month growth rate of net secured lending had reached 6.8% in June, compared with 5.6% a year earlier. The value of loan approvals for house purchase in June was also strong at £10.6 billion. Total unsecured lending had continued to slow during Q2, the twelve-month growth rate falling to 14.4% in June, down from its late 1998 peaks. However, the June flow itself had been strong, with a one-month increase in lending of 1.2%.

9 PNFCS' M4 deposits had been weak in Q2, with an average monthly flow of £0.2 billion (0.2%). Similarly, sterling lending by banks and building societies to PNFCS had also been weak in Q2, with a flow of only £0.1 billion in June and an average monthly flow of £0.3 billion (0.2%), leading to its lowest quarterly growth rate since 1997 Q1. However, PNFCS' total borrowing—including funds raised on the capital markets and foreign currency borrowing—had been extremely strong in Q2 at £18.3 billion, the highest flow in real terms since 1989 Q3.

10 Other financial corporations' (OFCs') M4 deposits had fallen again in Q2, the twelve-month growth rate coming down to 1.1%, its lowest value since 1993 Q2. By contrast, OFCs' M4 lending (excluding securitisations) had risen strongly in Q2, the monthly flow averaging £2.1 billion (1.1%). The twelve-month growth rate of OFCs' lending had risen to 10.3% in 1999 Q2, fully reversing the decline in the growth rate observed for Q1.

11 Turning to price indicators of monetary conditions, interest rate expectations implied by 2000/2001 short sterling futures contracts had risen by about 50–60 basis points since the previous MPC meeting. The release of the MPC minutes on 21 July, the Humphrey-Hawkins testimony by the Federal Reserve Chairman on

22 July, and the mid-month fall in sterling were all thought to have contributed.

12 Nominal forward rates at maturities of three to five years had changed little in the month. Long rates had fallen, but this fall was believed to be related to the lack of liquidity in the long (30-year) end of the gilt market, rather than to economic fundamentals.

13 Interest rates implied by short sterling futures had exhibited a 'hump' in May which became more pronounced in June and July. This hump suggested that in July the market had been expecting UK short-term interest rates to rise in 2000 and 2001, and to be at around 6.5% in late 2002.

14 Real interest rates derived from the index-linked gilt market had been virtually unchanged since the previous meeting. Likewise, survey measures of inflation expectations for 1999 and 2000 were hardly changed in July compared with June. On the other hand, market expectations of inflation in the short to medium term (derived from a comparison of nominal and index-linked gilts, and based on 3 and 5 year bond rates) had risen, continuing an increase since the beginning of the year.

15 The Bank's survey of advertised retail interest rates had suggested that the 25 basis point cut in the repo rate in June had not yet been fully passed through to standard variable mortgage rates. Fixed-rate mortgages in July had continued to rise; average five-year fixed mortgage rates (with no lock-in) had risen by about 20 basis points to around 6.4%.

16 The FTSE All-Share index had fallen by 4.5% since the previous meeting. The fall had been widespread, with the decline in utilities stock prices being especially large. Small capitalisation stocks continued to outperform the FTSE 100, rising by 0.1% in value since the previous meeting.

17 The sterling effective index had fallen by 1.2% since the May meeting to 103.3, approximately 0.2% below the modal path of the *May Inflation Report*. Since the July meeting sterling had fallen by 1.1% against the euro and risen by 4.0% against the dollar. Movements in sterling over the month had appeared to be largely unrelated to changes in UK yields relative to overseas.

III Demand and output

18 There had been changes to the level and composition of GDP arising from the annual balancing exercise. The cumulative impact of these revisions had been to raise the level of the output measure of GDP by less than 1/4% by 1999 Q1; the levels of the expenditure and income measures of GDP had been revised up by around 1/2%. So the average measure of GDP at constant market prices had been revised up by 0.4%. The revisions had resulted in a flatter and stronger profile for quarterly GDP growth over the first three quarters of 1998 relative to previous estimates.

19 Most of the upward revision to the expenditure measure had come from consumption and investment. The level of household consumption had been revised up by 0.9% reflecting the results of the 1998 retail sales enquiry. Investment had been revised up by 2.4% reflecting more computer spending. These revisions had been partly offset by downward revisions to the level of government consumption, reflecting new estimates of spending outside the health and education sectors. The cumulative revision to stocks had been small. Similarly, the contribution of net trade since 1996 had been slightly more negative than on previous estimates, but the difference was not large.

20 There had been a significant upward revision to profits in 1997 and 1998. Average profits during 1998 had been around 4% (0.9% of GDP) higher than previous estimates. But the profile of declining profits over 1998 and in 1999 Q1 had remained. Turning to the output measure, the level of manufacturing output had been

revised up by 0.4%. The level of services output had been revised up by 0.1% and construction output had been revised down.

21 GDP growth at constant market prices in 1999 Q1 had been revised up to 0.1% from zero mainly because of a less negative contribution from net trade. The revision to growth at basic prices had been slightly larger to 0.2% from zero—reflecting a less sharp fall in the output of the energy supply sectors. The preliminary estimate for Q2 had shown GDP growth at constant market prices picking up to 0.5%. The annual rate had been unchanged at 1.2%. Output of the service sectors had grown by 0.5% and, within this, distribution and retailing output had grown by 0.4%. The annual rate of services output growth had slowed to 2.4% from 2.7%.

22 Industrial production had risen by 0.1% in June because of higher energy output. By contrast, manufacturing output had fallen by 0.2%; but it had risen by 0.4% over Q2 as a whole, following three consecutive quarterly declines.

23 Retail sales volumes had been flat in June, following a rise of 1.1% in May. The level of sales C had been revised up in April and May so that quarterly growth in Q2 had been similar to Q1, at 0.9% compared to 1.0%. Food stores had continued to report slower sales growth than other stores; sales were, respectively, 0.2% and 1.5% higher in the three months to June compared with the previous three months. According to the CBI distributive trades survey, the balance of retailers reporting a rise in annual sales growth in July had risen to +28 from +22—its highest level since February 1998.

24 The GfK measure of consumer confidence had declined in July to 2.4 from 5.8 in June, which had largely unwound the sharp rise in confidence in May. Both general and household-specific measures of confidence had fallen. A new quarterly survey by the Consumers Association had also shown a small fall in consumer confidence to +33 in July from +35 in April.

25 New information on house price inflation had been mixed. The Nationwide index had risen by 0.4% in July, which had reduced the annual rate of house price inflation to 6.9% from 7.5%. The Halifax index had shown a sharper rise on the month of 2.2%, which had increased the annual rate to 8.2% from 6.9%. The number of housing transactions had continued to rise. The growth rate of particulars delivered had been 3.8% in the three months to June compared with the previous three months and the number of loans approved—a leading indicator of transactions—had been 7.5% over the same period. Net reservations for new homes had continued to rise, with the balance rising to +33 in June from +24 in May, though official data had suggested that increased demand had yet to feed through to housing starts.

26 Monthly trade data had pointed to a stronger net trade position, consistent with the continued upward trend in survey indicators of export demand. Goods exports to non-EU countries had risen by 5.0% in Q2, compared with a fall of 1.9% in Q1. The recovery had been widespread, with exports rising to both the United States and the Asian countries. Exports to EU countries had continued to be weak, falling by 1.3% in the three months to May.

27 Survey evidence for Q3 had pointed to a continued recovery in manufacturing output and a pickup in services output growth. The July Confederation of British Industry (CBI) survey had shown a further improvement in total and export orders, though the balances had remained negative at -19 and -24 respectively. Business optimism had risen to +5 from -6, the first positive reading since October 1998 and well above the average since 1972 of -5. The British Chambers of Commerce (BCC) survey had shown both manufacturing and services orders and sales picking up in Q2; domestic service orders had risen to +19 from +15. The Chartered Institute of Purchasing and Supply (CIPS) output balances in the manufacturing and service sector had been above the no-change level of 50 for the fourth and fifth month running in

July. The CIPS construction activity index had declined slightly in July, to 62.9 from 63.7, but had remained well above 50.

IV The labour market

28 According to the Labour Force Survey (LFS), employment growth had slowed since the second half of 1998, increasing by just 20,000 in the three months to May. The employment rate had fallen by 0.1 percentage points to 73.9%, as growth in the working-age population had outstripped growth in employment. Employment growth in the three months to May had been more than accounted for by full-timers; part-time employment had fallen, although it was still 90,000 higher than a year earlier. Total hours worked had been unchanged in the latest three months: the small rise in employment was offset by a 0.1% fall in average hours worked.

29 Turning to survey data, after seasonal adjustment, the July CIPS survey had reported employment in manufacturing falling at around the same rate as in June, while employment growth in the services and construction sectors had increased slightly. The BCC survey had pointed to an improvement in employment intentions in Q3 for both manufacturing and services, while the CBI had reported an upturn in manufacturing employment intentions, though the balance remained negative.

30 The CBI Industrial Trends survey reported a slight increase in skill shortages in Q2, though they had remained below their historical average. The net balance of manufacturers reporting shortages of unskilled labour had picked up to its highest level since 1974. The BCC had also reported continued recruitment difficulties.

31 Job-centre vacancy data had recently been affected by a number of distortions, and the ONS had recommended looking at notifications rather than the stock of vacancies. But on both measures, vacancies had been broadly flat in June. This contrasted with the NTC Press advertising index, which had been falling for several months.

32 Claimant unemployment had fallen by 0.1 percentage points in June to 4.4%, the lowest rate since 1980; LFS unemployment had fallen by 36,000 in the three months to May, compared with the previous three months, taking the rate down to 6.2%. Both unemployment rates had been broadly flat since the middle of 1998. The recent fall in LFS unemployment had been broadly concentrated among those unemployed for under one year, a reversal of previous rises. LFS redundancies in spring 1999 had been around the same rate as a year earlier. Redundancy rates had remained highest in the manufacturing and construction industries.

33 Revisions to GDP data had led to large upward revisions to productivity growth in recent quarters. Annual productivity growth in 1999 Q1 had been revised up from 0.5% to 1.0%. And the Institute of Management Services productivity index pointed to a sharp pick-up in Q2.

34 Whole-economy headline average earnings growth, which is a three-month moving average of monthly outturns, had declined further in May to 4.3%, while private sector earnings growth had fallen by 0.5 percentage points to 4.2%. Turning to the individual monthly outturns, whole-economy earnings growth had been revised up to 4.0% in April and was unchanged in May. Recent upward revisions to the Reward index had brought it more into line with the Average Earnings Index (AEI). The latest data indicated a 0.2 percentage point fall in June to 3.6%. The Federation of Recruitment and Employment Services (FRES) surveys on temporary and permanent pay rates were among the few indicators pointing to rising earnings growth: both series had increased slightly in July.

35 Growth in ONS wages and salaries per head, at 5.4%, had been higher than the 4.8% reported by the ABI in Q1. It was thought that the difference could largely be accounted for by differences between the industrial weights used for wages and salaries and for the ABI, and by reconciliation of the GDP income data with the expenditure and output data. The real product wage and the real consumption wage had both grown strongly in Q1.

36 The National Minimum Wage (NMW) had been introduced on 1 April. The spring LFS, which covered responses between March and May, had shown a muted impact of the NMW on the distribution of earnings. But there could be several explanations for this. First, many responses would have been made in March, before the introduction of the NMW, and of those responding in April or May, many people may have been reporting pay for a period before 1 April. Second, the LFS was known to under-record hourly earnings. It was still too early to draw firm conclusions about its impact on earnings; this would not be possible until publication of the summer LFS and the 1999 New Earnings Survey in October.

37 The method of weighting used in the Bank's settlements database had been changed. In the past, settlements had been weighted together using the employment weights of the Bank's sample. Now, in addition to being employment weighted, the four main sectors of the database were weighted together using fixed sectoral weights from the 1996 Annual Employment Survey. This had reduced the weight placed on the public and construction sectors, which had both been overweight in the Bank's sample, and increased the weight on private services.

38 The twelve-month whole-economy settlement for June, calculated on the new basis, had been 3.6% for the sixth month in a row. Within that total, higher public settlements had been offset by lower private sector settlements. Three-month private sector settlements had increased to 3.4% in June, mainly because of a large construction sector settlement in August covering 600,000 employees.

V Prices

39 The Bank's index of commodity prices excluding oil had risen by 0.7% in June; the index including oil prices had increased by 0.8%. Both series had now shown positive annual inflation for three consecutive months. Other measures of commodity prices had continued to show negative but moderating annual inflation.

40 The oil price had risen sharply again in July. The rise had brought the one-month future price of Brent crude to \$19.38 on 28 July, 80% above its trough in December 1998. Producer price inflation had increased in June, total input prices by 0.6% (annual inflation had risen to -0.8%) and total output prices by 0.2% (1.0%). Excluding food, beverages, tobacco and petroleum, both series had remained markedly lower: annual inflation on those measures had been -4.2% and -0.5% respectively in June.

41 The terms of trade had increased steadily since its most recent trough in 1995; the National Accounts revisions had made little difference. Manufacturers' margins for exports had continued to fall over the past year but domestic margins had been broadly flat. Retailers' margins had fallen during the winter, but had increased during the second quarter, to a level similar to that a year earlier. The retail sales deflator had fallen in June, on both an annual and a monthly basis. Annual inflation had been revised up to zero in May, which had meant that June's fall had been the first on record. Revisions to the GDP deflator had lowered the annual inflation rate in the first quarter. The new estimates had shown a sharp fall in annual GDP deflator inflation between Q3 and Q4 1998. But the level of the deflator by 1999 Q1 was very similar to the previous estimates.

42 The annual rate of RPIX inflation had risen by 0.1 percentage points to 2.2% in June. The rate excluding taxes and

excise duties (RPIY) and the all-items rate of inflation (RPI) had both remained unchanged in June, at 1.5% and 1.3% respectively. Ofwat, the water industry regulator, had announced proposed cuts in water prices, due to start in April 2000. Most of the fall would occur in the first year, which if it were passed on in full would lower RPIX inflation by 0.2 percentage points for a year. The short-term outlook for RPIX inflation was that it would remain close to 2.2%/2.3% for the next few months. That had represented a slight increase in expectations, primarily due to higher petrol and house prices.

VI Reports by the Bank's Agents

43 The Bank's regional Agents reported on the pace of the recovery based on discussions with their contacts over the past month. There had been a further pick up in manufacturing orders and output in July. But the path of recovery in domestic demand had not been smooth, and had varied between the regions and between industries. Exports to some markets had picked up, particularly to the US and Asian markets. But the strength of sterling and the level of import penetration had continued to be perceived as a problem. Manufacturing firms had expected a stronger recovery in the second half of this year. Services output had continued to grow steadily. Within the service sector, retailing output had been a little stronger and IT, financial and businesses output had been quite buoyant.

44 Consumer demand had picked up, but not strongly. There had been a slow recovery in retail sales, helped by early Summer sales and the opening of new shopping centres. The strength of the housing market did not seem to be feeding through into increased demand for goods related to house moves, at least not yet. Car sales had been reported to be rather sluggish. Overall, consumer demand had not been as firm as recent official data had suggested.

45 There had been further easing in the labour market. Employment in the manufacturing and primary sectors had continued to contract, but had expanded further in the service sector. Skill shortages had eased, though there had been pockets of tightness in some sectors. There had also been some reports of quality problems at the bottom end of the skills distribution. Firms had continued to focus on improving productivity.

46 The Bank's Agents presented a survey on productivity growth which they had carried out over the previous month. Of the 157 firms in the sample, nearly half had reported that their productivity growth over the past year had been above normal,

compared with 20% who had reported growth below normal. Responses on future productivity growth had been more positive, with just 7% expecting productivity growth to be below normal. Reasons for expected improvements included the more efficient utilisation of the workforce during the economic upturn and new capital investment coming online. One possible explanation for the contrast between the relative weakness of official statistics on productivity and the more upbeat picture of the survey could have been a form of aggregation bias: firms who had contracted out services such as cleaning might have reported the same gross output produced by fewer employees, and hence a rise in productivity. But if aggregate output and employment were unchanged, then aggregate productivity would not have been affected by such a move. Asked about spare labour capacity, the most common response—cited by nearly 40% of firms—had been that only zero to 1% of employees were currently underutilised. However, a quarter of manufacturing firms reported that 6% or more of the workforce were surplus relative to their current output.

VII Market intelligence

47 Market expectations for UK interest rates in both the short and the long term had risen since the previous MPC meeting and the market now seemed confident that 5% would form the floor for official interest rates. Economists' views of future interest rates had, in contrast, been lower than those implied by short sterling futures—for example, the latest monthly poll by Reuters showed a lower path for interest rates than that implied by the futures market. It was possible that some large transactions had produced overshooting in markets that may have been seasonally thin.

48 In the foreign exchange market, the main development over the month had been the across-the-board weakening of the US dollar: there had, in contrast, been relatively little sterling-specific market comment. The dollar had weakened against the yen on what the market saw as a change in the Bank of Japan's policy on intervention. It had also weakened against the euro, initially, according to market commentators, as short positions were closed out, with some subsequent support at the higher levels from stronger-than-expected economic data for the euro area. More recently, the Humphrey-Hawkins testimony and the renewed probability of rising US interest rates had affected both US asset markets and the dollar. Data from options markets suggested that the market saw the balance of risk on the downside for sterling against the euro but not against the dollar.

Minutes of the Monetary Policy Committee meeting on 7–8 September 1999

1 Before turning to its immediate policy decision, the Committee reviewed the world economy, monetary and financial conditions, demand and output, the labour market, and prices and costs.

The world economy

2 The Committee discussed whether recent news might cause an upward revision to the projections for world activity and prices. In the United States, domestic demand was still strong, but had started to slow. Indeed, it was possible that US growth would be lower than assumed in the August *Inflation Report* projections. There were signs in the non-farm payroll data of slower employment growth. Final domestic demand had, however, slowed less sharply. There were also some signs of incipient inflationary pressures: some commodity prices had risen, hourly compensation had accelerated and there had been a pick-up in producer prices. The Federal Reserve had recently raised official interest rates by 0.25%.

3 Some of the activity data for the euro area were perhaps a little stronger than had been expected a month ago. They supported the strengthening recovery built into the forecast.

4 In Japan, there was evidence of a sharp fall in corporate investment in the second quarter. Despite this weakness, which was thought likely to be reflected in the forthcoming Q2 GDP release, other forecasters' projections for Japanese GDP growth in 1999 continued to be revised up. There was also a perception that the authorities would take further fiscal action if needed—as an insurance policy if the recovery faltered. There were signs that deflationary pressures might be easing—the rate of change of the core CPI was essentially flat.

5 The recovery in the rest of Asia had been stronger than had previously been expected, and activity in Brazil and Russia somewhat less weak; though offset to some extent by events in some smaller South American countries. But the environment continued to be fragile, with interest rate spreads remaining at high levels.

6 One question was whether the likely pattern of trade balances in the major industrial countries would give rise to significant exchange rate movements. For example, would the growing US trade deficit lead to a depreciation of the dollar? It was possible that the markets might test the level of the yen against the dollar, with the yen rising and possibly taking the euro with it. Since one of the factors behind the recovery in confidence and activity in the euro area had been the depreciation of the exchange rate, such a move might risk a weaker outlook for the euro area. This in turn would have implications for the United Kingdom, though it would depend in part on what happened to sterling if the dollar depreciated against the yen and the euro. But the link between trade accounts and exchange rates was far from automatic.

7 The Committee noted that other forecasters' projections for world activity had generally continued to be revised up over the past few months, bringing them broadly into line with the Committee's August *Inflation Report* projections. Although the recent data might not point to a significantly stronger outlook for world activity than assumed in August, there were now signs that gave the Committee greater confidence in its projection of a robust recovery in world activity.

Monetary and financial conditions

8 Broad money growth was now at its lowest since 1993. This was largely accounted for by falls in other financial corporations' (OFC) deposits, rather than changes to money holdings of households or non-financial corporations. The fall in money holdings of other financial corporations was also reflected in a fall in their bank borrowing—both sides of the balance sheet were shrinking. However, the sector was heterogeneous and there seemed to be no single explanation. Although there might be lags, the adjustment did not seem well correlated with a possible reduction in the appetite for risk following the events of last summer and autumn. Another possibility was that the recent falls in deposits were in part a reaction to heavy borrowing through bond markets in advance of the Millennium. In any event, the rapid rise in these deposits and loans in earlier years had been difficult to explain. Overall, the changes to OFC money balances were not well understood and warranted continued investigation. As in the past, the Committee judged that developments in OFC money holdings were likely to have little impact on inflation. As well as focusing on growth in non-OFC money, it was noted that Divisia money continued to grow at around 7%.

9 Narrow money had been growing at around 8%, and this seemed somewhat faster than could be explained entirely by earlier reductions in interest rates. The question was whether the signs were of faster growth than thought a month ago. Recent money growth probably presaged faster growth in consumer spending over the next few months, or was at least consistent with the pace of consumer spending growth that had already been seen.

10 Household credit growth had been strong, with short-run growth rates exceeding 8% on an annual basis. Estimates of mortgage equity withdrawal in Q2 were the highest since Q2 1991, but were considerably below the levels of the late 1980s. House prices had risen sharply again in August, and the annual rate of increase was now nearly 10% on both the Halifax and Nationwide measures. Although there remained many regional differences, it was no longer correct to describe the rise as being accounted for by a few isolated hot spots. It was difficult to estimate exactly how much the previous reductions in interest rates had fed through to house prices—some rise was to be expected despite the forthcoming abolition of tax relief on mortgage interest payments. For the recent rise in house prices to be accounted for by lower interest rates, people would need to have focused primarily on recent movements in short-term interest rates.

11 It was possible that the transmission mechanism was faster than previously thought, and that the recent rise in house prices simply reflected a more rapid adjustment to a new level following previous reductions in interest rates. But if it were not faster, then it was likely that there was more to come from previous reductions in interest rates, and that other factors had been responsible for the current rapid rate of increase. For example, employment had continued to grow—and with it labour income—and consumer confidence had increased.

12 The current level of the house price to average earnings ratio was only slightly above its long term average. Financial liberalisation probably raised the level of house prices through the 1980s, while the reduction in mortgage interest relief since the mid-1980s might have somewhat reduced the level of house prices. It was possible that the fall in the average level of nominal interest rates in recent years would, over time, lead to a rise in the house price to average earnings ratio. So it was difficult to know what the

equilibrium house price to earnings ratio should be. Of more concern than the current level of house prices was the recent rate of increase. If the current rate of increase continued, the ratio would soon be well above the profile assumed in the August *Inflation Report*. There was also uncertainty about the size of the effect on domestic demand associated with the current strength of house prices and activity. As measured by indicators such as particulars delivered, activity was now stronger than at any time since the early 1990s. There remained a big stock of, as yet unused, mortgage approvals. Although the current state of the housing market was not like that reached in the late 1980s, the recent indicators meant that the Committee's concern about the possible implications for inflation of housing market developments was rising.

13 Turning to other financial prices, the gilt yield curve was now sharply downward sloping at maturities of five years and beyond. It was likely that the level of long term interest rates partly reflected the effects of the minimum funding requirement. The sterling effective exchange rate index was very close to its level at the time of the August meeting.

Demand and output

14 GDP growth had been unchanged from the preliminary estimate in Q2, at 0.5%. A breakdown of the expenditure components had now become available. Final domestic demand growth had turned out somewhat stronger than expected in the *Inflation Report* central projection. This was largely accounted for by stronger consumption growth. Part of this strength might be explained by the change in practice concerning new car registration dates this year, but the strength in consumption seemed more widespread than this. The latest indicators seemed to suggest that strong consumption growth had continued into the third quarter.

15 One possible explanation for stronger consumption was that there had been deeper than expected price discounting, reflecting the previous slowdown in activity after last summer. This might lead to an increase in the level of real consumption, but it did not necessarily imply that strong consumption growth would continue. There was, however, little direct evidence of deeper than expected discounting, although this would be consistent with the weaker than expected outturns for RPIX and the retail sales deflator. However, it was possible that as the economy recovered any such discounting would be reversed. In that case the time profile of profit margins would be a little different from what had been expected in August, so there would be only a temporarily depressing effect on inflation. There was little direct evidence available on the behaviour of profit margins across the economy, so it was particularly difficult to distinguish between these two possibilities.

16 Inventories had made a much larger negative contribution to GDP growth than had been expected a month ago. That seemed consistent with the stronger outturn for consumption, and might indicate an involuntary reduction in stocks. However, the survey data from the CBI and CIPS had shown few signs of a substantial involuntary reduction. If the reduction in inventories had been in response to stronger than expected consumer demand, then the implication might be stronger demand and output growth through the second half of the year than assumed in the central projection of the August *Inflation Report*. Although there was uncertainty about the appropriate level of the stock-output ratio, it seemed likely that the larger than expected negative contribution in Q2 reduced the risk of significant destocking in the future.

17 Although consumption had turned out stronger than expected, this had been offset to some extent by weaker investment. Public sector investment was continuing to undershoot spending plans, although this should be made up either later this year or in future years and in any event was a fairly small percentage of total investment. Most of the investment weakness was in private business investment, especially in the manufacturing and distribution sectors. There was a possibility of a

Millennium-related slowdown in investment growth and the Bank's regional Agents had found some evidence of a 'Millennium pause' in IT-related investment.

18 Net trade had made a slightly stronger contribution to Q2 growth than had been expected at the time of the August meeting. This reflected weaker than expected imports and somewhat stronger exports. It was difficult to read too much into these figures given their volatility from quarter to quarter.

19 Surveys seemed to be pointing to a slight rise in the quarterly growth rate of GDP in the third quarter, which was consistent with the central projection in the August *Inflation Report*. But the current annualised rate of growth of final domestic demand of around 4½% was unsustainable. It was noted, however, that the growth of nominal domestic demand had, slowed in recent quarters. At some point final domestic demand would have to moderate to allow room for an improvement in the external environment feeding through to net trade.

Labour market

20 Employment growth had continued to slow, but unemployment was still falling. The Labour Force Survey measure of unemployment had now reached its lowest rate since the series started, at 6.0%, while the claimant count had fallen to its lowest level since 1980. The FRES survey pointed to increasing shortages of permanent and temporary staff in August. The Bank's regional Agents had also noted tightness returning even in some lower skilled areas. But not all the quantity indicators pointed to greater tightness. It was noted that there had been a reversal in the path of inactivity, which had risen in Q2.

21 The latest earnings figures had been difficult to interpret. The Average Earnings Index (AEI) had shown a marked pick up to 5.2% in June compared with 4.1% in May and 4.0% in April, with the three-month headline rate consequently at 4.4% in June. The latest outturn for the AEI meant that earnings growth had turned out somewhat higher than the starting point used in the August inflation projections. That need have little consequence for inflation looking forward, unless the recent outturn affected the view of the future profile for earnings. It was noted that the Committee's best collective judgment of the central projection for earnings growth made at the time of the August *Inflation Report* was now towards the bottom end of the range of other forecasters.

22 It was difficult to know what was the underlying trend in earnings growth. The higher June figure was influenced by bonuses. But the change in the ONS form for the reporting of bonuses earlier this year meant that an unaffected year-on-year comparison would not be available until early next year. By contrast with the AEI, the Reward index had shown earnings growth continuing to slow. Settlements also continued to fall gently on the twelve-month employment-weighted measure, to around 3½% in July. However, after allowing for changes in inflation expectations, real settlements and earnings growth had probably continued to increase.

Prices and costs

23 Turning to prices and costs, some input prices were now moderately stronger, while output and retail prices remained weak. RPIX, for the fourth consecutive month, had been below the target.

24 The Brent oil price had averaged over \$20 per barrel in August, and was well above \$21 by the time of the meeting. That compared with an assumption of \$17 for the price over the next two years, which was the best collective judgment in the August *Inflation Report*, although some members had opted for a higher assumption of \$19 in August. The forward price was somewhat below the spot price, but had continued to be well above \$17. However, the forward price had not typically been a good predictor

of the future spot price. If the oil price remained at its current level it would imply higher retail prices than incorporated in the August projections.

25 The Bank's commodity price index had recently been reweighted and this had led to a slight reduction in the level of the index. The reweighted index, like the old, showed an increase in commodity prices over recent months. Commodity prices rose again in July on both the aggregate and non-oil indices.

26 Manufacturing input prices were now rising in annual terms for the first time since 1996, as the downward pressure from sterling's past appreciation and falling world commodity prices had largely worn off. Manufacturing output prices had also been rising gently, but were still falling after stripping out food, beverages, tobacco and petroleum. The rate of increase of the GDP deflator had turned out at historically low levels in Q2, at 1.5%. Retail price inflation excluding mortgage interest payments had been constant at 2.2% in July, a little below the rate in the central projection. The headline inflation rate had fallen further to 1.3%, its lowest rate since 1993. These recent low inflation outturns could have some effect on inflation expectations going forward, but it was unclear how much or how long-lasting they would be.

27 There was a risk that commodity prices might turn out higher than assumed a month ago if world demand strengthened and if the rise in the oil price was sustained. In addition, some of the unexpected weakness in retail price inflation over the past few months had been accounted for by seasonal food prices, which were hard to predict. However, the prospect of increasing competition, for example in food retailing, might work to reduce the price level. There were also prospective regulatory effects in the water and electricity industries. Overall, there seemed no strong reasons for changing the general shape of the short-term saucer-shaped projection for inflation made at the time of the August meeting.

Other considerations

28 There had been some discussion outside the Bank of whether, in the run-up to the end of the year, concern about Y2K problems would impose a constraint on monetary policy authorities adjusting interest rates. This debate seemed to be more widespread in the press than in the financial markets, whose main focus remained on the provision of liquidity. The Committee could see no reason why this should constrain UK monetary policy setting, and monetary policy would continue to be set, on the basis of the news from month to month, with a view to achieving the inflation target.

29 The Committee noted that the markets were attaching a low probability to a change in interest rates this month. In that context, the Committee discussed the pros and cons of moving interest rates by less than 25 basis points. Smaller changes might signal, in appropriate circumstances, the Committee's concern with the outlook for inflation, but with less of an effect on the exchange rate. Continuing the practice of changing interest rates in units of 25 basis points might make it increasingly difficult ever to change that practice. But a smaller change in interest rates might be seen as excessive fine-tuning. Markets might also expect that a further move in interest rates would follow such a small change.

The immediate policy decision

30 In focusing on the data it was difficult to see many indicators, at least on the output side, that were not generally stronger than they appeared a month ago. The question was the extent to which these data affected members' forecasts and how they judged the relationship between output and inflation in the medium term.

31 Some members preferred no change in interest rates this month. In August they had favoured a lower central projection than

the best collective judgment shown in the *Inflation Report* fan chart. On one view, there had been little news since then to alter this judgment. The international situation was developing much as expected, though perhaps a bit weaker in the US and stronger in Japan. UK output growth was recovering, but was still growing below trend, investment was weak and manufacturing output had not even recovered to its level of a year ago. Furthermore, RPIX remained below target and broader price measures such as the deflators for retail prices, for consumption and for GDP were all lower than expectations or recent history. This supported the view that competitive pressures on prices and margins were exerting a stronger downward pressure on inflation, even during conditions of robust domestic demand, than in the past. The recent rise in house prices was unlikely to develop into the type of consumption boom seen in the late 1980s, given the overheated position of the economy then and the stimulus to housing from financial liberalisation and fiscal changes. On this view to raise interest rates now would be premature, and could have adverse effects on the exchange rate and thus damage the recovery in growth that was necessary to return inflation to target.

32 A second view among those favouring no change this month was that the news on the month had probably shifted the central projection up a little towards August's best collective judgment, primarily because of stronger labour market data and the change in tone of the Agents' reports. The risks of higher inflation from the effect of the strong housing market on domestic demand had also increased. But against this there was an argument that sterling might be stronger than assumed in August. The possibility of growth surprises in the UK relative to overseas might now imply some additional upward risk to sterling, even relative to the random walk convention. Business confidence was still fragile. A rate rise would probably be associated with a larger-than-normal appreciation of sterling. It would therefore be preferable to wait to give growth a chance to get established. In recent years, the US had experienced high rates of GDP growth and a significant rate of appreciation in the stock market, without it yet leading to the higher CPI inflation that might have been expected from standard historical relationships. It might therefore be inappropriate to assume that the higher GDP growth and increase in house prices that we were seeing in the UK would necessarily lead to as much of an increase in RPIX inflation as was predicted by historical relationships. The saucer-shaped inflation projection, and the fact that forward-looking indicators of output prices were still benign, allowed time to see how the activity-price relationship was evolving before contemplating any action.

33 A majority of members favoured an increase in interest rates of 25 basis points this month, although one of them saw some attractions in a smaller increase. Various arguments were identified for a rise. Since the August meeting, new data showed that the pace of final domestic demand growth in 1999 Q2 was faster than expected. The current pace of final domestic demand growth could not be sustained indefinitely, and action would be needed to restrain that growth in order to meet the inflation target in the medium term. Consumption growth, together with the fall in inventories, probably indicated faster demand and output growth than previously expected in the second half of the year. The recent strength of the housing market and associated credit data were reasons to believe that consumption growth would remain strong. Growth in narrow money had continued to pick up and the labour market had continued to tighten, with the tone of reports from the Agents on conditions in the labour market reflecting this. Real wages had continued to grow increasingly strongly on most measures. It was recognised that an increase in interest rates now carried some risks. It might damage consumer and business confidence. Given that there was little expectation of an interest rate rise in the markets, there could be a further appreciation of sterling, which would tend to depress further activity in the tradable sectors of the economy. The saucer-shaped projection for inflation provided some time to see how some of the puzzles about the short-run trade-off between nominal and real variables might be resolved. But there was an

argument for an early increase in interest rates because there was merit in seeking to adjust expectations now rather than later, when more might otherwise need to be done to have the same effect in slowing domestic demand in order to achieve the inflation target.

34 Of those Committee members favouring an increase, some had taken the view in August that prospective inflation was likely to be somewhat stronger than the profile in the *Inflation Report* fan chart. The news over the past month—including developments in the oil price, consumer demand, the housing market and the labour market—had together further strengthened the medium-term inflation outlook. In the absence of compelling tactical considerations to the contrary, these members shared the view that a 25 basis point increase in interest rates was needed now to keep prospective inflation in line with the target.

35 The Governor invited members of the Committee to vote on the proposition that the Bank's repo rate be increased by 25 basis

points to 5.25%. Seven members of the Committee (the Governor, Mervyn King, David Clementi, Willem Buiter, Charles Goodhart, Ian Plenderleith and John Vickers) voted for the proposition. DeAnne Julius and Sushil Wadhvani voted against, preferring to maintain interest rates at 5.0%.

36 The following members 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 Wadhvani

37 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 3 September, in advance of its meeting on 7–8 September 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 the Annex.

I The international economy

2 The US outlook had remained robust, despite a slowdown in GDP growth in Q2. Forward-looking indicators for the euro area had picked up, and there were signs of a more stable outlook in Japan. Growth projections for Asia and Brazil had been revised upward.

3 In the United States, the Federal Open Market Committee had raised both the federal funds target rate and the discount rate by 25 basis points, to 5.25% and 4.75% respectively on 24 August, but had maintained a neutral stance on the outlook for policy in the near term. The preliminary estimate of quarterly GDP growth in Q2 had been revised down to 0.4%, though final domestic demand growth had remained robust, as reflected by a further widening of the trade deficit in June. The three-month on three-month growth rate of retail sales had fallen to 1.5% in July, and consumer confidence had fallen in August, though it remained strong. The outlook for industrial activity had improved, with both production and durable goods orders strengthening and industrial confidence remaining robust. The business inventories to sales ratio had fallen to an historically low level. Quantities data had suggested that the labour market remained tight, but evidence of rising labour cost pressures had been mixed. In Q2, hourly labour compensation growth had risen, and productivity growth had fallen. Annual average hourly earnings growth had fallen in August. Consumer price inflation had remained subdued, though there had been some evidence of higher pressures on producer prices.

4 French preliminary GDP had risen by 0.6% in Q2. Industrial production data had pointed to weak GDP growth in Q2 in Germany and Italy. But industrial confidence in the euro area had risen in July, with the west German IFO index rising for the third consecutive month. In both Germany and Italy, domestic orders had been recovering, and foreign orders had improved. And, for the euro area as a whole, export expectations had risen. Euro-area consumer confidence had rebounded in July, reflecting an improvement in expectations of the future general economic situation. Annual M3 growth had remained not far from the European Central Bank's reference value of 4.5%. Credit growth had moderated somewhat but remained strong, rising at an average twelve-month growth rate of 10.5% during May to July. Euro-area consumer price inflation had risen to 1.1% in July from 0.9% in June, mainly due to food and energy price rises.

5 Japanese economic data had, for the most part, been weak during the month, though the outlook appeared to be stabilising. The Ministry of International Trade and Investment's GDP proxy measure had fallen by 0.4% in Q2 after a 1.3% rise in Q1 (the official measure of GDP had risen by 2.0% in Q1, after a 0.1 percentage point upwards revision). The Ministry of Finance's capital spending survey had shown a 13.4% fall in corporate investment on a year earlier in Q2. Construction orders by both the private and public sector had weakened. Consumer confidence had fallen in Q2, though it remained higher than in 1998. Household spending had risen by 0.7% in July, but this had failed to reverse the 2.3% decline in June. The outlook for consumption remained constrained by continued falls in employment. Inventory levels had fallen to their lowest level since 1991, suggesting that inventory adjustment might be nearing completion, and increasing the

likelihood that industrial production would rise in Q3. There had been evidence that deflationary forces might be diminishing: base money growth had risen, and the annual rate of domestic wholesale price deflation had fallen.

6 In the financial markets, the yen had appreciated over the month, by around 3% against the dollar and 5% against the euro. The Nikkei-225 index had been little changed over the month, despite continued net foreign purchases of Japanese assets. In contrast, equity prices had increased in the euro area. US bond yields had been little changed over the month. Swap spreads (and to a lesser extent corporate spreads) over Treasury bond yields had risen in recent months, though it seemed likely that at least part of this rise reflected factors other than a rise in perceived credit risk. Spreads on government bonds in emerging markets had been little changed since the August MPC meeting.

II Monetary and financial conditions

7 Narrow money growth had remained robust. The twelve-month growth rate of notes and coin, after adjusting for the introduction of the new 50 pence and £2 coins, had risen to 7.7% in August. The three-month and six-month annualised growth rates had remained high, at 8.2% and 8.0% respectively.

8 M4 had fallen by £3.3 billion (0.4%) in July, and the annual rate of growth had slowed to 3.6%, its lowest since October 1993. M4 lending (excluding securitisations) had also been weak in July, with the annual rate of growth falling to 6.6%. The slowdown in both M4 and M4 lending had mainly been accounted for by other financial corporations (OFCs), though private non-financial corporations' (PNFCs) M4 deposits and borrowing had also been weak. OFCs' M4 deposits had fallen by £6.3 billion in July and the annual rate of growth had become negative (-5.6%) for the first time since 1992 Q1. Lending to OFCs had also fallen sharply in July, by £3.3 billion (1.7%). PNFCs' M4 deposits had fallen by £0.1 billion (0.1%) in July, and lending to PNFCs had fallen by £0.1 billion. However, while PNFCs had repaid sterling bank borrowing in each of the last three months, their total borrowing, including capital issues and foreign currency borrowing as well as domestic currency borrowing from banks, had increased in 1999 relative to 1998.

9 The M4 deposits of the household sector had risen by £3.1 billion (0.6%) in July, and M4 lending to households (excluding securitisations) had risen by £4.3 billion (0.8%). The annual growth rate of M4 lending to households had risen to 8.2%, its highest rate since 1991 Q4. This had reflected the strength both of the housing market and of total lending for consumption (defined as unsecured lending plus mortgage equity withdrawal). The monthly flow of total lending secured on dwellings had risen to £3.4 billion, compared with an average of £2.8 billion in the first half of 1999. Monthly consumer credit growth had been 1.2% in July, resulting in an increase of 14.5% on a year earlier. According to provisional Bank estimates, mortgage equity withdrawal had increased sharply in Q2 to around £2.5 billion from £0.8 billion in Q1. On the basis of these estimates, total lending for consumption had been the largest in real terms since 1990 Q1.

10 Interest rate expectations implied by longer-dated short-sterling futures contracts had fallen by around 10 basis points since the previous MPC meeting, though they had been volatile over the month. Medium and longer-term nominal forward rates had risen by around 10–25 basis points.

11 UK swap spreads had risen in August. The ten-year swap spread had risen to around 0.9 percentage points, close to its highest

rate since October 1998. However, corporate bond spreads had increased only marginally and were well below October 1998 levels.

12 Real interest rates derived from the index-linked gilt market had risen by around 25 basis points since the previous MPC meeting, to just over 2%. A measure of the expected real interest rate in the year 2000, constructed using the Merrill Lynch survey of fund managers' inflation expectations, had risen by 40 basis points, to 3.8%, between the beginning of July and the beginning of August. Survey-based measures of inflation expectations had been broadly unchanged in August.

13 The FTSE All-Share index had risen by 1.5%, to 2975, since the August MPC meeting. Small-capitalisation stocks had continued to outperform the FTSE 100. The sterling effective index had fallen by 0.1% since the August MPC meeting, to 103.2. Sterling had fallen by 1.0% against the dollar and had risen by 0.6% against the euro.

III Demand and output

14 Quarterly GDP growth at constant market prices had been unrevised, at 0.5% in Q2. The annual growth rate had also been unchanged at 1.2%.

15 Manufacturing output had grown by 0.3% in Q2, the first rise since 1998 Q2, but the level of output had still been more than 1% lower than a year earlier, and had fallen by 0.2% in June. Construction output had grown by 0.7% in Q2, but had still only been 0.5% above its level a year earlier. The weakness of the official construction data relative to the strength of the survey evidence had been a puzzle. Services output had grown by 0.4% in Q2, revised down from 0.5% in the first release, with annual growth at 2.3%, the lowest rate since 1992 Q4. Within services, the output of the distribution, hotel and catering, and business and finance sectors had been weak. But there had been continuing strength in transport and communications, mainly due to telecommunications.

16 The expenditure breakdown of GDP had shown domestic demand growing by 0.3% in Q2, but changes in inventories had reduced growth by 0.8 percentage points. Growth in final domestic demand had been strong at 1%.

17 Consumers' expenditure had grown by 1.3% in 1999 Q2, and annual growth had been 4%. Consumer confidence had risen further in Q2, and income and wealth had been robust. A breakdown of consumption growth had not yet been published, but retail sales had grown by 0.9% in Q2, and utilities output had risen by 1.4%. Within retail sales, household goods had been the fastest growing sector, possibly related to the pick-up in housing activity. The data had appeared to suggest a rise in the demand for cars, but caution was required because the pattern of spending on cars had been heavily affected by the changes to registration dates. New private car registrations had increased by 21% in Q2 on a year earlier. The Society of Motor Manufacturers and Traders had said that demand had been stronger than expected so far in 1999, partly stimulated by deals and incentives, but they still expected registrations for 1999 as a whole to be similar to those in 1998.

18 Total investment had grown by 0.4% in Q2. Business investment had fallen by 0.7%, but had remained 10.1% higher than a year earlier. Within this, manufacturing investment had fallen by 4.2% and service sector investment had fallen by 0.3%. The corporate operating surplus had risen by 1.3% in Q2, but had fallen by 9.5% on a year earlier.

19 Including the alignment adjustment, inventories had fallen by £1.8 billion in Q2, led by manufacturing and other industries. It had not been clear whether the decline in manufacturing stocks had been voluntary. The 1998 H2 rise in stocks had been more than

unwound in 1999 H1. The Confederation of British Industry (CBI) quarterly survey in July had indicated a fall in stocks, with a balance of -20 reporting a rise in finished goods stocks, the lowest since 1991 Q4. The CBI monthly survey had reported that stocks were still more than adequate.

20 Net trade had contributed 0.2 percentage points to GDP growth in Q2, the first positive contribution since 1997 Q3. Total exports had grown by 0.6%. The 1.1% rise in exports of goods had been more than accounted for by growth in exports to non-EU countries; exports to the EU had fallen by 1.2%. UK imports of goods and services had fallen by 0.2% in Q2, despite the strength of final domestic demand.

21 Turning to indicators of Q3 activity, manufacturing output had risen by 0.3% in July and retail sales volumes had risen by 0.1%. On a slightly longer view, retail sales growth appeared to be above trend. Retail sales had grown by 1.3% on the three months to July compared with the previous three months, and 2.9% compared with a year earlier. There had been far less of an upturn in retail sales values, which may have accounted for the more downbeat retail sentiment and the more subdued picture from the Agents. The CBI Distributive Trades survey had shown a balance of +33 respondents reporting higher growth in August, and the outlook for September had been for further growth. The GfK consumer confidence index had increased in August to +4.9, but the MORI measure of confidence (which was more volatile and had a smaller sample) had fallen to -12.

22 House prices had risen strongly in August, with the Halifax measure rising by 1.1%, and the Nationwide measure by 2.5%. Housing activity had also continued to recover. Particulars delivered had risen by 5.8% in July and had been 11.3% up on a year earlier, to the highest level since September 1992 (but still well below the level of the late 1980s). The July House Builders' Federation survey had shown a net balance of +37 respondents reporting an increase in net reservations, and the Royal Institute of Chartered Surveyors sales balance had remained high at +31. Loan approvals data had been flat in the three months to July compared to the previous three months, but remained at a high level. Private housing starts had risen by 4% in July, but had fallen by 2% on a year earlier.

23 Survey balances of manufacturing investment intentions had remained well below their average levels. The CBI Industrial Trends survey had shown output expectations balances up to +17, the highest level since October 1997. Orders had been around their average, at -22, but well below 1997 levels, and export order books had remained weak at -37. The Chartered Institute of Purchasing and Supply (CIPS) manufacturing survey had shown continued growth in output, with the index at 57.2 in August. The survey had also shown modest growth in export orders, with the index at 52.6. The CIPS services survey had remained strong, at 57.3 in August, with financial services strongest, but computing and IT weaker. The CIPS construction index had also been strong at 60.8, with housing and commercial orders rising. Construction new orders had shown slight growth over the latest three months (0.6%), but had been 2.6% below their level in the same period in 1998.

IV The labour market

24 Employment growth had continued to slow. According to the Labour Force Survey (LFS), employment had grown by 43,000 (0.2%) in Q2, compared with Q1. This increase had been more than accounted for by a rise in full-time employment. The total number of hours worked had increased by 0.2% between Q1 and Q2, but average hours worked per person in Q2 had still been 0.7% lower than a year earlier.

25 The August CIPS surveys had suggested that the rate of decline of manufacturing employment had slowed, but that employment growth in services and construction had eased slightly.

The Federation of Recruitment and Employment Services (FRES) survey had indicated increasing shortages of permanent and temporary staff in August. But the latest reports by the Bank's regional Agents had suggested little overall change in labour and skill shortages. The stock of Jobcentre vacancies (adjusted for recent data problems) had remained broadly flat in July.

26 Both official measures of unemployment had fallen. LFS unemployment had decreased by 62,000 in Q2, and the rate had fallen to 6.0%, the lowest since the series started in 1984. The fall had been largely accounted for by lower short-term unemployment; long-term unemployment had remained broadly flat. The claimant count unemployment rate had fallen from 4.4% in June to 4.3% in July.

27 Labour market inactivity had risen by 58,000 in Q2, about half of which had reflected an increase in the number of people who said that they did not want a job. In an accounting sense, employment growth had been associated with falling inactivity over the past year or so. But in Q2, inactivity had risen, associated with falling unemployment. Recent movements in inactivity had been hard to explain in terms of economic factors.

28 Whole-economy headline average earnings growth, a three-month moving average, had risen to 4.4% in June. The twelve-month growth rate of earnings had risen sharply, to 5.2% in June, from a revised 4.1% in May and 4.0% in April, as private service sector earnings had increased markedly. The upturn between April and June had been affected by bonus payments. First, slower earnings growth in April and May 1999 had been to some extent the counterpart of unusually large bonuses in April and May 1998. Second, earnings growth in June had been boosted by bonuses paid by firms in the telecommunications sector, some of which had been paid in different months in previous years. A smoothed measure of earnings growth, generated using a statistical filter, had been 4.7% in June, although the profile of this measure tended to be sensitive to the arrival of new data.

29 The August FRES survey had indicated a further rise in the earnings growth of permanent staff supplied by job agencies. But earnings growth as measured by the Reward index had fallen further in July. The Bank measure of twelve-month whole-economy settlements had been falling since the end of 1998, and had reached 3.5% in July. The three-month whole-economy measure had been relatively stable, at 3.2%, but service sector settlements had continued to fall. Other published measures had been somewhat lower than the Bank's in recent months, but some of these differences could be explained by the fact that outside measures were not employment-weighted. In contrast to nominal measures of settlements, estimates of the real value of settlements had been increasing.

V Prices

30 The oil price had continued to rise. The one-month future price of Brent crude oil had reached \$21 at the end of August, over 100% higher than in December 1998. The average price in August had been about 9% higher than in July. Recent price rises had been driven by OPEC supply cuts, though stronger world demand had also been a factor. The Consensus Economics forecast was for prices to fall from these levels over the following months. In the past, oil price rises had normally been passed on quickly and fully to both output and retail petroleum prices.

31 Excluding oil, there had been little change in the underlying picture for commodity prices. The Bank's index of commodity prices including oil had risen by 4.5% in the year to July; excluding oil, it had fallen by 2.7%. The index had been reweighted to reflect the pattern of UK demand in 1995. This has brought down the growth rates slightly in recent months, but overall had made little difference to the profile. Metals prices had increased markedly over the month.

32 Producer input prices had risen sharply in July, by 3.4% compared with June, mainly due to oil prices, but also because of higher imported material prices. Annual input price inflation had become positive for the first time since 1996. Annual output price inflation had risen to 1.1%. The rise in output prices since the beginning of the year had been more than accounted for by rising petroleum product prices (reflecting both oil price and duty effects). Annual output price inflation excluding food, tobacco, beverages and petrol had remained negative. The CBI Industrial Trends survey had suggested that output price inflation would remain muted in the near future.

33 The GDP deflator had increased by 1.5% in the year to Q2, its second lowest annual rate of increase since 1963. The annual inflation rate of household expenditure, which accounted for close to two thirds of GDP, had continued to slow, as had inflation in the domestic demand deflator. Both the import and export deflators had risen in the second quarter, but the annual inflation rates had remained negative. The retail sales deflator had been unchanged in July, on both a month and a year earlier. The RPIX and GDP-based measures of domestically generated inflation had fallen in the second quarter, to 3.6% and 1.7% respectively.

34 RPIX inflation had remained unchanged at 2.2% in July. RPIY inflation had increased slightly to 1.6%. HICP inflation had fallen by 0.1 percentage points to 1.3%. Insurance and tobacco prices had made the largest positive contributions to the change in RPIX inflation; household goods, housing depreciation and food prices had made the largest negative contributions.

VI Reports by the Bank's regional Agents

35 The Bank's regional Agents reported that, overall, the pace of recovery had been gathering some speed, but the picture had remained uneven, both sectorally and geographically. The recovery had appeared to be stronger in the south of England. Agriculture had remained weak. Growth in manufacturing output had been positive, but varied from sector to sector. IT and communications-related output had shown the strongest growth; most other sectors had recorded only modest growth. Construction output had remained at a high level, although in some areas, growth appeared to have levelled off. Demand for housing had been rising in the south of England and in pockets elsewhere. Business and professional services activity had been strong. Overall, consumer demand had continued to grow steadily. The retail picture had been mixed: discount stores had continued to record stronger growth than department stores. Firms had reported that the worst had passed in overseas markets, although import competition had remained a problem. Order levels had improved as world demand had picked up.

36 There had been evidence that, after a slight easing, labour markets in some areas had begun to tighten again. In parts of the South East and London, the demand for labour remained high. Any renewed pressure had not yet shown through in pay, although there was an expectation of higher settlements in the future. Recent wage settlements had been, on the whole, lower than a year ago, at around 2%–3% for manufacturing and 3%–5% for services. There had been some pay freezes, but also some significantly higher rises.

37 Input prices had generally flattened out, although there had been evidence of increasing raw materials prices of metals and oil. There had been little change in manufacturing output prices. By contrast, upward pressure on services prices had remained noticeable at the higher value-added end. Retail price inflation had stayed low, kept down by competition and consumer spending behaviour. House prices had been rising, particularly sharply in areas such as London and the South East.

VII Market intelligence

38 Short-term market interest rates had fallen a little since the August MPC meeting. But there had been larger intra-month movements, mainly reflecting US data releases and the publication of the *Inflation Report* and the minutes of the August MPC meeting. Rates implied by short sterling futures had continued to exceed those implied by surveys of economists' forecasts, but many fewer economists now expected any further reduction in official rates. And evidence from options suggested, if anything, an upside rather than a downside risk to market interest rates over the next year or so. Two main views of the likely future path of official interest rates had been expressed in the market, with one expecting a rise in rates this year and the other expecting no rise until next year, if at all. Particular issues highlighted had included the housing market, the divergence of the paths of real and nominal wages, the composition of GDP, and the expected future path of interest rates in the United States and the euro area. Implied volatilities on short sterling futures had fallen on the days of publication of the *Inflation Report* and the minutes of the August MPC meeting.

39 Movements in sterling over the month had been relatively small. Although some domestic data releases had differed from market expectations, these appeared to have had little influence on the exchange rate. Implied volatilities had been slightly higher than a month earlier. Survey projections for sterling against the euro had again suggested a higher degree of sterling depreciation than implied by the UIP path, based on relative interest rate differentials. But survey projections for sterling against the dollar had been broadly in line with the UIP path. Particular factors identified by market participants as influencing the prospects for sterling had included relative growth and monetary policy developments in the major economies, the UK trade figures and the volume of mergers and acquisitions flows.

40 Bank staff explained that over the next few months the Bank's stock of refinancing was forecast to grow, reflecting the normal seasonal increase in the market's need for liquidity and the Millennium change. The Bank intended to introduce a temporary three month repo facility to supplement the usual two week operation. This facility had no significance for monetary policy. Any change by MPC in the official rate would result in a matching adjustment to the rate charged on outstanding three month repos.

Text of Bank of England press notice of 8 September 1999

Bank of England raises interest rates by 0.25% to 5.25%

The Bank of England's Monetary Policy Committee today voted to raise the Bank's repo rate by 0.25% to 5.25%.

The Committee reviewed developments since its last meeting, including world demand, the strength of consumption and the housing market, and continuing tight conditions in the labour market. Although inflation is expected to remain below the target of 2½% in the short term, the Committee concluded that a rise in interest rates was necessary to keep inflation on track further ahead, and that an early move could lower the level at which interest rates might otherwise need to be set. It therefore voted to increase the repo rate by 0.25% to 5.25%.

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

Minutes of the Monetary Policy Committee meeting on 6–7 October 1999

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

The world economy

2 In the United States final domestic demand was still growing strongly, although GDP growth in Q2 had slowed to below $\frac{1}{2}\%$, reflecting negative contributions from net trade and stockbuilding. Headline consumer price inflation was increasing, reflecting higher oil prices.

3 There had been little market reaction to the tightening of US monetary policy in August, although equity prices had fallen slightly in recent weeks. While this could be consistent with a soft landing for the US economy, it need not be so, particularly if the current account deficit continued to grow as a result of strong domestic demand, or if forward-looking indicators of price pressures continued to rise. The prospects for sustainable growth would be improved if supply-side changes, such as a rise in productivity, continued to underpin the increase in output in the US, and led to inflows of capital from the rest of the world. Nevertheless risks remained of a sharp move in the dollar and/or in equity prices if these supply-side factors should tail off. At its October meeting the FOMC had left rates unchanged, but with a bias towards a possible firming of policy going forward. The Committee agreed that although there were still risks to the outlook for the US economy, it was not clear that these were any greater than they had been a month earlier.

4 In Japan output had been stronger in Q2 than expected, although it was too soon to say whether this upturn would be sustained. A fiscal package now looked likely, and statements by the Bank of Japan had indicated that monetary policy would remain accommodative. But over the past month there had been a strong appreciation in the yen which, if sustained, could weaken future growth prospects.

5 In the euro area, business confidence was now back to its long-term average, with Q2 GDP growth positive in most countries other than Germany. Orders data also pointed to a recovery. Broad money growth was above its reference value, although doubts remained about the quality of these data, subject as they were to revision. The recovery was still in its early stages, and had yet to become firmly established.

6 Prospects in the emerging market economies were on balance little changed from a month earlier. If anything, forecasts were now a little less negative for Russia and Brazil, although not for the rest of Latin America. In many Asian countries growth was strong, if much as expected.

7 While the uncertainties about the prospects for the world economy had diminished over the past few months, and recent data suggested a stronger recovery in world trade, the Committee concluded that there had been little change in the outlook since its previous meeting.

Money and credit

8 Recent data for the monetary aggregates had been volatile, and it was unclear whether the latest figures contained much in the way of significant information. In September M0 was virtually unchanged from a month earlier, and as a result the annual growth rate had fallen to 7.0% from 7.8% in August. In August M4 had grown in underlying terms for the first time since April, with the

annual growth rate a little higher at 4.3%. The growth in August primarily reflected movements in the deposits of Other Financial Corporations; deposits by Private Non-Financial Corporations had fallen.

9 Household credit growth in the year to August, and estimates of mortgage equity withdrawal in real terms in Q2, were both at their highest levels since 1991 Q4, although the latter had been revised down slightly. While it was too soon to draw conclusions from the various house price indices, there was now some suggestion that the hype surrounding the housing market had moderated.

10 Nominal interest rates implied by futures contracts for the next nine months were some 40 basis points higher than a month earlier, with rates higher across most of the yield curve, although at around two years the implied rates were little changed. Towards the end of September these rates had been lower than at the time of the Committee's previous meeting, but there was little sign yet that by moving in September the Committee had achieved any lasting reduction in interest rate expectations further along the yield curve. On a longer-term basis, two-year real interest rates, calculated using survey-based measures of inflation expectations, had risen by 60–90 basis points over the past quarter. Swap rates for maturities of three years or more were generally 20–30 basis points higher over the month as a whole, with gilt yields up by rather more. Equity indices had fallen by around 4% over the month, and the sterling effective exchange rate had appreciated by 2%. The magnitude of the rise in medium-term interest rates and the exchange rate over the month as a whole was higher than might normally be expected from a rise in the repo rate of 25 basis points. This might have reflected market perceptions of a turning point in interest rates, and it was possible that there had also been other influences, for example higher European interest rates and M&A-related activity in the exchange markets. Whatever the cause, these movements over the past month would tend to restrain demand.

Demand and output

11 Real quarterly GDP growth was now stronger than earlier estimated, at 0.2% in Q1 and 0.6% in Q2, and on a year-on-year basis had picked up from its low point of 1.3% in Q1. Manufacturing output had increased by 0.4% both in July and August, and the National Institute for Economic and Social Research now projected GDP growth of 0.8% in Q3.

12 During the past month, household expenditure had been revised up in Q1, in part due to new estimates for expenditure on cars. But with the level of household expenditure little changed in Q2, the quarterly growth rate had been revised down to 1.1%. Business investment had been revised up to 0.8% in Q2, though government investment had fallen by 5%. Final domestic demand therefore continued to grow strongly, although by less than in the previous quarter. Domestic demand itself was much less buoyant, reflecting a sharp fall in inventories, especially in manufacturing. The difference between growth in final domestic demand in Q2 (at 4.5% on a year earlier) and GDP (at 1.4%) had been the highest since the first quarter of 1988.

13 Although the current account deficit had widened in Q2, in volume terms the net trade contribution to quarterly GDP growth had been positive. While these were volatile numbers, the most recent trade data suggested that the stronger export performance in Q2 might have continued into the third quarter, on account of stronger world trade. Manufacturing export orders, as measured by

the Chartered Institute of Purchasing and Supply (CIPS), had also risen in Q3 and many of the contacts of the Bank's regional Agents had reported some recovery in overseas orders. A strengthening in exports relative to domestic demand would lead to a better-balanced recovery.

14 Indications for domestic demand in Q3 remained strong, judging by the retail sales data, the CBI Distributive Trades Survey, and reports from the Bank's regional Agents, but the GfK consumer confidence measure had fallen back in September and the CIPS services survey, while remaining well above 50, was also slightly lower. Measures of industrial confidence about profitability had strengthened, although the effects of the recent appreciation of sterling were unlikely to have fed through to survey data yet. Car registration data and evidence from the Bank's regional Agents suggested that activity in this sector may have slowed in Q3, although the data were still hard to interpret given the changes in the registration cycle for new vehicles and survey evidence was mixed. Tax revenues appeared to be buoyant, perhaps largely reflecting cyclical factors.

15 Taken together, the evidence suggested slightly stronger output growth than had been expected the previous month, and perhaps a rather stronger export performance. Some Committee members saw a few signs that domestic demand growth could perhaps be moderating, as it would need to do at some point if growth were to prove sustainable, although a period of above-trend growth was to be expected in the recovery phase of the cycle.

Labour market

16 Employment growth was no longer slowing, with an increase of more than 50,000 on the latest three month Labour Force Survey (LFS) measure, and around 100,000 in Q2 on the more volatile Workforce jobs measure. The LFS unemployment rate continued to fall, reaching 5.9% in the three months to July, and the claimant count rate was down to 4.2%. Measures of labour market inactivity had meanwhile risen.

17 The Federation of Recruitment and Employment Services reported that shortages of temporary and permanent staff persisted in September, and the Bank's regional Agents spoke of a similar picture in most parts of the UK. So far as skill shortages were concerned, it was important to distinguish between cyclical effects and structural issues relating to education and training. It was also possible that skill shortages might now lead to less generalised pressure on earnings than in the past, given the increasing importance of individually-tailored contracts. But some of the Agents' contacts reported labour shortages even for unskilled jobs.

18 These skill shortages did not yet appear to be influencing pay settlements, which continued to fall. The recently announced electricians' settlement was a possible exception, but it appeared to have consolidated certain existing supplementary payments so that the net settlement might have been rather less than had been reported. Earnings growth, as measured by the Average Earnings Index, had meanwhile fallen to 4.4% in the year to July, from 5.2% in the previous month. The headline rate, a less volatile measure calculated as a three-month moving average, had risen slightly to 4.6%.

19 Real earnings growth had increased, and might suggest that pressures in the labour market were greater than implied by the path of nominal earnings. But it might be that employers and employees had expected rather higher inflation when settlements were agreed, and to that extent had been surprised by the subsequent growth in real earnings. How that would influence next spring's pay bargaining round remained to be seen.

Prices and costs

20 Input prices for manufacturing were rising, as a result of higher oil prices, and were 3.8% up on a year earlier. However, output prices (excluding excise duties) were little changed. Despite higher oil prices, RPIX inflation in the year to August had been a little lower than expected, at 2.1%, in part due to lower food prices. Within this total, goods price inflation was very low, and had turned negative on some measures, such as the retail sales deflator, while the prices of services continued to increase. The implied deflator for GDP at market prices had been revised, with the annual rate of change at 1.8% in Q2. Most measures of domestically generated inflation were falling, with the RPIX-based measure down to 3.6% in Q2 on a year earlier, compared with almost 5% only six months earlier.

21 It was possible that increasing competition in the retail sector, for instance in food and clothing, might reduce RPIX inflation further below target, at least in the short term. But it was difficult to be sure how large any such effect might be. Some types of price cut (such as '2 for 1' offers) were not captured by the RPIX. Others might be offset by increases in prices elsewhere, although the scope to do so would be limited if competition was indeed more intense, or if low and stable inflation made it easier for consumers to identify and react to relative price changes. A survey by the Bank's regional Agents had shown widespread discounting driven by new and existing competition, and consumer resistance to price rises. Regulatory decisions (for example on utilities pricing) and rulings by competition authorities might add to the downwards pressure on inflation, although not all these factors were new: deregulation and competition had been important influences on pricing for many years, although more sectors currently might perhaps be affected than in recent years.

22 Even if competition were important in restraining price increases in the near term, what would be the effect on inflation further out? To the extent that lower prices fed through into inflation expectations and wage bargaining negotiations next spring, the effects might persist beyond the short run. But to the extent that some of the reductions in prices were time-limited (and perhaps analogous to advertising) there could be a bounceback in inflation further ahead as they unwound. A further factor which might prolong downward pressure on prices was e-commerce. Both the short-run and longer-run effects of these various factors would need to be considered carefully in the context of the forthcoming *Inflation Report* forecast.

23 The Committee discussed the recent doubling in oil prices. In the short term, these increases would push up inflation, albeit from a position below target. The Committee had to set policy so that prospective inflation further ahead was on target, so it would be important not to accommodate the longer-run effects from higher oil prices.

The immediate policy decision

24 The Committee discussed various arguments for leaving the repo rate unchanged at 5.25%.

25 Final domestic demand was still growing rapidly, and was beginning to be reflected in stronger output growth; growth in Q3 might be clearly above trend for the first time in two years, and output had been revised up for both Q1 and Q2. There were signs—not least in survey data—that world trade in general, and UK exports in particular, might be recovering. With stronger input prices and a tight labour market, there were upside risks to inflation in the medium term, although if the economy had fallen below potential after a period of below-trend growth, a period of above-trend growth would be consistent with the inflation target. More immediately, there was a possibility that increased competition would result in greater downwards pressure on margins and prices, at least in the short term.

26 Until recently, falling import prices had helped to restrain inflation, while output had been held back by a negative contribution from net trade. Both of these influences might now be coming to an end, although much would depend on the future path of the exchange rate. If domestic demand growth and domestically generated inflation fell back as net trade and import prices picked up, the economy should be better balanced going forward. If not, pressure on resources—and inflationary pressures more generally—would increase.

27 The increase in the Bank's repo rate at the Committee's previous meeting had surprised the markets. Compared with a month earlier, market interest rates were higher at most maturities, as were rates on fixed-rate mortgages, while sterling was stronger and equity prices lower. While these developments might in part reflect influences other than the increase in official rates, if maintained they would help to restrain demand growth and inflation in the medium term.

28 There remained a number of puzzles, with most output and demand figures continuing to be stronger than expected, while inflation was if anything lower. Similarly, in the labour market, despite a continuing fall in unemployment and reports of growing labour shortages there was as yet little sign of an acceleration in nominal earnings, although unit labour cost estimates were increasing quite rapidly. The increase in real earnings growth might signal labour market pressures, but it could instead reflect lower than expected inflation. It was unclear how long this combination of stronger growth with lower inflation would last; it might reflect domestic developments, such as structural changes in product and labour markets, or alternatively external influences, which could prove temporary. The change in market rates since the Committee's previous meeting in September meant there was no need to move official rates now, although the Committee would

remain alert to any signs that robust growth was feeding through into pressure on prices.

29 Some members of the Committee emphasised the likelihood that inflation, particularly in the short run, would fall further below target, in part reflecting the competitive pressures in retailing and regulatory developments in the utilities sector. Nearly all inflation measures were at present falling; RPIX had been below target for five months, and excluding petrol prices was running at only 1.7%. Given the structural changes that may have occurred in the labour and product markets, it made sense to see whether higher growth would translate into as much of a rise in inflation as was suggested by historical relationships. The rise in the repo rate had contributed to a significant tightening across the yield curve, and the impact of a stronger exchange rate had yet to be seen, even in survey data.

30 The Governor invited the Committee to vote on the proposition that the Bank's repo rate be maintained at 5.25%. The Committee voted unanimously in favour of the proposition.

31 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 Wadhvani

32 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 Bank staff to the Monetary Policy Committee on 1 October, in advance of its meeting on 6–7 October 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 The US economy had remained strong, and leading indicators for the euro area continued to indicate the prospect of faster growth. Q2 GDP growth in Japan had been stronger than expected.

3 In the US economy strong personal consumption had accompanied further increases in household wealth. New orders had been strong, especially in durable goods and manufacturing, in all Federal Reserve districts. In the short run, some reversal of recent declines in inventories might support GDP growth. According to standard measures, labour cost pressures had not yet emerged, but more refined measures including the effect of stock options suggested some rise over the past few months. Headline CPI inflation had increased to 2.3% in August due to higher crude oil prices, but core consumer price inflation (which excludes energy and food prices) had continued to slow.

4 GDP in the euro area was provisionally estimated to have risen by 0.3% in Q2. GDP in Germany had been flat on the quarter, but had risen by 0.4% in Italy. Euro area HICP inflation had increased from 1.1% to 1.2% in August but, net of energy prices, had fallen again. Confidence measures had shown further improvement in economic conditions reported by both consumers and producers, particularly in Germany and France.

5 In Japan, GDP had risen by 0.2% in the second quarter. Industrial production had remained strong. The September Tankan survey had shown an improvement in business confidence. There had also been a pick-up in trade flows, in particular to South East Asia, where growth had been strong. Prices of goods and services covered in the headline CPI had risen by 0.3% from July to August, a reversal in the recent trend. This may have been accounted for by volatile food prices.

6 World commodity prices had increased, to a large extent accounted for by an increase in the price of crude oil, which seemed to have occurred because of a high degree of compliance with the agreement among OPEC members to limit supply. The price per barrel had reached \$24 at the end of September, up from \$10 in December 1998. The strength in oil prices had contributed to a rise in producer prices in the euro area and the US. However, despite the strength in oil prices, producer prices in Japan had fallen further. Food prices, by contrast, had moved to their lowest level since October 1992. According to the Economist all-items index, non-oil commodities had declined by 5% in dollar terms over the year.

7 There had been a further appreciation of the Japanese yen in foreign exchange markets. The extent of the yen's appreciation against the euro and the dollar had been similar, and the bilateral euro-dollar rate had been broadly unaltered. Equity markets around the world had fallen somewhat over the month. One development had been the increase in buying intentions of US fund managers for euro-denominated equities as reported by Merrill Lynch's Fund Manager Survey.

II Monetary and financial conditions

8 Narrow money growth had slowed sharply in September. The twelve-month growth rate of notes and coin, after adjusting for the introduction of the new 50 pence and £2 coins, had fallen to 7.0% in September compared with 7.8% in August. The one-month growth rate, at 0.0%, had been unusually low by recent historical standards. The sharp reduction in the rate of monthly growth was unlikely to have been solely 'noise', and might indicate that the underlying growth rate was less than had been previously thought.

9 M4 had risen by £4.6 billion (0.6%) in August, with the annual growth rate rising to 4.3%. After adjusting for an unusual transaction that had affected the flows in May and June, this had been the first rise in M4 since April. M4 lending (excluding the effects of securitisations) had been very strong in August, rising by £10.0 billion (1.1%), but recent flows had been erratic.

10 Households' M4 lending had been strong in August, rising by £4.1 billion (0.7%), and the annual growth rate, at 8.3%, had been the highest since 1991 Q4. The three and six-month rates, at 9.4% and 9.2%, were above the twelve-month rate. Total lending to individuals, including banks, building societies and other lenders had fallen slightly on the previous month to £3.2 billion, but it remained strong compared with an average of £2.8 billion for the first half of 1998. The value of new loans approved for house purchase in August was £10.3 billion, little changed from the July figure of £10.2 billion. It appeared that outflows from the stock of approvals had been mostly due to flows into gross lending; cancellations remained flat. Total unsecured lending had been strong in August, with the three, six and twelve-month annualised growth rates at 14.9%, 14.1% and 14.1% respectively. Recent data had led to the provisional estimate of mortgage equity withdrawal in Q2 being revised down from £1.9 billion to £1.6 billion. But mortgage equity withdrawal in Q2 was still estimated to have been stronger in real terms than at any point since 1991 Q4. Households' M4 deposits had been weak in August, rising by £0.9 billion (0.2%). The twelve-month growth rate was 6.2%.

11 Private non-financial corporations (PNFCs) had repaid bank borrowing in each of the last four months and the twelve-month growth rate had fallen by 0.7 percentage points to 3.5% in August. But a wider measure of PNFCs' borrowing (which also includes bond and equity issues) had been strong between January and August, averaging £4.4 billion, compared with an average of £2.9 billion in 1998. The August figure had been down by £0.3 billion to £2.4 billion. PNFCs' M4 deposits had fallen by £1.2 billion (1.0%) in August. The twelve-month growth rate had fallen by 2.2 percentage points to 3.9%.

12 Other financial corporations' (OFCs') M4 deposits had risen by £5.0 billion (2.9%) in August, only the second monthly increase in 1999. OFCs' M4 lending had also risen sharply, by £6.1 billion (3.0%). Repo and reverse repo transactions had been £1.1 billion and £1.4 billion (nsa) compared with -£2.7 billion and -£3.1 billion in August 1998.

13 Interest rate expectations out to June 2000 implied by short-dated sterling futures contracts had increased by 25 basis points or more, after the 25 basis point increase in the official repo rate on 8 September. Over the month, nominal forward rates implied by gilts had also risen at short to medium maturities. Swap rates had risen by around 30 basis points, slightly less than the 40 basis point rise in gilts, resulting in a narrowing of swap spreads, except at the two-year maturity. Yields on corporate bonds had

risen by between 30 and 35 basis points at maturities of between five and ten years. There had been less than complete pass-through of the official repo rate increase to an average of standard variable mortgage rates offered by banks and building societies, but many institutions had not yet announced how they intended to respond. The spread of five-year fixed-rate mortgages over swap rates of corresponding maturities had narrowed.

14 Real interest rates derived from the index-linked gilt market had been little affected by the official rate rise, so implied inflation expectations moved in line with gilt yields. In contrast, short-term survey-based measures of inflation expectations had been little changed. And survey-based real interest rates had increased by between 60 and 90 basis points between the Q2 and Q3 surveys of inflation expectations.

15 The sterling effective exchange rate index (ERI) had appreciated by 2.1% over the month. Within this, sterling had appreciated by 2.0% against the euro, 3.1% against the dollar, and had been virtually unchanged against the yen. Monetary news had appeared to account for a significant amount of the appreciation in sterling's ERI. The FTSE All-Share index had fallen by 4.1% over the month. This fall had been broadly spread across the sectoral components of the index.

III Demand and output

16 Quarterly GDP growth at constant market prices had been revised up by 0.1 percentage point in both the first and second quarters, to 0.2% in Q1 and 0.6% in Q2. The growth rate in the year to the second quarter had been revised up to 1.4% from 1.3%. Domestic demand growth in the second quarter had been revised down on a quarterly basis to 0.2%, but up on an annual basis, reflecting upward revisions to the level in both the first and second quarters. But the lower growth had been outweighed by the contribution to quarterly GDP growth made by net trade, which had been revised up to 0.5 percentage points, largely due to stronger export growth and an upwardly revised trade deficit in Q1.

17 Quarterly growth of household expenditure had been revised down to 1.1% in Q2, though the level in the second quarter had been essentially unchanged from the previous estimate. Spending on durables had been the main driving force of consumption growth in the first half of 1999. Roughly half the revision to the Q1 number had come from expenditure on cars (which had been significantly distorted by the introduction of the new registration month in March). Expenditure on services had been weak in the second quarter, particularly spending on financial services, which had fallen by 5.1%. Expenditure on investment (excluding net acquisitions of valuables) had been revised up slightly in the second quarter, but the composition of growth had changed more markedly. Business investment had been revised up significantly, but government investment had fallen by 5%. Government consumption expenditure had not been revised.

18 Final domestic demand growth had been much stronger than domestic demand growth, as the change in inventories had contributed -0.8 percentage points to quarterly GDP growth. The change in inventories had been revised up in both of the first two quarters by the equivalent of 0.3% of GDP. The rate of manufacturing destocking had been revised up in the second quarter, but the level of retailers' stocks had increased again by £405 million. The sharp fall in the level of inventories in the second quarter had been slightly larger when excluding the quarterly alignment adjustment. The sum of the alignment adjustments on the expenditure measure in the first two quarters had been close to £400 million. The alignment adjustment has to sum to zero in any calendar year, which implied that either there would be downward revisions to the first two quarters in subsequent releases, or it would be negative in the second half of the year.

19 The current account deficit had widened in Q2, and had been at its largest since 1990. But the trade deficit had narrowed as export volumes had grown by 2.1%. Growth in import volumes had been revised up to 0.5%. The revision had made the data more plausible as the previous estimate of a fall in imports had been difficult to reconcile with the strength of domestic demand, especially durables spending.

20 The revision to the income data within the National Accounts had shown growth of post-tax income of 3.1%, greater than spending growth in Q2. The strength had been partly due to very strong growth of dividend income following a fall in Q1. The gross operating surplus of corporations had remained weak in the revisions.

21 On the output measure of GDP, services growth had been revised up in the second quarter to 0.6%. Within services, communications growth had been strong and finance and business output growth had picked up after slow growth in the previous two quarters. Construction growth had been revised up in both the first and second quarters, to 0.5% and 0.6% respectively.

22 Retail sales volume growth had remained stronger than values growth in August. Volume growth in the year to August had been 3.6% compared with values growth of 3.2%. The official data had been consistent with information from the Bank's regional Agents. The CBI distributive trades survey had suggested that growth would continue to strengthen, despite a small fall in the level of consumer confidence, as measured by the GfK survey.

23 The Nationwide measure of house price inflation had risen to 11.0% in September, compared with a figure of 9.8% in August. However, the Halifax measure had fallen from an annual growth rate of 9.4% in August to 8.8% for September. The strong growth of house prices generally over the past year had not brought the level far from the long-run trend and, compared with incomes, the average house price had remained well below the recent peak in 1990. Loan approvals growth had remained strong, as had survey evidence of housing strength.

24 Data on economic activity in the third quarter had remained strong in general. Export volumes (excluding oil and erratics) had increased by 2.6% in the three months to July, with widespread growth on a geographical basis. Imports had also been strong, rising by 3% over the same period. Construction orders had fallen by 1.7% in the three months to July and by 5.9% compared with July 1998. But the Chartered Institute of Purchasing and Supply (CIPS) construction index had been 59.6 in September, indicating continued growth, though lower than in the summer. Both the CIPS and CBI surveys had continued to show strengthening manufacturing output in September. The CIPS services survey had remained well above 50, though it had fallen slightly for the second successive month. The National Institute of Economic and Social Research's estimate of GDP growth in the three months to September had been 0.8%, and had been produced after the publication of the August industrial production data.

IV The labour market

25 LFS employment had increased by 54,000 (0.2%) in the three months to July, compared with the previous three months, broadly the same as growth in the three months to April. Workforce jobs had increased by 104,000 in Q2, though the series had been volatile and the average growth for H1 had been in line with LFS growth for the same period. The rise in LFS employment had been split mainly between self-employment and employees, with employment growth broadly the same in both head-count and in full-time equivalent terms. By industry, the recent rise in Workforce jobs had been concentrated in the services sector; employment had continued to fall in the manufacturing sector, though at a slightly slower pace. The total number of hours worked

had risen by 0.7% in the three months to July, and so average hours worked per person had increased by 0.5%.

26 The CIPS manufacturing survey for September had suggested a slowdown in the rate of decline of manufacturing employment. In the construction sector, employment had expanded at a less rapid rate than in August, while services employment had grown at a slightly faster rate. The Federation of Recruitment and Employment Services (FRES) survey had suggested that shortages of permanent and temporary staff had persisted in September. The latest reports by the Bank's regional Agents had suggested that skill shortages were a major concern in some areas. The stock of job centre vacancies (adjusted for recent data problems) and notifications of new vacancies had been broadly unchanged in August. The National Press Recruitment Advertising index (produced by FRES) had stabilised.

27 Both measures of unemployment had fallen in the latest data release. LFS unemployment had decreased by 86,000 in the three months to July compared with three months earlier, and the rate had fallen by 0.3 percentage points to 5.9%. Claimant count unemployment had declined by 22,300 in August; the rate had fallen by 0.1 percentage points to 4.2%, its lowest rate since March 1980. The latest fall in LFS unemployment had been mainly among the short-term unemployed, but long-term unemployment had also been lower.

28 Labour market inactivity had risen by 71,000 in the three months to July compared with the previous three months, with much of this increase accounted for by the number of people classified as not wanting a job. The inactivity rate had increased by 0.1 percentage points to 21.2% in the three months to July.

29 Whole-economy headline earnings growth, a three-month moving average of the monthly annual rate, had increased from 4.4% to 4.6% in July, driven by a pick-up in private sector earnings. Service sector headline earnings growth had mirrored the increase in private sector earnings growth, rising to 5.0%, while manufacturing headline earnings growth had fallen back slightly to 3.4%. The twelve-month growth rate of earnings had fallen back sharply from 5.2% in June to 4.4% in July. The fall in the annual rate of earnings growth in July had been affected by bonus payments; some firms in the telecommunications sector had paid bonuses in June, not in July as they had done in previous years. A smoothed measure of earnings growth, generated using a statistical filter, had been 4.6% in July, though this measure was sensitive to new data. The Committee were briefed about developments regarding the new Average Earnings Index sample.

30 Other earnings data had been mixed. The Reward index had fallen from 3.4% in July to 3.3% in August. The September FRES survey had indicated a further rise in earnings growth of temporary staff supplied by job agencies, though growth rates for permanent staff had eased slightly. The measure of wages and salaries per head from the National Accounts had grown at an annual rate of 5.3% in Q2, which had been higher than the annual growth rate of the Average Earnings Index.

31 The Bank's measures of wage settlements in August had been broadly unchanged from July. The twelve-month whole-economy mean had fallen since the end of 1998 but had been unchanged at 3.4% in August. The three-month whole-economy measure had been relatively stable, at around 3.1%. Other published settlements measures had been subdued in recent months. A range of measures had shown that the real value of settlements had been rising.

32 The ONS measure of annual productivity growth had fallen to 0.9% in Q2. Productivity surveys for July and August which had been produced by NTC Research and the Institute of Management Services had suggested a sharp pick-up in productivity growth in

Q3. Growth in unit wage costs had risen again in Q2, as wages and salaries had grown faster than productivity.

V Prices

33 The Bank's oil-inclusive commodity price index had risen by 1.3% in August, mainly as a result of continued strengthening in crude oil prices. Excluding oil, commodity prices had fallen slightly over the month, taking the annual inflation rate to -1.3%. This had been mainly accounted for by falling UK food prices.

34 Manufacturing input prices had risen by only 0.1% in August and were now 3.8% higher compared with a year earlier. The latest CIPS survey input price index had risen to 54.6 in September, above the neutral 50 mark for the second consecutive month. Output prices had also picked up. The index excluding excise duties (PPIY) had recorded its first annual increase in two years. But producer price inflation, excluding food, tobacco, beverages and petroleum, had remained subdued.

35 Both export and import prices had risen by 0.6% in July. However, after stripping out the oil component, export prices had fallen by more than import prices over the last 12 months.

36 The annual rate of change of the GDP and household expenditure deflator had been revised up to 1.8% and 1.5% respectively in Q2. The weakness in the latter had been mainly accounted for by the steep fall in durable goods price inflation.

37 Retail price inflation in August had been below expectations. RPIX inflation had fallen to 2.1% mainly because of the weakness in food prices and by a less-than-expected seasonal bounceback in some other goods prices.

VI Reports by the Bank's Agents

38 The Bank's regional Agents reported that overall there had been a continued pick-up in the pace of activity, driven by domestic demand. But the regional divergences had widened. The pick-up in growth had been most pronounced in the South, boosted by growth in services. Manufacturing activity overall had increased at a moderate pace, but output in more specialist sectors such as pharmaceuticals and high-technology products had risen more quickly. Construction activity had remained relatively robust across the regions. Service sector growth had strengthened in a number of regions, with particularly strong demand for financial services. Consumer demand had accelerated at different rates across the regions. The retail picture had remained mixed, with discount stores continuing to record stronger growth than department stores. The renewed appreciation of sterling had affected manufacturers' margins further and contacts had reported that business was being lost to inward competition. The agricultural sector had remained weak.

39 There had been evidence of further tightening in the labour market. Most regions had reported skill shortages. These had been more evident in services than in manufacturing and were quite acute in some sectors. A significant number of contacts had reported that labour shortages had been spreading and affecting a wider range of skilled and unskilled jobs (particularly in the retail sector and financial services). However, there had so far been little evidence of skill shortages affecting pay rates. Firms reported that pay increases had been directed at performance-related pay rather than 'across-the-board' increases. Many big manufacturers had contained overall increases in the pay bill, targeting increases at groups of staff and cutting staff costs elsewhere.

40 Commodity prices had begun to pick up for fuels, metals, paper and packaging. However, firms had continued to find it difficult to pass on increased costs. Contacts had reported that increases in fuel prices had not been passed through to output prices. The Agents had conducted a survey of contacts in

September to find out whether discounting in the retail and other service sectors had become more marked than in the past. Increased discounting had been notable in the food, mixed retailing, cars, and clothing and footwear sectors. There had been little evidence of increases in discounting for services. In those areas where discounting had increased, a number of explanations had been given for the pattern. Existing and new competition were frequently cited for increasing the pressure on firms to discount prices. 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.

41 Rising house price inflation had been most pronounced in the southern regions. In the most recent month, reports of an acceleration in house prices had been more widespread, though some regions had not seen any pick-up in housing market activity.

VII Market intelligence

42 In addition to the market view of short-term prospects, Bank staff looked at two key issues. First, what factors had contributed to changes in the peak that interest rates implied by the short sterling futures curve were expected to reach; and second, what had contributed to the rise in sterling over the month?

43 Looking at very short-term rates, mid-October two-week repo rates were expected to be higher than at present, suggesting a modest expectation of a rise in rates. The Reuters' poll of economists had shown a one in three chance of a 25 basis point rise in rates at the October meeting and a two in three chance of a 25 basis point rise before the end of the year.

44 Looking further out, implied short-term rates in the two-year area (where the short sterling curve had peaked earlier) had fallen over much of the month, but subsequently had returned to a level close to that prevailing before the September Monetary Policy Committee announcement. Individual UK and international economic data releases had not appeared to explain all of this movement. Bank staff considered whether equity prices had been an influence. Falls in equity prices had appeared to reduce interest rate expectations, but more so in the United States than in the United Kingdom. Bank staff had also considered that, at times, movements in sterling may have been a factor. Finally, some market contacts had suggested that the fall in the two-year peak had been a continuation of the gradual adjustment to this summer's earlier 'overshoot'.

45 The sterling ERI had appreciated by 2.1% since the previous MPC meeting. Risk reversals had suggested little change in risk-hedging behaviour since the beginning of the year. Weak US equities could have been a factor: sterling had strengthened against the dollar during the period of global equity falls. But it had been hard to say whether the dollar had fallen because US equities had weakened more than elsewhere, or whether it had been feared that they had further to go, or whether equities had been of greater significance in the US economy than elsewhere; and the decline in US interest rate expectations which had accompanied weakening equity prices was one of the components of the monetary news. Market contacts had argued that, with hedge funds now less leveraged, 'real money' flows, including those from merger and acquisition activity, carried more weight in market movements. This could mean that such flows had a more persistent, though still temporary, effect on the exchange rate.

Text of Bank of England press notice of 7 October 1999

Bank of England maintains interest rates at 5.25%

The Bank of England's Monetary Policy Committee today voted to maintain the Bank's repo rate at 5.25%.

The minutes of the meeting will be published at 9.30 am on Wednesday 20 October.

Text of Bank of England press notice of 4 November 1999

Bank of England raises interest rates by 0.25% to 5.50%

The Bank of England's Monetary Policy Committee today voted to raise the Bank's repo rate by 0.25% to 5.50%.

The Committee's latest inflation and output projections will appear in the *Inflation Report* to be published on Wednesday 10 November.

The minutes of the meeting will be published at 9.30 am on Wednesday 17 November.

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.

PPI: Producer Prices Index.

PPIY: Producer Prices Index excluding excise duties.

Reward Index: a three-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.

BCC: British Chambers of Commerce.

BIS: Bank for International Settlements.

CBI: Confederation of British Industry.

CIPS: Chartered Institute of Purchasing and Supply.

EIU: Economist Intelligence Unit.

FRES: Federation of Recruitment and Employment Services.

FTA: Financial Times Actuaries.

FTSE: Financial Times Stock Exchange.

GfK: Gesellschaft für Konsum, Great Britain Ltd.

ICPFs: Insurance companies and pension funds.

IPD: Investment Property Databank Ltd.

LFS: Labour Force Survey.

IMF: International Monetary Fund.

MEW: Mortgage equity withdrawal.

MFR: Minimum funding requirement.

MIPs: Mortgage interest payments.

MPC: Monetary Policy Committee.

NMW: National Minimum Wage.

OECD: Organisation for Economic Co-operation and Development.

OFCs: Other financial corporations.

OFIFAs: Other financial institutions and financial auxiliaries.

OFWAT: Office of Water Services.

ONS: Office for National Statistics.

OPEC: Organisation of Petroleum Exporting Countries.

PNFCs: Private non-financial corporations.

SVR: Standard variable rate.

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

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