Inflation Report

August 1997

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Introduction and summary

1

The Chancellor of the Exchequer announced on 6 May that the Government was giving the Bank operational responsibility for setting interest rates. The May *Inflation Report* contained a summary of this announcement, including the role and composition of the new Monetary Policy Committee (MPC). The format of the *Report* has been altered in the light of the changes to the monetary policy framework. This introduction describes the new structure of the *Report*, which includes an additional section detailing the interest rate decisions made by the MPC since the previous *Report* and the reasons for those decisions.

The Chancellor announced details of the Government's inflation target in his Mansion House speech on 12 June. The operational target for monetary policy is an underlying inflation rate, measured by the twelve-month increase in the RPI excluding mortgage interest payments (RPIX), of $2^{1}/_{2}$ %. The MPC will set interest rates with reference to prospects for inflation two years or so ahead. This is for two reasons. First, changes in interest rates take up to two years to have their maximum effect on inflation, and so monetary policy has to be forward-looking. Second, the target measure of inflation is the increase in prices over the previous twelve months, and so is itself a lagging indicator of inflationary pressure.

The new framework recognises that the actual inflation rate will on occasion depart from its target as a result of shocks and disturbances. If inflation moves away from the target by more than 1 percentage point, the Governor of the Bank is required, on behalf of the MPC, to send an open letter to the Chancellor of the Exchequer, giving reasons for the divergence, details of the policy actions being taken to deal with it and the period within which inflation is expected to return to the target. An article in the *Bank of England Quarterly Bulletin* (August 1997, pages 241–47) sets out the changes to the monetary policy framework in more detail.

The MPC has met three times since the Chancellor's announcement in May. The minutes of the meetings will be published regularly as an Annex to the *Report*. This *Report* contains the minutes of the first meeting, held on 5–6 June (previously released on 16 July), and the minutes

of the meeting on 9–10 July (released on publication of this *Inflation Report*).⁽¹⁾ Minutes of the meeting held on 6–7 August will be not published until 17 September, but the analysis and conclusions in this *Report* reflect the outcome of the August meeting.

The basic framework for the analysis in the *Report* remains the same. The first *Report*, published in February 1993, stated that 'inflation is a monetary phenomenon, and, in the long run, it is monetary policy that determines the rate of inflation. The lags between changes in monetary policy and changes in inflation are known only imprecisely, and will vary with the state of the economy. That is why monetary policy is set in relation not to the current rate of inflation but to inflationary trends over the next year or two'. So Section 2 of the Report begins with an analysis of the latest monetary trends. The monitoring ranges for money growth set by the previous Government lapsed following the announcement that the Bank was to be given operational independence. The MPC is considering this issue.

Section 2 also considers the possible sources of sterling's appreciation. Section 3 assesses the likely pressures on inflation on the basis of recent developments in demand and output: in particular, revisions to the national accounts, the effects of the Budget, the continuing impact of windfall gains, and the response of net trade to sterling's appreciation. Evidence from the Bank's regional Agencies is used to help interpret developments in the economy.⁽²⁾ Section 4 assesses the evidence from the labour market, which has continued to tighten. The section includes analysis of the temporary effects of bonuses on earnings. The box on page 32 focuses on recent evidence gathered by the Bank's regional Agencies on the extent of skill shortages, which complements information from other surveys. Section 5 looks at short-term cost and price pressures in the manufacturing and service sectors. The box on page 39 describes the differences between service and goods price inflation.

Section 6 provides a summary of the economic news since the May *Report* and a short account of the decisions made by the MPC. Despite the strength of the exchange rate, which was expected to restrain retail price inflation temporarily, the May *Report* concluded that 'the central projection for inflation, and the risks surrounding it, suggests that, on the present evidence, there is still likely

⁽¹⁾ Copies of the minutes are also available from the Bank of England's website (1) Copies of the initiation and as a variable from the bank of England's website at http://www.bankofengland.co.uk/.
 (2) See also the Agents' Summary of Business Conditions, which is published at

the same time as the Inflation Report.

to be a need for some further moderate tightening of policy in the months ahead'.

Since the May *Report*, revisions to the national accounts and recent developments in monetary growth and the pace of demand indicated to the MPC that a further tightening of monetary policy was necessary, despite further exchange rate appreciation and additional fiscal tightening in the Budget. So the MPC decided to raise the Bank's repo rate. The rate was increased three times, by 0.25 percentage points on each occasion, and currently stands at 7%.

Section 7 assesses the prospects for inflation, and concludes that the dilemma facing monetary policy has remained acute over the past quarter. Buoyant domestic demand, fuelled by rapid growth of wealth, money and credit, has led to faster output growth. At the same time, the large rise in the effective exchange rate over the past year is now leading to severe pressures on those sectors most exposed to international competition, especially manufacturing businesses.

Output growth is likely to fall back later this year and through 1998, reflecting the impact not only of the higher exchange rate but also of the monetary and fiscal tightening that has been put in place over the past quarter and the unwinding of the windfall effect. The outcome for inflation will depend on the balance between the factors sustaining domestic demand and those exerting a contractionary influence. The outlook for the next year or so is favourable. Much of the first round effect of a rise in sterling on the domestic price level has yet to come through. Import prices are flat or falling and output price inflation remains subdued. Further out, the recent policy tightening will help to keep inflation down, although the central projection picks up to around $2^{1}/_{2}$ % by the end of the forecast period.

As ever, there are uncertainties and risks to the central projection on both sides. At present, they appear to be more on the upside. In the short run, asset prices, such as the exchange rate and the level of the stock market, are volatile. Looking further ahead, there is uncertainty about the impact of money and credit growth on the pace of domestic demand expansion. Given those uncertainties, the MPC concluded that monetary policy has now reached a position at which it should be possible to pause in order to assess the direction in which the risks are likely to materialise.

Chart 2.1 Growth of M4 and M4 lending



Table 2.AGrowth rates of M4 and M4 lending(a)

		1 month	3 months (b)	6 months (b)	12 months
M4	Mar.	1.0	17.3	12.5	11.1
	Apr.	0.4	11.7	10.9	10.5
	May	1.4	12.0	11.7	11.4
	June	0.9	11.6	14.4	11.7
M4 lending	Mar.	0.6	13.8	9.6	9.0
U	Apr.	0.7	9.5	8.9	8.9
	May	1.1	10.1	9.4	9.5
	June	0.7	10.4	12.1	9.5

Source: Bank of England.

(a) Seasonally adjusted.(b) Annualised.

Broad money has continued to grow at double-digit rates and increased in real terms by almost 9% in the year to 1997 Q2, its fastest rise since 1991. Between 8 May and 8 August the Bank raised its repo rate by 0.75 percentage points to 7%. The exchange rate continued to appreciate—by 2.5% in effective terms since the previous *Report*, and by 20.5% since August last year though it fell by 1.5% following the 0.25 percentage points increase in the Bank's repo rate on 7 August.

2.1

Money

From mid 1995 until the end of 1996, annual broad money (M4) growth was generally between 8% and 10% (see Chart 2.1). Since then, broad money growth has been in double figures. If broad money continued to grow at current rates, the velocity of money would have to fall by more than 5% a year to be consistent with the inflation target. The May *Report* noted that though velocity might be expected to rise or fall for one or two years over the cycle, a sustained fall would tend to occur only during periods of change such as rapid financial liberalisation. So the current growth rate of broad money may not be compatible with the inflation target in the medium term.

Monitoring ranges set by the previous Government for M4 and M0 have lapsed following the announcement that the Bank was to be given operational independence; the Monetary Policy Committee is considering whether or not to employ monitoring ranges for money in future.

Table 2.A shows that M4 grew rapidly in May and June. The twelve-month growth rate picked up to 11.7%, its highest since 1990, and the three and six-month annualised growth rates were also above 11%. Retail M4's growth rate in the year to June, 7.5%, was its highest since February 1992. The retail component of M4 grew by £5.5 billion (1.2%) in June, accounting for nearly all of the rise in aggregate M4 that month. It was boosted by proceeds from the demutualisation of the Halifax building society deposited with banks and building societies. Wholesale M4 grew by only 0.4% in June, with institutional investors using their funds to purchase shares following the demutualisation.

Personal sector

The personal sector's deposits and holdings of broad money rose by 8% in the year to 1997 Q2, their highest rate of growth in six years.⁽¹⁾ The May *Report* suggested that following building society conversions, slower growth of deposits might be expected because savers in former building societies would no longer have an incentive to hold high balances to maximise their allocation of shares. But continued rapid growth in retail deposits suggests that there may have been speculative inflows in anticipation of future building society conversions.

Individuals' demand for broad money depends largely on their consumption, income and wealth, and on the level of interest rates. Personal sector wealth has risen rapidly recently: in the year to 1997 Q1, financial wealth rose by 10.4% and was over 20% higher than at the beginning of 1995. Chart 2.2 shows that though personal sector broad money growth was strong, the ratio of the personal sector's broad money to its total financial wealth continued to fall because wealth increased more rapidly. The personal sector has increased its holdings of other financial assets relative to broad money over time: the proportion of wealth held in equities (directly, or indirectly through pension funds and unit trusts) has risen.

Rising equity and house prices have contributed to the increase in household wealth. Equity prices may have been influenced by higher profit expectations or a fall in the user cost of capital. As Chart 2.3 shows, however, equity prices have risen faster than prices of indexed bonds since the beginning of 1996, so falling real interest rates do not explain the recent rise in share prices. To the extent that the rise in equity prices reflects higher profit expectations, the rapid growth in wealth is consistent with the robust outlook for consumption implied by strong money growth (see Section 3).

Industrial and commercial companies (ICCs)

ICCs' deposits rose by 7.9% in the year to 1997 Q2, having grown at an annual rate of around 10% in each of the previous four quarters. Research undertaken at the Bank has shown that changes in ICCs' deposits tend to









Sources: Bank of England and Financial Times.

(a) The index of real bond prices is calculated from the estimated real yield curve. Each price is constructed as the discounted value of a unit of real wealth in 20 years' time.

⁽¹⁾ New banking statistics returns will be introduced at the end of September, bringing UK statistics into line with European System of Accounts standards. The coverage of returns and the definitions of economic sectors will both change, affecting the monetary aggregates and their sectoral breakdowns. The scale of the changes may cause problems in interpreting the data, though the Bank will try to ensure that breaks in the calculation of financial flows are minimised. Details of the reporting changes will be published in the September issue of *Bank of England: Monetary and Financial Statistics*.





Table 2.BDivisia and M4 annual growth rates

Percentage change	in th	e year t	o 1997	Q2
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	Divisia	<u>M4</u>
Personal sector	7.8	8.0
OFIs	29.4	26.6
ICCs	7.3	7.9
Aggregate	10.2	11.7

Source: Bank of England.

precede changes in investment.⁽¹⁾ ICCs' nominal investment spending rose by 12.1% in the year to 1997 Q1 and may continue to grow quickly during the rest of the year, given the rise in their deposits in 1996.

Other financial institutions (OFIs)

OFIs' deposits are only one fifth of all banks' and building societies' deposits, but their increase over the past year, of ± 34 billion, accounted for almost half of the rise in total M4 (see Chart 2.4).

One important factor leading to this rise was the increase in financial wealth, especially equities. Even if OFIs increased their money holdings simply in order to balance their portfolios following a rise in asset prices, that same rise in asset values will directly stimulate higher spending. But the rise in OFI deposits has been so large that it is difficult to explain entirely in terms of a portfolio rebalancing. It may be that some OFIs have been raising their deposits as a hedge against future falls in asset prices. If these fears should fall away, OFIs might use some of their excess deposits to buy financial assets, leading to a transfer of deposits within M4 from OFIs to persons and companies. In this way, higher OFIs' money balances could lead to higher consumption and investment expenditure.

Alternatively, if OFIs use excess deposits to reduce borrowing, or to purchase financial assets from households or companies who in turn reduce their stock of debt, then aggregate money growth will fall back. The strength of OFIs' money would not in this case be an indicator of future inflationary pressure.

The future behaviour of financial asset prices has a major bearing on which of the two cases predominates.

Divisia money

The Divisia measure of money weights the components of M4 to reflect the extent to which they are used in transactions.⁽²⁾ In the year to 1997 Q2, aggregate Divisia money grew by 10.2%, less rapidly than aggregate M4 during the period (see Table 2.B). This was the case for both the personal sector and ICCs, where money held as a store of wealth has recently increased more quickly than money used to finance spending. As wealth has

Astley, M S and Haldane, A G (1997), 'The information in money', Bank of England Quarterly Bulletin, May, pages 174–80.

⁽²⁾ The Divisia index of money weights the components of money according to their liquidity, proxied by the inverse of their relative interest rates. Current accounts, for example, have a high weight in Divisia money because they pay lower interest rates than other accounts which have restrictions on withdrawals.

Chart 2.5 Growth of M0 and nominal retail sales



Chart 2.6

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



Chart 2.7 National and regional house prices^(a)



Source: Halifax PLC and Bank calculations

- All data are seasonally adjusted. (b) Logarithmic scale.
- Logarithmic scale. A weighted average of Greater London and the South East of England. A weighted average of Scotland, Northwest, North England and Yorkshire and Humberside regions. (d)

itself been increasing, these sectors could be attempting to maintain the share of money in their portfolio of assets.

Narrow money

M0 grew by 5.9% in the year to July. This was below the annual rates of around 7% recorded between June 1996 and January of this year. Though bankers' balances are less than 1% of total M0, their high volatility greatly increases M0's monthly variation. The growth of notes and coins is a better guide to the underlying increase in narrow money. Notes and coins grew by 5.6% in the year to July, also below the rates recorded in the second half of last year.

The increase in narrow money growth in 1996 coincided with higher nominal retail spending growth, but narrow money growth has slowed in 1997 while retail sales have continued to grow fairly steadily (see Chart 2.5). The November 1996 Report noted that the correlation between annual narrow money and nominal retail sales growth has weakened during the past ten years, partly because of more widespread use of credit and debit cards.

2.2

Credit

Bank and building society lending to the non-bank private sector (M4 lending) rose strongly in 1997 Q2, as in the previous quarter. The demand for credit depends on the interest rate charged relative to other forms of borrowing, and on current and future expected activity. The supply of credit—banks' willingness to lend—will depend, among other things, on the capital base of lenders. The interaction of the demand for and supply of credit will determine its price, the rate of interest charged.

Personal sector

Net lending to individuals, including lending by institutions other than banks and building societies, grew by 7.4% in the year to 1997 Q2, its fastest for five years. Lending to individuals consists of lending secured on property (mortgages) and other lending ('consumer credit'). Mortgage lending can also be used to finance consumption through equity withdrawal. Equity withdrawal, which has been negative during the past few years, is no longer falling as the housing market recovers (see Chart 2.6). But Chart 2.7 shows that though house prices in the United Kingdom have been increasing since

Chart 2.8 Growth of the corporate sector's unused facilities and lending^(a)



_____1985 86 87 88 89 90 91 92 93 94 95 96 97 30 Source: Bank of England.

(a) Data after 1987 are break-adjusted for factors such as population changes and loan write-offs. 1995, they are still below their 1989 peak, though the regional pattern varies.

Net mortgage lending grew by $\pounds 6.2$ billion (1.5%) in the second quarter of the year. The spread of lending rates over official rates has also been narrowing. The continuing rise in mortgage lending in the second quarter of the year has probably reflected banks' and building societies' increased willingness to lend, as well as higher mortgage demand.

Industrial and commercial companies

ICCs' borrowing from banks and building societies has risen rapidly since the end of 1994, but as a proportion of income it has been much lower than in the late 1980s. The February *Report* noted that average spreads over Libor paid by ICCs on loans from international bank syndicates narrowed slightly in 1996. This continued for low-risk borrowers in the first half of 1997, so the rise in their bank borrowing may have reflected an increase in banks' willingness to lend, as well as greater demand for credit.

The corporate sector's unused credit facilities (lines of credit arranged by firms with banks, but not yet used) have increased rapidly during the past year. Since 1996 Q1, the stock of unused facilities, which remained virtually static in 1995, has risen by around 15%. Unused credit facilities are a good leading indicator of firms' actual borrowing, as Chart 2.8 shows. So they may provide information on firms' intentions to borrow in the future—the demand side of the credit market—as well as banks' willingness to supply credit. Statistical tests indicate that an increase in the corporate sector's unused facilities tends to occur on average 12 to 18 months before a pick-up in actual lending. So the rise in unused facilities during the past year would be consistent with continuing fast M4 lending growth in the second half of 1997.

Other financial institutions

OFIs' bank borrowing was 20.2% higher in 1997 Q2 than a year earlier. Lending to OFIs has accounted for much of the recent strength of M4 lending. OFIs' lending accounted for around one third of the rise in M4 lending since the beginning of 1995, and the stock of OFIs' lending rose to 20.1% of total M4 lending by 1997 Q2. Some borrowing by OFIs may have direct links to nominal expenditure. For example, borrowing may be used to finance purchases of new capital goods, which would be consistent with reports of strengthening investment expenditure. According to the Finance and Leasing Association, excluding high value items, which can be volatile, the annual growth rates of leasing and business finance rose in 1997 Q2 compared with 1997 Q1.

2.3 Interest rates and exchange rates

Short-term interest rates

Interest rates—the price of monetary services—should be considered alongside the quantity of money. Since publication of the May *Report*, the Bank has raised its repo rate three times—on 6 June, 10 July and 7 August, by 0.25 percentage points on each occasion—to the current rate of 7%.

Chart 2.9 shows that expected overseas three-month interest rates have fallen slightly since the previous *Report*. Following the rise in the Bank's repo rate on 7 August, the gap between UK and overseas interest rates is expected to remain broadly the same during the next year, with both UK and overseas interest rates expected to rise a little. In the United States, following the rise in the Federal Reserve's official short-term rate on 25 March, expectations of further increases were revised down as data suggested that growth had moderated and price pressures were more subdued than previously thought.

Long-term interest rates

The yield on ten-year gilts was broadly unchanged between the May and August *Reports*. The yield on the trade-weighted average of government bonds overseas fell by around 20 basis points. On 8 August the yield on UK gilts was about 180 basis points higher than the average yield on overseas bonds. This gap largely reflects the difference in the expected level of short-term interest rates during the next few years, which in turn mainly reflects relative positions in the economic cycle. Implied forward rates derived from interest rate swaps suggest that UK short-term interest rates, in ten years' time, are expected to be around 45 basis points higher than German rates, compared with a difference of around 380 basis points in current three-month interest rates.⁽¹⁾

The May *Report* noted that there was an immediate reaction in the financial markets to the Chancellor's





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

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

⁽¹⁾ An interest rate swap is an over-the-counter contractual arrangement between two parties to exchange a series of interest payments. The swap-derived forward interest rate curve appears more stable than the forward interest rate curve derived from government bond prices for Germany, partly because of data limitations for the latter.

Chart 2.10 Implied distributions for sterling three-month interest rates



announcement of operational independence for the Bank of England: UK inflation expectations derived from ten-year bonds fell by nearly 50 basis points. This has persisted, with implied forward inflation expectations falling by a further 10 basis points since the day after the announcement.

Market expectations of inflation and nominal interest rates at shorter maturities were revised downwards after the Bank's independence was announced. Short-term interest rate expectations have risen since the May *Report*, though they fell back slightly following the announcement of the rise in the Bank's repo rate on 7 August (see Chart 2.9). Data from options prices can be used to generate a distribution of market expectations of interest rates. Distributions of expected three-month interest rates are shown in Chart 2.10. The markets judge that there is about a 10% chance of interest rates being within the darkest, central band at any date. The next deepest shade (on both sides of the central band) takes the probability distribution out to 30%, and so on in steps of 20 percentage points. The more uncertainty there is about the interest rate outcome at any particular time horizon, the wider the bands and the more gradually the colour fades. And if the risks are more on one side than the other, then the bands will be wider on that side of the central band.⁽¹⁾

Chart 2.10 shows that on 8 May, when data for the previous *Report* were finalised, markets expected interest rates to rise by the end of this year, with expectations skewed above the central band, and to continue increasing during the first few months of 1998. Markets also expected short-term interest rates to rise slightly by the end of the year from their level on 6 August, the day before the most recent increase in the Bank's repo rate, with a higher probability attached to interest rates being above the central band than below it. Further out, the central band was fairly flat in the first half of 1998, though probabilities continued to be skewed towards rates above the central band.

Exchange rates

The nominal effective exchange rate index closed at 101.3 on 8 August, $2^{1}/_{2}$ % higher than on 8 May when data for the previous *Report* were finalised. The average value of the exchange rate during the 15 working days before the August meeting of the Monetary Policy

⁽¹⁾ See the box on pages 46–7 of the February 1996 *Report* for further discussion of forecasting and probability distributions. Also see Bahra, B (1997) 'Implied risk-neutral probability density functions from option prices: theory and application', *Bank of England Working Paper*, No 66.

Chart 2.11 Sterling bilateral exchange rates and ERI



Table 2.CMarket forecasts for Government deficits as apercentage of GDP in 1997

	Date o	f forecast	:			
	1996		1997			
	<u>H1</u>	<u>H2</u>	Jan.	<u>Mar</u> .	May	July
Canada	2.0	1.8	1.4	1.3	1.2	1.0
France	3.7	3.5	3.3	3.3	3.3	3.4
Germany	3.1	3.2	3.2	3.2	3.2	3.2
Italy	5.3	4.4	3.8	3.8	3.9	3.4
Japan	3.4	2.9	2.7	2.3	2.5	2.5
United States	1.8	1.6	1.5	1.4	1.1	0.8
M6 (a)	2.8	2.5	2.3	2.2	2.1	2.0
United Kingdom	2.7	2.7	2.7	2.6	2.3	1.6

Source: Consensus Economics

(a) GDP weighted average for G7 excluding the United Kingdom. Mean of around 30 private sector forecasts published monthly by Consensus Economics. Committee, 105.1, is used as the starting point for its inflation projection (see Section 7). The monthly average in July—104.5—was 23.4% higher than in August last year and at its highest since 1989 (see Chart 2.11). Sterling rose by 28.1% against the Deutsche Mark and 13.4% against the Japanese yen in the year to July 1997, compared with an appreciation of 7.5% against the US dollar. Since the beginning of 1997, sterling has fallen by 6.5% against the US dollar.

Several factors identified in previous *Reports* may have contributed to sterling's appreciation. Changes in current and expected future UK interest rates have played a role in sterling's continuing appreciation since May. Movements in UK and overseas interest rates since the May *Report* was published have indicated a further expected temporary tightening of monetary policy in the United Kingdom relative to overseas economies.

News about expected changes in fiscal policy may also have affected the exchange rate. Since May, market estimates of the expected UK budget deficit have fallen, as have those for the United States, while expectations for Germany and Japan have remained broadly unchanged (see Table 2.C). The May *Report* noted that the aggregate expected deficit as a share of GDP for the major six economies had generally fallen since the first half of 1996; this trend has continued. So there is no clear role for fiscal policy in explaining sterling's appreciation since May.

Taken together, changes in expected domestic and overseas interest rates, and any fiscal policy effects, account for around one half of the rise in sterling since May. This leaves a significant part of sterling's rise unexplained. As the May *Report* noted, some of this will simply be erratic. But some may reflect expectations about which EU Member States are most likely to participate in European Monetary Union and, in particular, concerns about likely fiscal and monetary policies in the euro area. These expectations are reflected in yield curves which were discussed above.

A portfolio shift away from currencies of countries most likely to participate in EMU may also have reflected higher risk premia arising from uncertainties about the economic prospects of other European countries and the interpretation of the criteria they will have to meet to qualify for EMU. The exchange rates of potential EMU participants could rise or fall in the coming months, as it becomes clearer whether EMU will start in January 1999

Chart 2.12 UK effective exchange rate profiles^(a)



⁽a) Assuming uncovered interest rate parity.

and if so, whether it will have a 'broad' or 'narrow' membership. Sterling's risk premium may have fallen relative to other EU currencies, providing at least a partial explanation for the appreciation of sterling against them. It is difficult, however, to separate the direct risk premium effect on the exchange rate from the effect that these uncertainties could have on interest rate differentials, and therefore on the yield curve.

Investors and borrowers may also be diversifying their currency holdings ahead of EMU, irrespective of any change in relative risk premia on individual currencies. To maintain the current diversity of their portfolios, investors would have to reduce their exposure to the euro below the aggregate level of exposure to pre-EMU currencies such as the Deutsche Mark, French franc and Italian lira. They may therefore be reducing their holdings of these currencies and increasing their holdings of sterling in the expectation that the United Kingdom will not join EMU, at least initially.

Chart 2.12 shows the path for sterling implied by uncovered interest parity (UIP). In common currency terms, assets with similar liquidity and risk characteristics should have the same expected return; differences imply that the exchange rate is expected to change to equalise returns in common currency terms. So the path the exchange rate has to follow if expected returns are to be equalised can be calculated by comparing UK interest rates at different maturities with overseas rates. UK interest rates are higher than average interest rates overseas, so UIP implies that sterling is expected to depreciate. The expected rate of depreciation has risen since the May *Report*—the path in Chart 2.12 has become steeper. This is because UK implied forward interest rates at longer maturities have risen relative to those overseas.

2.4

Summary

Broad money growth has been around 11% since the beginning of the year, having generally been between 8% and 10% from mid 1995 until the end of 1996. This rate of broad money growth is unlikely to be compatible with the inflation target in the medium term. The Bank raised its repo rate by 0.25 percentage points on 6 June and by the same amount on 10 July and 7 August, to the current rate of 7%. The exchange rate has appreciated by 2.5% since 8 May and by 20.5% since last August, though it fell by 1.5% following the 0.25 percentage points increase in the Bank's repo rate on 7 August.

Demand and output

Chart 3.1 Growth in demand and output



Table 3.A **Expenditure components of GDP**

		itage cha us quarte	Contribution to quarterly GDP growth		
	Q2	Q3	<u>Q</u> 4	<u>1997</u> Q1	1997 Q1 (a)
Private consumption	0.8	0.7	1.3	0.9	0.6
Public consumption	0.4	0.2	0.4	-0.1	0.0
Investment of which:	2.8	-2.4	2.5	0.9	0.2
Business fixed investment	-0.4	-0.5	2.4	6.5	0.8
Final domestic demand	1.0	0.1	1.3	0.7	0.8
Stockbuilding (b)(c)	-0.3	0.1	0.2	0.3	0.3
Domestic demand	0.0	0.7	1.1	0.7	0.8
Exports	2.2	0.6	2.4	1.4	0.5
Imports	0.2	1.2	2.5	0.5	0.2
Net exports (b)	0.7	-0.2	-0.1	0.3	0.3
GDP	0.6	0.5	1.1	0.9	n/a
Memo items:					
Statistical discrepancy (b)	0.0	0.0	0.0	0.0	0.0
Alignment adjustment (b)	-0.9	0.7	-0.4	-0.2	-0.2

n/a = not applicable.

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

(b) Contribution to quarterly GDP growth.(c) Excluding the alignment adjustment.

Real GDP growth has risen since the second half of 1995 (see Chart 3.1). The main impetus to growth has come from private final demand, especially consumption. The exchange rate appreciation appears to have had little effect on trade volumes as yet, with net exports increasing in Q1. But surveys are increasingly pessimistic about the prospects for external demand. The annual growth of nominal GDP slowed to 5.4% in 1997 Q1, from 6.5% in 1996 Q4.

Recent revisions to the national accounts have changed the reported profile and composition of growth-the acceleration in real GDP during 1996 now looks stronger, as does the recovery in business fixed investment. Overall, the revisions have raised the reported level of GDP in 1997 Q1 by 1%, and reduced the discrepancies among the three GDP measures (expenditure, income and output). The box on page 16 discusses the size and impact of these revisions.

3.1

Domestic demand

Domestic demand growth remained strong at 0.7% in the first quarter of 1997 (see Table 3.A). Growth was lower than in the previous quarter, owing largely to a slowdown in consumption. Nevertheless, consumption growth was well above its 40-year average in Q1, and is likely to remain so during coming quarters, given strong real disposable income growth, high levels of consumer confidence and windfall gains. Demand was also boosted by strong growth in business fixed investment. Public final demand picked up in 1997 Q1 and the rate of stock accumulation increased.

Real broad money growth tends to lead domestic demand growth. Real broad money has diverged from real domestic demand since 1995 (see Chart 3.2). Though the same divergence in the early 1980s could be accounted for by the effects of financial deregulation, it is hard to identify a comparable reason now. Instead, the increase in real broad money growth is probably signalling a continued increase in demand growth during the next year or so.

Revisions to the national accounts

The national accounts for 1997 Q1 contained significant revisions to the three GDP measures—expenditure (E), income (I) and output (O). These revisions raised the level of the average measure of GDP (GDP(A)) in 1997 Q1 by 1%, and changed the profile of growth (see the chart). And as the chart also shows, the discrepancies among the three measures have been significantly reduced. Prior to the revisions, the gap between the level of the highest and lowest measures of GDP—GDP(O) and (E)—was 1.1% in 1997 Q1. At most, the levels of the three measures now differ by 0.2%.

The largest revisions were made to GDP(E), with an additional £15.3 billion of expenditure at constant prices being allocated to its various components since 1994. The level of GDP(E) in 1997 Q1 is now 1.5% higher than previously estimated (see the table). Higher private consumption alone accounted for half of this increase. There were also significant upward revisions to business fixed investment, which is now estimated to have recovered much more strongly than previously thought (see Section 3.1 for a more detailed discussion).

The least revised measure of GDP was GDP(O): it was revised up by 0.4% in 1997 Q1. In the previous two *Reports*, it was argued that GDP(O) was probably the most accurate estimate of activity.⁽¹⁾ The largest contributions to the upward revisions in GDP(O) were from the service and manufacturing sectors.

On the income side of the accounts, there were significant revisions to both income from employment and gross trading profits. The level of GDP(I) at constant prices in 1997 Q1 is now estimated to be 0.8% higher than previously reported.

Changes in the profile and range of annual GDP growth



The revisions to GDP have important implications for the short-term outlook for demand and output. There now appears to have been a slightly greater acceleration in activity since the beginning of 1996 than thought at the time of the May *Report*. And the composition of growth during this recovery has been changed. In particular, business fixed investment has made a much stronger contribution to GDP growth than was previously thought.

Revisions to the national accounts

Percentage difference between the level of each component published in May and June 1997

Way and June 1997								
	1994	1995	1996	1997 Q1				
GDP(A), 1990 prices	0.5	0.8	0.9	1.0				
The expenditure account, 1990 prices								
Private consumption	0.3	0.1	0.5	0.7				
Public consumption	0.5	0.2	1.7	1.2				
Fixed investment	1.4	3.0	3.8	1.7				
Final domestic demand	0.5	0.6	1.3	0.9				
Increase in stocks (a)	0.0	0.2	0.1	0.3				
Domestic demand	0.5	0.7	1.4	1.2				
Net trade (a)	0.0	-0.1	-0.1	0.2				
GDP(E) at factor cost,								
1990 prices	0.5	0.8	1.3	1.5				
The production account, 1990) prices							
Agriculture	0.5	1.5	1.2	3.4				
Industrial production	1.2	0.7	0.6	0.3				
of which:								
Manufacturing	1.5	0.9	0.8	0.6				
Construction	0.0	0.5	0.8	0.3				
Services	0.3	0.3	0.2	0.4				
GDP(O), 1990 prices	0.5	0.4	0.3	0.4				
The income account, current	prices							
Income from employment	0.0	0.3	0.7	0.9				
Gross trading profits	2.2	4.1	4.4	2.6				
Nominal GDP	0.3	0.7	1.1	0.9				
GDP(I), 1990 prices	0.5	1.0	0.8	0.8				
(a) Contribution of the revision in the expenditure component to the revised level of GDP.								

(1) See the May 1997 Report, pages 20–21 and the February 1997 Report, page 19.

Chart 3.2 Annual growth in real domestic demand and real broad money



(a) M4 divided by retail prices excluding mortgage interest payments.





Sources: ONS, MORI and GFK

Latest three months on the same three months a year earlier.

- (c)
- Question: Do you think the general economic situation in this country will improve over the next 12 months? Question: How do you think the general economic situation in this country has changed over the last 12 months?

Consumption

Private consumption continued to grow strongly. In the first quarter of 1997, consumers' expenditure rose by 0.9% and was 3.7% higher than a year earlier. This reflected increases in expected income and rising household wealth. As Chart 3.3 shows, the past three months have seen a marked rise in consumer confidence. partly boosted by actual and anticipated windfall gains (such as payouts from the demutualisation of building societies). Confidence, as measured by the MORI Survey, is now at levels higher than at any other time in the present recovery. This may explain some of the recent strength in retail sales.

The recent revisions to the national accounts show that private consumption since mid 1995 has been stronger than initially reported. The level of consumption in 1997 Q1 was revised up by 0.7%, accounting for half of the revision in the level of GDP(E). The growth rate of consumption was also revised up, to an average annual rate of 3.9% since 1995 Q3 from the previous estimate of 3.4%. Consumption has contributed an average of 2.5 percentage points to annual growth since 1995 Q1above its 40-year average contribution.

Two factors suggest that robust consumption growth will continue. First, strong growth in real income and employment suggests that households have become more confident about their future financial position. Real personal disposable income grew above its long-run average throughout 1996 and the unemployment rate is now at its lowest since 1990. Though real income growth slowed in 1997 Q1, growing by 0.9% on a year earlier, the strength in consumption has been maintained.

Second, wealth has continued to increase. Households typically hold their wealth in the form of money balances, bonds, securities, durables and housing. Personal sector net wealth grew by 9% in the year to 1997 O1, an estimated increase of £230 billion. Increased financial wealth, including real money balances, contributed substantially to this rise though housing wealth also played a part (see Chart 3.4).

Equities held by the household sector, both directly and indirectly in the form of pensions, constitute a significant part of financial wealth. The recent rise in equity prices has raised the value of financial wealth, increasing the resources available to consumers as a result. Share prices may be rising because of

Chart 3.4 Contributions to annual growth in personal sector net wealth^(a)

Growth in net wealth Contribution from housing wealth

Contribution from net financial wealth



Sources: ONS and Bank of England.

Table 3.BValue of special payouts to the personal sectorin 1997(a)

£ billions

Institution (conversion date in brackets)	Revised estimate	May Inflation Report estimate		
Building society payouts				
Alliance and Leicester (April)	3.2	3.4		
Halifax (June)	18.4	12.8		
Woolwich (July)	4.9	3.7		
Bristol and West (July) (b)	0.6	0.6		
Northern Rock (October)	1.4	1.3		
Total building societies	28.5	21.8		
Payout from other institutions				
Colonial Mutual (January)	0.3	0.3		
Norwich Union (June)	4.2	3.2		
Takeover of Scottish Amicable				
(September) (b)	2.9	2.9		
Total payouts	35.9	28.2		
As a share of consumers' expenditure at current prices (1996)	7.6%	6.0%		
Sources: Actual value at flatation and pr		5.070		

Sources: Actual value at flotation and press estimates.

(a) Figures in italics are estimates; the rest are actual payouts.(b) These are fixed cash, rather than share distributions.

expectations of increased future dividends or because the user cost of capital has fallen. But as Section 2 explains, falling real interest rates are unlikely to account for the recent rise in share prices. To the extent that this rise reflects anticipation of continued strong economic activity, current and prospective consumption will increase.

Since publication of the May *Report*, the expected value of windfall payouts to households in 1997 has increased from £28.2 billion to £35.9 billion (see Table 3.B). The revised payout is equivalent to around $7^{1/2}$ % of annual consumers' expenditure. Nearly 90% of the windfall gains expected this year have been paid out, the majority between April and July. The windfall gains are small when compared with the overall increase in net wealth during the past year. Nonetheless, this increment to wealth will have consequences for the path of consumption during the remainder of the year and beyond. It is likely that the annuity value of the payouts will be spent, but it is also necessary to take into account the timing of payout announcements and the degree to which windfall recipients are liquidity-constrained.

Recipients who are not liquidity-constrained are likely to increase their flow of consumption by the annuity value of the windfall gains. But consumers may initially spend in excess of the annuity value on durable goods and housing-related expenditure, which provide a flow of future services. Recipients who are liquidity-constrained are likely to increase their flow of consumption in the short term by significantly more than the annuity value of the windfalls.

To the extent that windfalls are spent on durables and housing-related expenditure, and on short-term increases in spending by liquidity-constrained recipients, there will be an additional boost to the level of consumption during 1997. Growth in real durable goods consumption in 1997 Q1 was particularly strong—up by nearly 8% on a year earlier. The acceleration of durable goods consumption growth during the present recovery has been comparable to the second half of the 1980s (see Chart 3.5). More timely retail sales data suggest that the volume of household goods sales continued to grow rapidly in 1997 Q2, increasing by 14% during the year. At least some of this growth in spending has probably been the result of payouts.

In the light of the revised estimates of the windfalls, the Bank's central projection is that they will add around 1 percentage point to consumption growth in 1997.

⁽a) Personal sector net wealth is defined as financial assets and housing assets less financial liabilities.

Chart 3.5 Durable and total consumption growth^(a)



(a) At constant 1990 prices.

Chart 3.6





Table 3.CFixed investment as a share of GDP, at constant1990 prices

Per cent

	1992	Average share 1993–96	1997 Q1	Average share 1965–97
Investment by sector and industry ((a)			
Business fixed investment (b) of which:	13.0	12.5	13.7	12.2
Mining and quarrying	1.4	0.9	0.8	1.1
Utilities	1.4	1.0	0.7	1.3
Manufacturing	2.5	2.4	2.5	3.1
Distribution	1.8	1.8	2.0	1.4
Transport and communications	1.9	2.2	2.4	1.8
Financial and business services	3.0	3.0	4.1	1.7
Private dwellings	3.3	3.4	3.4	3.8
General government	3.0	2.6	1.4	3.1
Total investment	20.6	20.1	19.9	20.9
Memo items: investment by asset				
Vehicles, ships and aircraft	1.7	1.9	2.2	2.3
Plant and machinery	7.0	6.9	6.7	6.2
Non-dwelling construction	8.0	7.3	7.2	7.4
Dwellings	3.9	4.0	3.7	5.2

(a) This breakdown of investment by sector excludes transfer costs of land and existing buildings of the private and public corporations sector, and investment by NHS trusts.

(b) Business fixed investment comprises investment by the private sector and public corporations in plant and machinery, non-dwelling construction and vehicles, ships and aircraft, but does not include transfer costs of land and existing buildings. The breakdown is not exclusive. There is an upside risk that a larger-than-expected proportion of the payouts will be spent during the year. Moreover, the effects on consumption will also depend on whether the payouts have raised expectations of future conversions.

Investment demand

Real fixed investment rose by 0.9% in the first quarter of 1997, contributing 0.2 percentage points to GDP growth. Overall, fixed investment has risen at an average rate of 2% a year during this recovery—more slowly than GDP, which has increased by nearly 3% a year in the same period. Accordingly, investment as a share of GDP at constant prices has fallen, to 19.9% from 20.8% in 1992 Q1. Chart 3.6 shows that there has been a large divergence between investment as a share of GDP in nominal and constant prices since the beginning of the 1990s, mainly because of a fall in non-dwelling construction prices relative to the GDP deflator. The gap has recently narrowed, because construction prices have been rising faster than the GDP deflator.

(a) Business fixed investment

Business fixed investment rose by 6.5% in the first quarter of 1997.⁽¹⁾ This partly reflected heavy spending on vehicles, ships and aircraft, which rose by 25%. Business fixed investment accounts for around two thirds of total investment expenditure. But during this recovery, higher business investment has more than accounted for the increase in total investment. Estimated business investment has been revised up since the May *Report*, and now appears more consistent with the favourable conditions for investment during much of this recovery. Table 3.C shows that the strength of business fixed investment has largely reflected growth in investment by the private service sector. Manufacturing investment has been more subdued during this recovery, though it has picked up since the second half of 1996. And lower spending on investment goods by the mining and utilities sectors since the trough in output has reduced GDP growth.

Since the May *Report*, major revisions to the national accounts have significantly changed the reported profile of business fixed investment. Prior to the revisions, as a share of GDP it was estimated at 12.1% in 1996 Q4, just below its long-run average. This appeared surprisingly

⁽¹⁾ Business fixed investment comprises investment by the private sector and public corporations in plant and machinery, non-dwelling construction and vehicles, ships and aircraft. It does not include transfer costs of land and existing buildings, and investment by NHS trusts.











 (a) CBI Survey: Question: Is your present level of output below capacity? Answer: No.
 (b) BCC Survey:

Question: Are you currently operating at full capacity? Answer: Yes. low, given the favourable investment conditions facing the business sector (as discussed below). But the latest national accounts show the share of business fixed investment in GDP as 13% in 1996 Q4 and $13^{3/4}$ % in 1997 Q1, above its long-run average (see Chart 3.7). This has increased measured growth since 1994 and raised the estimated level of business fixed investment in 1996 Q4 by $8^{1/4}$ %.

The stronger profile for business investment is consistent with survey data from the British Chambers of Commerce (BCC) and the CBI, which have shown investment intentions strengthening since the beginning of the recovery. This largely reflects four key factors influencing expenditure decisions by the corporate sector. First, firms have been encountering increasing capacity constraints, with capacity utilisation in the manufacturing and service sectors at levels comparable to 1989 (see Chart 3.8). Second, the price of investment goods has fallen relative to the general price level since 1990, increasing the incentive to invest. Third, the burden of taxation on the corporate sector is lower now than in the 1980s: taxes paid on income by industrial and commercial companies (ICCs) fell to 18³/₄% of gross trading profits in 1997 Q1, from an average of 22% during the 1980s. Finally, firms are better able to obtain financing for investment projects. Internal funds available for investment have been boosted by strong profits and an easing of debt-servicing burdens (see Chart 3.8). External finance may be easier to obtain: credit availability has improved during the past year (see Section 2) and rising share prices should make issuing equity more attractive.

(b) Private residential investment

Private dwelling investment, which accounted for 17% of fixed investment expenditure in 1996, fell by 2.9% in 1997 Q1. It remained 9.3% higher than a year earlier. Housing affordability remains high relative to the 1980s and net lending secured on dwellings has picked up recently (see Section 2). But measures announced in the 1997 Budget, namely lower interest relief on mortgages and higher stamp duty, will increase the cost of owner-occupied housing. This may reduce the incentive to invest at the margin.

(c) General government investment

General government investment, which accounted for 10% of fixed investment expenditure in 1996, rose by 14.4% in the first quarter of 1997. But government

Percentage point contributions to GDP from previous quarter

	1996				1997
	Q1	<u>Q2</u>	<u>Q3</u>	<u>Q</u> 4	Q1
Manufacturing	-0.1	-0.2	-0.1	0.2	0.0
Distribution	0.0	-0.4	-0.2	0.2	0.3
of which:					
Wholesale	0.1	-0.1	-0.2	0.2	0.0
Retail	0.0	-0.2	-0.1	0.0	0.3
Motor trades	-0.1	-0.1	0.1	0.0	-0.1
Other (b)	-0.1	0.2	0.3	-0.2	-0.1
Total (b)	-0.1	-0.3	0.1	0.2	0.3
Memo item:					
Stock-to-output ratio (b)(c)	92.5	92.3	92.2	91.9	92.0
(a) 1990 market prices.(b) Excluding the alignment adi	netmont				

(b) Excluding the alignment adjustment
 (c) 1990 = 100.

Chart 3.9 Retailers' desired stock positions: survey evidence



Source: CBL

(a) Three-month moving average. A zero balance indicates that firms perceive stocks to be adequate relative to expected sales. Balances are normalised on long-run averages. investment is typically volatile: it fell by 40% in the preceding quarter. Overall, investment expenditure by the government has been scaled back during the course of this cycle, falling at an average annual rate of $10^{1/4}$ % since 1992 Q1. This reflected phased reductions in real government spending announced in Budgets since November 1993, related to the planned transfer of investment expenditure to the private sector under the Private Finance Initiative.

Stockbuilding

The rate of stockbuilding, excluding the alignment adjustment,⁽¹⁾ has increased during the past year (see Table 3.D). Despite this, the stock-to-output ratio has fallen during this period, as output has increased faster than stocks. In 1997 Q1, much of the increase in stockbuilding came from higher retail stocks, which contributed 0.3 percentage points to GDP growth, their highest contribution in five years. Manufacturing and wholesale stocks were largely unchanged.

The implications for output of higher retail stocks depend on the cause of the stock accumulation. If retailers were increasing stocks voluntarily, it would signal strengthening expectations of future demand and therefore output. But if the increase was unintendedbecause retailers overestimated the strength of demand -then the production of retail goods might be curtailed in the short term (as was the case in the manufacturing sector during 1995). There is some evidence to suggest that at least part of the increase in stockbuilding was involuntary. According to the CBI Distributive Trades Survey, retail stocks have become more excessive relative to expected sales since the beginning of the year (see Chart 3.9)—they are currently at their highest level since the end of 1989. But it is important to put this into perspective. Even if stocks are above desired levels, consumer demand in coming quarters should be strong enough to unwind these positions quickly, and the initial estimates of stockbuilding are often revised.

Public sector demand

Measures announced in the Budget on 2 July provide for a tightening of fiscal policy in addition to that already announced in previous Budgets. Previous measures to restrain public spending together with over-indexation of fuel and tobacco duty and real fiscal drag meant that, in the November 1996 Budget, the general government

⁽¹⁾ Previous *Reports* have argued that it is best to analyse stocks data excluding the alignment adjustment. See the November 1996 *Report*, page 22.

Table 3.EPublic finances on a national accounts basis

Per cent of GDP at current prices

	Outturn (estimated)	Treasury forecast			
	1996/97	1997/98	1998/99		
Total receipts Total current expenditure Current deficit General government	37.9 40.8 2.8	39.0 39.7 0.7	39.3 38.8 -0.5		
financial deficit (a) PSBR excluding windfall tax	4 3	$\frac{1^{1/2}}{1^{3/4}}$	$\frac{1}{4}$ $\frac{3}{4}$		

Source: HMT.

(a) Defined using a Maastricht basis.

Chart 3.10 Growth in the volume of goods exports and imports^(a)



deficit to GDP ratio was projected to fall from 4% in 1996/97 to $2^{1}/_{2}\%$ in 1997/98 and $1^{1}/_{2}\%$ in 1998/99. The latest measures are expected to result in a general government deficit to GDP ratio of $1^{1}/_{2}\%$ in 1997/98 and $^{1}/_{4}\%$ in 1998/99 (see Table 3.E). On a calendar year basis, the Treasury forecast for 1997 is 2% of GDP.

Changes in the government deficit to GDP ratio comprise a cyclical and a structural component, with the latter providing a measure of the underlying discretionary fiscal stance. The Bank's estimates based on Treasury research suggest that in the November 1996 Budget, the structural tightening embodied in the fiscal stance for 1997/98 and 1998/99 amounted to approximately 1 percentage point and $\frac{1}{2}$ of a percentage point respectively.⁽¹⁾ Using the same approach, the fiscal projections outlined in the July Budget incorporate an additional tightening, for 1997/98 and 1998/99, of some $\frac{1}{2}\%-1\%$ of GDP in total.

<u>3.2</u>

External demand

The current account was in surplus for the second consecutive quarter in the first quarter of 1997, rising to $\pounds 1.5$ billion. In part, this reflects import values falling faster than export values. Export goods volumes, excluding oil and erratics, grew by 2.7% in the three months to May compared with the previous three months. By contrast, import goods volume growth was moderate; excluding oil and erratics, they rose by 0.6% on the three months to May compared with the previous three months (see Chart 3.10). Given the strength of recent retail sales figures, stronger import growth might have been expected.

Several reasons have already been advanced to explain the performance of net exports since August 1996. As argued in the May *Report*, exchange rate effects on trade volumes may be limited by the tendency for import and export volumes to be fixed by short-term contracts. This is likely to result in a sluggish response of the trade balance to an exchange rate appreciation. Growth in overseas demand also influences net exports. Domestic demand in the major six overseas economies grew by 2.7% on a year earlier in 1997 Q1 compared with 2.5% in the year to 1996 Q4.⁽²⁾ Finally, increased competitiveness of UK exports, perhaps as a result of improved productivity in the traded goods sector, may

^{(1) &#}x27;Public Finances and the Cycle', Treasury Occasional Paper 4,

September 1995. (2) See 'The international environment', August 1997 *Quarterly Bulletin*, pages 265–73.

have helped to limit some of the effects of the appreciation.

The failure of trade volumes to respond quickly to recent exchange rate changes may also reflect the slow adjustment of relative prices. Foreign exporters to the United Kingdom may not have fully passed the exchange rate changes through into sterling import prices. Firms' expectations of future exchange rate changes affect their pricing strategies. The magnitude and direction of the pass-through depend on whether the recent appreciation of sterling is viewed as temporary or permanent.

Current and expected changes in the exchange rate affect the attractiveness of a firm's current market share. An appreciation of sterling that is viewed as temporary raises the value of current, relative to future, sterling profits for foreign producers. The return from investing in additional market share is lower than if the appreciation of sterling were viewed as permanent. In such circumstances, firms are likely to let current profit margins grow.⁽¹⁾ By contrast, a permanent appreciation reduces both current and future sterling costs for foreign firms, encouraging price competition. The limited extent of pass-through to import prices, and the absence of a dramatic shift in trade volumes, may signal that the exchange rate appreciation is viewed as being unlikely to persist.

The Bank's regional Agencies conducted a small survey of 150 firms in June for the Monetary Policy Committee to examine the impact of the exchange rate on net trade. The findings show that large firms have been driven by market share considerations, rather than profitability, in the short run. Over half of the manufacturers surveyed had seen no major impact of the exchange rate appreciation on exports. But over half of the manufacturers also indicated that they expected a deterioration in export orders if the current strength in sterling were to persist. This sentiment appears to be borne out by other survey data. Chart 3.11, which presents export orders and deliveries from the CBI quarterly Industrial Trends Survey on a quantitative basis,⁽²⁾ shows that export volume orders and deliveries

Chart 3.11 Manufacturing export volumes: survey evidence



Question: Excluding seasonal variations, what are the expected trends for the next four months with regard to export deliveries? Question: Excluding seasonal variations, what are the expected trends for the next four months with regard to export orders? (a)

⁽¹⁾ Temporary appreciation also induces a cost effect, lowering foreign firms' sterling costs and encouraging price reduction. The incentive to let current profit margins grow must be set against these cost considerations. If equally significant, they can promote import price stickiness. Froot, K and Klemperer, P (1989), 'Exchange Rate Pass-Through when Market Shares Matter', American Economic Review, pages 637-53, offer a full account of these effects.

⁽²⁾ An explanation of how survey data can be converted to quantitative measures is provided in Cunningham, A (1997), 'Quantifying survey data', *Bank of England Quarterly Bulletin*, August, pages 292–300.

Table 3.FMeasures of the external orientation of UKindustry

Per cent

	Proportion of value added dependent on exports	Imports as a proportion of gross sales		
Agriculture	20.6	17.7		
Energy	35.0	12.3		
Manufacturing	44.1	29.6		
Total services	12.8	3.9		
Whole economy	19.6	13.3		

Source: Input-Output tables for the United Kingdom (1990) and Bank estimates.

Chart 3.12 Constraints on business conditions: the BCC Survey



Source: British Chambers of Commerce.

(a) Proportion of firms reporting that the exchange rate was more of a concern than three months ago.

concern than three months ago.
 (b) Proportion of firms reporting that import competition was more of a concern than three months ago. This question was discontinued after 1997 Q1.

Table 3.GOutput growth by industry

Percentage changes from previous period

	1995 Year	1996 Year	<u>Q</u> 3	Q4	<u>1997</u> <u>Q1</u>	<u>Q2</u>
Agriculture Production industries of which:	-1.4 2.2	-1.8 1.1	0.5 0.7	-1.2 0.4	0.1 -0.2	n.a. 0.4
Manufacturing Mining Utilities Construction Service industries	1.7 5.0 3.0 -0.7 3.1	0.3 3.3 6.3 1.2 3.4	1.1 -0.1 -1.5 1.0 0.4	0.1 1.0 1.3 1.4 1.4	0.5 -2.3 -3.1 1.1 1.3	-0.1 0.1 5.3 n.a. 1.3
of which: Distribution Transport and communications	1.7 6.6	3.3 4.1	0.0 0.9	0.6 1.8	1.0 1.3	1.3 n.a.
Financial and business Government and other	4.2 1.7	5.2 1.3	1.0 0.2	2.3 0.7	2.4 0.4	n.a. n.a.
Total output Memo item: Non-oil GDP	2.8 2.7	2.4 2.4	0.5	1.1 1.1	0.9 1.0	0.9 1.0

have deteriorated more than has been suggested by ONS trade volume data. But export orders began to fall before the exchange rate appreciation. This suggests that factors other than the exchange rate, such as market switching and overseas export demand, may also be at play.

The manufacturing sector is probably more sensitive than other sectors in the economy to the effects of the exchange rate change. A sector's short-term exchange rate exposure can be gauged by examining its dependency on exports for the creation of value added, and the extent to which it competes with foreign goods in the domestic market. Table 3.F presents estimates of these two indicators using 1990 Input-Output data, showing that manufacturing is more dependent on exports for value added and is also more exposed to international competition. Services do not seem as dependent on exports to generate value added, and their exposure to import penetration is also less than that of manufacturing. Table 3.F is merely suggestive and offers a static, rather than dynamic, view of the external orientation of UK industry. Recent survey data from the BCC are consistent with the estimates in the table. Chart 3.12 shows that the proportion of manufacturing firms viewing the exchange rate as a constraint on business prospects has risen from 40% to 58% since the start of the appreciation. By contrast, the reaction in the service sector has been more modest. Though the proportion of firms expressing concern over the degree of import penetration has increased during the same period, it is not dissimilar to levels recorded since 1993.

3.3

Output

Non-oil GDP growth picked up further in the first half of 1997 (see Table 3.G): it rose at an annualised rate of 3.9% in the first half of 1997, compared with a rate of 3.4% a year in the second half of 1996. On average, GDP has increased by nearly 3% a year since the recovery began in 1992 Q1. Much of this growth has come from the service sector, which has accounted for three quarters of the increase in output during this recovery. In particular, private service sector output has assumed an increasing share of output, growing faster than GDP (see Chart 3.13). Construction output rose by 1.1% in 1997 Q1, driven by private non-dwelling construction output.

Manufacturing output growth slowed in the first half of 1997, increasing at an annualised rate of 0.8%,



Chart 3.14 Manufacturing orders: survey evidence



Source: CBI quarterly Industrial Trends Survey

compared with 2.4% a year in the second half of 1996. As discussed in Section 3.2, the impact of the exchange rate appreciation on trade volumes has probably been delayed. And as Chart 3.14 suggests, weakening external demand for manufactures has been partly offset by strengthening domestic demand. In particular, the production of durable consumer goods (other than passenger cars) and investment goods accelerated sharply during the first half of 1997, consistent with the effects of windfall gains and the continued recovery in fixed investment expenditure.

Summary

3.4

Real GDP continued to accelerate during the first half of 1997. And the pick-up in growth since the beginning of 1996 has become more pronounced following recent revisions to the national accounts. These revisions have also removed much of the discrepancies among the three measures of GDP.

Stronger private final demand has been a key factor in the above-average GDP growth. Consumption should continue to be supported by strong employment and real earnings growth. An upside risk to consumption growth during the coming year is that a higher-than-expected proportion of windfall gains may be spent.

The contribution of external demand to GDP growth is likely to diminish during the coming year as a result of the exchange rate appreciation. Perhaps surprisingly, export volumes have so far been relatively robust. This probably reflects the pick-up in overseas demand and delays in the response to sterling's appreciation, either because trade volumes are fixed by contracts in the short term, or because firms expect that at least part of the appreciation is temporary.

The labour market

Chart 4.1 Underlying earnings growth^(a)



Chart 4.2 Average public and private sector earnings growth^{(a)(b)}



 ⁽a) The proxy for public sector earnings growth is constructed by weighting earnings in public administration and education, health and social work by their employment share; the private sector proxy is created by weighting private sector earnings by the private sector enployment shares.
 (b) Centred three-month moving average, except for latest observation which is constructed three month moving average.

Annual earnings growth has been just under $4^{1/2}$ % since the start of the year. The labour market continues to tighten. During the past year, unemployment fell quickly, employment rose rapidly, and recruitment difficulties increased.

4.1

Nominal earnings

Whole-economy underlying average earnings growth in the twelve months to May was $4^{1/4}$ % (see Chart 4.1). The ONS definition of underlying average earningscurrently under review—uses a three-month moving average of 'adjusted' earnings, centred on the month in question.⁽¹⁾ The latest month's figure includes an ONS forecast for adjusted earnings in the following month. The underlying average earnings data are subsequently revised to remove any forecast errors. For example, at the time of the May *Report*, underlying average earnings growth was estimated to be 5% in the year to February, but that estimate has since been revised down to $4^{1/2}$ %. Actual adjusted earnings data do not include a forecast and so avoid this problem. The average annual growth rate for March to May-the latest three months' data at the time of this *Report*—was $4^{1/2}$ %, compared with $3^{3/4}$ % a year earlier.

Earnings growth in December, January and March was distorted by high bonuses and profit-related pay, which tend to be concentrated around the end of the calendar or financial year. This helps to explain why published underlying average earnings growth has slowed more recently. The box on page 27 outlines two methods for adjusting earnings to smooth temporary bonus effects. It concludes that, after this adjustment, earnings growth has been broadly flat at just under $4^{1/2}$ % since January this year. Whole-economy productivity growth has averaged just over 2% a year in the past 40 years. So if real earnings grow in line with productivity, the current growth of nominal earnings is close to the level consistent with the inflation target of $2^{1/2}$ %.

Earnings growth in the private sector has been higher than in the public sector since 1993 (see Chart 4.2).

average of latest two months

⁽¹⁾ Adjustments are made for temporary influences such as arrears, variations in the timing of settlements, industrial disputes and the influence of public holidays in relation to the survey period.

Adjusting earnings for temporary bonus effects

Bonuses and profit-related payments vary significantly in size from month to month and from year to year. So the growth rate of earnings can be temporarily distorted. These effects should not be removed from earnings altogether, since that would bias the level of pay downwards. It is more useful to include a smoothed measure of these effects. This box describes two methods to achieve this.

The first method is to identify the bonus effects on earnings, remove them, then add them back in a smoothed way. The timing of bonus payments varies by industry groups throughout the year, and will show up in significant, temporary changes in the monthly growth of earnings in a particular industry.

One way to estimate the size of bonus effects is to identify which monthly growth rates of a particular industry are significantly different from the average of the previous six months.⁽¹⁾ The growth rates for earnings in the identified months are replaced by the average growth rate of the previous six months. The estimated bonus effect is the difference between that growth rate and the actual growth rate of earnings. The twelve-month moving average of bonus effects is added back to earnings to smooth these effects. These adjusted earnings data for each industry are weighted together to obtain a new whole-economy earnings growth rate.

One problem with this measure is that the smoothed growth rate of earnings will be slow to adjust to a change in the size of bonuses. For example, bonuses could remain at their recent high level, or even rise further, during the next couple of years because of the tightness in the labour market. Under these circumstances, earnings adjusted by the method described above will temporarily underestimate the current growth rate of earnings. A second method of adjusting earnings data for the temporary effects of bonuses is to use a statistical technique. The Kalman filter tries to distinguish between a trend component and erratic changes in the data. The trend component should be free of short-term bonus effects.



Actual adjusted earnings take account of the effects of back-dated pay, industrial disputes and differences in the timings of settlements, but not the effects of bonuses. The chart above compares actual adjusted earnings growth with earnings smoothed using the two methods described in this box. Though actual adjusted earnings growth has fallen during the past few months, this seems to have been because of temporary bonus effects. Both of the smoothing methods suggest that earnings growth has been broadly flat at just under $4^{1}/_{2}$ % since the start of the year.

(1) In the example shown in this box, a 'significant' change in the monthly growth rate was defined as 1¹/₂ percentage points. Sensitivity analysis showed that varying this between 1 and 2 percentage points made a small difference to the results.

Private sector earnings growth increased from $3^{3}/_{4}\%$ in May 1996 to around $4^{3}/_{4}\%$ in May this year. Public sector earnings growth has fallen from around 3% to $2^{1}/_{4}\%$ during the past year.

4.2

Real earnings

Employers and employees are concerned about real, rather than nominal, earnings when bargaining. Employees wish to preserve their real incomes and employers their prices relative to costs. But earnings are nearly always settled in nominal terms. So expectations of inflation for the next year or so are an important part of the bargaining process. Higher inflation expectations will cause employees to bid for higher nominal wage

Table 4.AMerrill Lynch-Gallup Survey of UK fundmanagers' inflation expectations

Percentage increases in prices

Twelve-month RPI inflation in	Month o 1997 <u>Mar.</u>	f survey <u>Apr.</u>	May	June	July
December 1997	3.1	3.2	3.1	3.0	2.9
December 1998	3.4	3.5	3.5	3.3	3.3

Source: Merrill Lynch-Gallup.

Table 4.BBarclays Basix Survey of inflation expectations

Percentage increases in prices

Twelve-month RPI inflation one year ahead

	Mar. 1997	June 1997
General public	4.0	4.2
Business economists	3.0	3.0
Finance directors	3.2	3.1
Investment analysts	3.1	3.1
Academic economists	3.0	3.0
Trade unions	3.3	3.4
Twelve-month RPI inflation	Mar. 1997	June 1997
General public	4.7	4.7
Business economists	3.4	3.2
Finance directors	4.0	3.6
Investment analysts	3.8	3.5
Academic economists	3.4	3.2
Trade unions	4.7	4.1

Source: Barclays Bank.

Chart 4.3 Growth in the real product wage per employee^(a)



increases, and will make employers more likely to grant higher settlements. Short-term inflation expectations, according to the Merrill Lynch-Gallup and Barclays Basix Surveys, have fallen a little over the past three months (see Tables 4.A and 4.B). Because nominal earnings growth has been flat recently, expected real earnings growth has probably risen.

Inflation outturns sometimes differ from expectations, so it is useful to estimate real earnings based on actual changes in prices. The real product wage, which includes employers' social security contributions and deflates earnings by the GDP deflator at factor cost, measures the real cost of labour to employers. The annual growth rate of the real product wage per employee increased significantly during the past two quarters, to $1^{3}/_{4}\%$ in the year to 1997 Q1, still slightly less than its average of around $2^{1}/_{4}\%$ for the past 40 years (see Chart 4.3).

4.3 Explaining real earnings behaviour

Labour market tightness

Tightness in the labour market is the main influence on real earnings. There are several indicators of tightness, including various measures of unemployment, employment, vacancies, the gap between hours offered and hours worked, and skill shortages. All suggest that the labour market has continued to tighten since the previous *Report*.

Claimant unemployment fell by a monthly average of 46,000 in the year to June 1997, compared with 14,000 in the previous year. The unemployment rate was 5.7% in June, its lowest since 1990.

Claimant unemployment has been affected by the introduction of the Jobseeker's Allowance (JSA) in October 1996. The JSA has had some small one-off administrative effects, and larger effects on incentives. The administrative effects of the JSA relate to the introduction of means testing after six rather than twelve months, and tighter restrictions on postal claimants. The ONS estimate that the first of these measures has reduced the level of the claimant count by around 5,000 a month since October last year. The number of postal claimants has fallen considerably since September 1996. But most of those affected are now likely to be claiming in person instead of by post, so the net effect on the claimant count is unlikely to have been large. The most significant effect of the JSA has been on incentives. The JSA should have permanently increased the efficiency with which the unemployed search for work. The JSA has also had a one-off effect because it requires claimants to give more details of job-search activity. This will have deterred some former claimants. Both of these incentive effects have probably led to a fall in the rate of claimant unemployment consistent with the long-run equilibrium—or natural—rate. So the falls in the claimant count since October last year exaggerate the extent of tightening in the labour market.

Labour market tightness depends on the number of unemployed actively seeking work with up-to-date skills attractive to employers. So measures of unemployment that take account of these factors may be better indicators than the claimant count of labour market tightness. The Labour Force Survey (LFS) measures unemployment on a standardised international definition, by asking individuals directly whether they have been looking for a job in the past four weeks and are able to start work in the next two weeks. It is less likely than the claimant count to be affected by the JSA. And LFS short-term unemployment should roughly measure the number of people with up-to-date skills.

LFS unemployment shows a similar profile to the claimant count during the past five years, but has fallen by less in the past nine months. LFS unemployment fell by 74,000 in spring 1997 (March to May), after a fall of 110,000 in the previous quarter (November to February). In the previous four quarters unemployment fell by an average of 41,000. So the labour market was tightening faster in the first half of this year than in most of 1996.

The LFS unemployment rate was 7.2% in spring 1997, higher than the lowest point in the previous cycle (see Chart 4.4). Short-term unemployment, however, was only 4.5% of the economically active population in spring 1997, slightly lower than the 1980s trough of 4.6%, reached in spring 1989.⁽¹⁾ In 1996, the latest date for which comparable data are available, the UK short-term unemployment rate was 4.9%, the same as the US rate.

Total UK employment rose by around $1^{1/2}$ % in the year to spring 1997, according to both the LFS and the Workforce in Employment measures. Unemployment





______1984 85 86 87 88 89 90 91 92 93 94 95 96 97 0 Sources: LFS and Bank of England.

⁽¹⁾ Short-term unemployment is defined here as those unemployed for less than a year.

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

Chart 4.5 Changes in labour market composition^(a)



Changes over previous year. All measures include all people over 16. Inactive people are neither employed nor looking for a job. Changes i inactivity affect the participation rate. (b) Changes in



⁽a) As a percentage of the workforce

85

90

95

₹

0 1980

falls because employment rises, the population falls, or labour force participation falls. These have different implications for labour market tightness. Chart 4.5 shows that according to the LFS, employment rose by more than unemployment fell during the past year. The difference is explained by an increase in the supply of labour-the increase in the population adjusted for changes in the participation rate. So the rise in employment during the past year exaggerates the extent of tightening in the labour market, because of the expansion of the labour force.

Employment is likely to continue rising. The number of unfilled vacancies advertised at Jobcentres-about one third of all vacancies in the economy-has increased rapidly during the past year. The stock of recorded vacancies was around 275,000 in 1997 Q2, its highest for over 20 years. Chart 4.6 shows that changes in vacancies often precede changes in the employment rate; the correlation is closest with a two-year delay. So the vacancies data suggest that the employment rate is likely to increase further in the next two years. This is consistent with the Manpower Survey of employment prospects in June, which found that the balance of firms expecting to increase staffing levels in 1997 Q3 was at its highest since 1989. In the past 13 years, this balance has been closely correlated with actual changes in the workforce in employment.

Since the recovery began in 1992 Q1, three quarters of the increase in employment has been in part-time jobs. In the past year, this trend has been reversed: between spring 1996 and spring 1997 two thirds of the increase was in full-time jobs. The changing balance of full-time and part-time jobs makes it difficult to know how quickly labour usage is rising. Hours worked are not affected by this problem. Total hours worked have been volatile recently: they fell by 1/2% in the winter according to the LFS, but rose by 1% in the spring.⁽¹⁾ Total hours worked increased by 1.7% over the year to spring 1997. The potential hours on offer include extra hours from part-time workers who would be willing to work full-time, and from the unemployed who are seeking work. The gap between potential hours on offer and total hours worked has narrowed since the beginning of 1993, and was significantly smaller in spring 1997 than a year earlier, providing further evidence that the labour market is tightening (see Chart 4.7).

⁽¹⁾ The data are seasonally adjusted. The recent volatility may have been caused by unusual weather in the winter, or by a changing seasonal pattern in hours worked, not accounted for by the seasonal adjustment.

Chart 4.7 Gap between potential hours on offer and actual hours worked



- (a) Potential hours on offer defined as hours worked plus hours those actively seeking employment would like to work, plus additional hours part-timers would like to work.
- would like to Work. (b) Potential hours on offer defined as above, but also including all those who say they would like a job.

Table 4.CSkill shortages and recruitment difficulties

Percentage balance, unless stated

		1989	1995	1996	199	
		Average	Average	Average	<u>Q1</u>	<u>Q</u> 2
BCC recruitment difficulties (a) BCC skilled manual	Services	57	46	57	66	62
recruitment difficulties (a)	Manufacturing	42	36	36	41	41
CBI skill shortages (b) Manufacturing	21	10	10	11	13
Memo: claimant unemployment rate	(per cent)	6.2	8.2	7.5	6.3	5.8

Sources: British Chambers of Commerce, CBI and ONS

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

(b) Next four months.

Chart 4.8 Real unit labour cost growth and unemployment



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

The labour market

Reported recruitment difficulties in the service sector are as severe as they were in the late 1980s and have grown in the past two years, according to the British Chambers of Commerce (BCC) Survey (see Table 4.C). But evidence on recruitment difficulties in the manufacturing sector is less clear. The CBI quarterly Industrial Trends Survey and the BCC Survey both show that skilled labour shortages in the manufacturing sector have not risen much in the past two years. But according to the BCC, skill shortages are as high now as in the late 1980s, whereas the CBI suggests that shortages are lower. A labour market survey conducted by the Bank's regional Agencies in July suggested that tightening is having a greater effect on the services sector than the manufacturing sector (see the box on page 32).

Other factors affecting real earnings

Measures of labour market tightness are as high now as at any point in the late 1980s cycle, a period of high inflationary pressure. But real earnings grew by less than their long-run average in the year to 1997 Q1. Chart 4.8 shows that real unit labour costs (the real product wage relative to productivity) tend to rise as unemployment falls. In each year of this recovery, real unit labour costs have fallen by more than would have been expected based on the average relationship since 1980. The rest of this section considers possible explanations for this apparent shift in behaviour.

The cost of losing a job may be higher in the 1990s than in the 1980s. The value of unemployment benefit has fallen relative to earnings. And the average hourly entry wage (the wage of someone who was unemployed twelve months earlier) fell relative to total hourly wages between 1979 and 1991.⁽¹⁾ The British Social Attitudes Report (BSAR) suggests that perceptions of the cost of job loss have risen. The share of employees who thought it would take less than three months to find an 'acceptable replacement job' if they lost their own was about the same in 1995 as in 1986, despite the much lower level of unemployment in 1995.

Evidence on changes in job insecurity is less clear. The previous *Report* noted that average job tenure has not changed much in the past 20 years. And the number of people experiencing unemployment in the 1990s has not been unusually high. The BSAR suggests that there has been no clear trend since 1983 in the number of people expecting to be made redundant during the following

Based on the General Household Survey. See Gregg, P, and Wadsworth, J, 'Mind the Gap, Please? The Changing Nature of Entry Jobs in Britain', *Centre for Economic Performance, Discussion Paper 303*, August 1996.

Labour market tightness: evidence from the Bank's regional Agencies

The Bank's regional Agencies conducted a survey in July this year to help the Monetary Policy Committee to assess recent labour market trends. The survey covered 136 companies of which about one half were service sector firms. This box reports the main findings of the survey.

47% of the companies expected their staff numbers to rise during the next six months whereas only 16% expected staff numbers to fall. A balance of 59% of service sector firms expected to increase their staff, in marked contrast with the balance of only 4% of manufacturing firms.

Skill shortages seem to be rising, with 51% of service sector firms reporting an increase in the past six months, compared with 45% of manufacturing companies. Almost one third of the firms in both sectors noted that

labour shortages were restricting their ability to meet demand.

A balance of 30% of firms reported that settlements in 1997 were, or were likely to be, higher than in 1996. And again, there was a contrast between service sector and manufacturing firms, with balances of 42% and 20% respectively.

So the Agents' survey seems to confirm the picture from other national surveys of a tightening labour market. This is particularly true of the service sector, and is consistent with other data. Service sector output is growing more quickly than manufacturing output, capacity constraints (which include labour usage) are more pressing, and recruitment difficulties are greater in the service sector.

twelve months.⁽¹⁾ But the previous *Report* noted that a survey by International Survey Research suggests that employees' perceptions of insecurity have increased since 1990. And union membership, which might make employees feel more secure in their jobs, has fallen considerably during the past 15 years.

4.4

Summary

Annual nominal earnings growth has been just under 4¹/₂% since the start of the year, close to the rate consistent with the inflation target. Real earnings growth may have been low during the past few years because of increased costs of losing a job compared with the 1980s, and possibly because of increased perceptions of job insecurity. But the labour market seems to be tightening faster now than a year ago, and real earnings growth has risen. Short-term unemployment is lower than at any time during the 1980s. The labour market is likely to tighten further during the next year, increasing upward pressure on real earnings.

⁽¹⁾ The percentage of people who said they were likely to leave their current employer over the next year, and who gave redundancy as the reason for leaving. The BSAR is based on answers given by around 3,500 British adults.

Costs and prices

Chart 5.1 Import prices and the exchange rate



Sources: ONS and Bank of England.

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





(a) Monthly averages of daily data.(b) Hong Kong, Malaysia, Singapore, South Korea, Taiwan and Thailand.

Retail goods and retail services price inflation continue to diverge. The appreciation of sterling has caused some food prices to fall. This has depressed retail food prices and so reduced underlying goods price inflation. Very low input and output price inflation in the manufacturing sector has also restrained retail goods prices. But costs and prices in the service sector and the prices of most retail services continue to rise.

5.1 Import prices and the exchange rate

Non-oil goods import prices fell by 5.4% between August 1996 and May 1997 (see Chart 5.1). This fall was much smaller than the appreciation of sterling: the monthly average of the effective exchange rate rose by nearly 17% during this period.

In the previous *Report* it was noted that the effective exchange rate index (ERI) may have overstated the rise in the exchange rate since August 1996 because its coverage of countries is incomplete. Sterling has risen less against some currencies that are excluded from the ERI, such as those of the Asian newly industrialised economies (NIEs). This might explain some of the slowness in pass-through to import prices, which cover imports from all countries. A broader effective exchange rate can be constructed with nearly 50 countries in the basket, covering over 97% of UK trade compared with the 83% covered by the ERI (see Chart 5.2).⁽¹⁾ But the differences in movements of the aggregate ERIs during this period are quite small; the monthly average of the ERI rose by 23.4% between August 1996 and July 1997, that of the broad ERI by 21.9%. So the narrower coverage of the ERI cannot explain more than a small proportion of the slow pass-through.

A new method of recording import prices has clarified the pricing response of foreign exporters to a change in the exchange rate and hence the cause of limited pass-through. In the past, the slowness of recorded import prices to fall after an appreciation could be attributed in part to importers' contracting arrangements.

⁽¹⁾ Based on a trade weight matrix of 150 countries supplied by the IMF. Chart 5.2 shows a broad ERI based on the top 49 countries ranked by their importance in UK trade.

Prices on contracts signed before an exchange rate movement were recorded as they were paid. So even if prices on new contracts changed immediately after an exchange rate movement, recorded import prices would not fully change until existing contracts expired. But changes to the ONS's method of recording import prices mean that import prices now measure only the prices of new contracts signed.⁽¹⁾ This means that recorded import prices should not now be affected by different contracting arrangements, and that pass-through should quickly be evident in the import price data. But it does imply that long contracts may create a delay between changes in recorded import prices and subsequent changes in importers' costs.

So the limited fall of import prices since August 1996 probably reflects rising foreign export prices. This may be because foreign exporters did not expect sterling's appreciation to be permanent and so have been taking advantage of the strength of UK domestic demand to widen their margins.

In sectors such as finished manufactured goods, output is more heterogeneous than in other sectors, and the maintenance of market share over time may be more important than short-term profitability. This contrasts with sectors such as semi-manufactured goods and foods where there tend to be more easily available alternative sources of supply. Foreign exporters in heterogeneous goods sectors are more likely to be able-and wish-to change margins and keep sterling prices constant. This is consistent with reports from the Bank's Agencies that some foreign exporters of manufactured goods are pricing to market in the United Kingdom and maintaining the sterling prices of their exports. It is also consistent with disaggregated import price data. Finished manufactured goods import prices have fallen less than the prices of foods, beverages and tobacco, and of semi-manufactured goods, since August 1996.

5.2 Raw material and commodity prices

The prices of indigenous foods—those that can be produced in the United Kingdom—have fallen rapidly in 1997. This was caused by a combination of low international food prices, a very large UK harvest in 1996 and the effect of the exchange rate on UK market

⁽¹⁾ Previously, goods value data were divided by goods volumes to obtain an implied deflator. The new method, which has now been applied to data from late 1994, is based on price surveys of importers. These surveys request importers to report prices at the time of order rather than at the time of delivery.

Chart 5.3 Bank sterling commodity price index^(a)



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





Sources: Ministry of Agriculture, Fisheries and Food (MAFF) and Bank of England.

(a) Agricultural price index from MAFF.(b) Monthly average of daily data. A rise in the line reflects a depreciation

Chart 5.5 Premium of one-month over six-month oil prices



Source: International Petroleum Exchange.

prices. As Section 5.5 explains, low food prices have affected retail prices. The transmission from food prices to retail prices is often relatively rapid, since food is subject to less processing than many other retail goods.

The indigenous foods price component of the Bank's demand-weighted sterling commodity price index fell by nearly 9% in the first five months of 1997, more than offsetting rises in some other components (see Chart 5.3). Indigenous foods have a weight of nearly one half in the non-oil commodity index. Though these indigenous food prices are 'farm gate' prices of UK producers, many are subject to international competition and so will be affected by movements in international food prices and in the exchange rate. Farm gate prices have often moved with changes in the exchange rate in recent years (see Chart 5.4). In the past year, this has mainly been caused by the direct impact of the exchange rate on market prices because of import competition, rather than falling Common Agricultural Policy support prices. The 'green' pound, which is used to convert EU-wide support prices into sterling support prices, has been revalued four times since August 1996 and is now nearly 16% higher than a year ago. This has kept support prices low in the United Kingdom.

The sterling oil price was stable throughout June and July, remaining between £10 and £12 a barrel. The one-month Brent crude price has generally been below the six-month price since the end of May. This is unusual; liquidity premia mean that the six-month price is usually lower (see Chart 5.5). This upward-sloping forward curve implies that oil prices are expected to remain constant or rise in the final four months of 1997 and in early 1998. Though the shorter-dated oil futures prices have been quite volatile in 1997, the longer-dated futures contracts have stayed around £11-12 a barrel in the second half of 1997, close to their five-year average (see Chart 5.6). This implies that the news in the oil market since December 1996 has not affected the market's expectation of the price for around the end of 1997.

5.3 Costs and prices in the service sector

The service sector continues to show signs of inflationary pressure. The Chartered Institute of Purchasing and Supply (CIPS) input cost indicator for the service sector, which includes labour costs, has suggested that costs continue to rise. After peaking at 60.1 in April, it fell back slightly in the next two months

Chart 5.6 Forward curves of Brent crude sterling oil price(a)



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





- 30 Source: Chartered Institute of Purchasing and Supply

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

Table 5.A

Short-run measures of producer price inflation^(a)

	<u>1997</u> Feb.	Mar.	Apr.	May	June
Three-month annualised percent	age cha	nges			
Input prices - excluding FDTP industries (b)	-8.5 -7.4	-9.2 -3.4	-15.7 -7.8	-10.4 -6.0	-10.2 -7.1
Output prices (c) - excluding FDTP industries (b) - excluding excise duties (PPIY)	0.0 0.0) -1.6	-1.3 0.0 -1.6	-1.0 1.0 -1.3	0.3 1.3 0.7	0.6 1.0 1.0
One-month percentage changes					
Input prices - excluding FDTP industries (b)	-0.9 -0.5	-0.8 0.1	-2.5 -1.6	0.6 0.0	-0.8 -0.2
Output prices (c) - excluding FDTP industries (b) - excluding excise duties (PPIY)	-0.2 0.0) -0.2	$0.0 \\ 0.2 \\ 0.0$	-0.1 0.1 -0.1	0.2 0.1 0.2	$\begin{array}{c} 0.1 \\ 0.1 \\ 0.1 \end{array}$

Seasonally adjusted by the ONS, except where noted. FDTP is food, drink, tobacco and petroleum. The ONS does not publish a seasonally adjusted headline output price series To retain excise duty effects, these data are based on the seasonally adjusted tax-exclusive output price series multiplied by the ratio of unadjusted tax-inclusive to tax-exclusive prices.

before rising again in July. The falls in May and June may have been caused by service sector earnings falling back in the months after March as the effect of the bonuses paid in some parts of the service sector dropped out. But the indicator has continued to suggest rapidly rising service sector costs, contrasting sharply with the manufacturing input price indicator (see Chart 5.7). The British Chambers of Commerce surveys for the first half of 1997, and reports from the Bank's Agencies, confirm that the service sector is facing skill shortages and recruitment problems, particularly of information technology staff. This may drive up labour costs. The CIPS service sector survey also suggested that output prices in the service sector continued to rise, with the indicator remaining above 50 in July. Since many services are sold to the production sector rather than to consumers, higher service prices do not necessarily all feed through directly into retail service inflation. But they are consistent with the difference between retail goods and services inflation discussed in Section 5.5.

5.4 **Costs and prices in manufacturing**

Input costs in the manufacturing sector rose in May, because of the rise in the oil price, but fell again in June (see Table 5.A). Output prices excluding excise duties (PPIY) rose slightly in May and June for the first time since October 1996. Low manufacturing output price inflation helps to restrain retail goods price inflation. because about three quarters of retailers' costs are physical goods.

The prices of materials and fuels purchased by manufacturing industry fell by 8.6% in the twelve months to June. The seasonally adjusted index fell by 0.8% in June after rising in May because of higher crude oil prices; the index excluding the food, drink, tobacco and petroleum industries also fell in June. Despite survey reports that the appreciation of sterling has reduced manufacturers' costs by making imported input goods cheaper, the imported element of the input price index fell by less than 6% between August 1996 and June 1997, smaller than the fall for input prices as a whole. This small fall largely reflects some world commodity price rises: the imported foods and metals price components of the input price index increased during the first six months of 1997. The CIPS manufacturing survey continued to show input prices falling: the index fell to 38.8 in July (see Chart 5.8).
Chart 5.8 Input price inflation and the CIPS purchase price indicator



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





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

Percentage changes over the period shown, except where noted

	<u>1995</u> <u>Year</u>	<u>1996</u> <u>Year</u>	1997 Q1	<u>Q2</u>
Unit costs				
Unit labour costs	3.4	4.7	0.2	1.1
of which: (a)				
Average earnings	4.5	4.4	1.0	0.6 (b)
Productivity	0.8	0.2	0.7	-0.1 (b)
Materials and fuels (including semi-finished manufactured imports)	10.8	-4.0	-2.1	-1.8
Imports of finished manufactures	8.6	0.7	-1.7	-1.6
Services	2.0	2.8	0.3	0.3
Weighted costs	5.3	2.0	-0.5	0.0
Output prices (c)	4.5	1.9	0.1	0.2

Sources: ONS and Bank of England.

Unit labour costs also include employers' National Insurance Contributions (a) Those do not appear separately in the table Average of April and May. Domestic sales.

Manufacturing output price inflation remains very low (see Chart 5.9). The twelve-month rate rose slightly to 1.1% in June, perhaps because of higher oil prices; excluding the food, drink, tobacco and petroleum industries, the rate was unchanged at 0.6%. Seasonally adjusted output prices excluding excise duties, which had been falling since October, rose slightly in May and June (see Table 5.A). The twelve-month change for the unadjusted index rose from its record low of 0.1% in April to 0.4% in June.

Pricing in the manufacturing sector

Estimated unit costs in the manufacturing sector continued to weaken in the first half of 1997, driven by falls in the prices of materials and fuels and of imported manufactures (see Table 5.B). But manufacturers' output prices on domestic sales (including excise duties) continued to rise slowly. So domestic margins continued to widen in the manufacturing sector. By contrast, manufacturers' export margins probably narrowed in the first half of 1997 as goods export prices fell.

5.5

Retail prices

The retail price index excluding mortgage interest payments (RPIX) rose by 2.7% in the twelve months to June, a rise of 0.2 percentage points from the rate in May (see Chart 5.10). This rise was mainly caused by higher seasonal food prices. Headline inflation (RPI) rose above RPIX inflation in May because the reduction in mortgage payments in May 1996 dropped out of the twelve-month rate. Short-run RPI inflation was pushed up relative to RPIX inflation by rising mortgage payments in June 1997, following the rises in the Bank's repo rate in May and June (see Table 5.C).

Retail goods prices were broadly flat in the first quarter of 1997. The annual rate of change dropped to around 2%. Estimated retailers' input costs fell very slightly in 1997 Q1, as continued falls in the price of physical inputs were mainly offset by rises in unit labour costs and in the costs of bought-in services. So retailers' margins probably widened in the first quarter, but only slightly. This is consistent with the argument in previous *Reports* that increased competition led to a structural break in retailers' margins in the early 1990s, and that retailers have subsequently found it difficult to restore margins to the levels of the previous decade.

The box on page 39 explains the structural gap between goods inflation and services inflation. Goods inflation

Chart 5.10



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.

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

Percentage changes

	<u>1997</u> Jan.	Feb.	Mar.	Apr.	May	June
RPI RPIX	4.5 3.7	3.9 3.1	1.9	1.3 1.3	1.7 1.5	3.1 2.3
RPIY	2.0	1.5	1.1	0.4	0.6	1.7

Source: ONS and Bank calculations.

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





1986 87 88 89 90 91 92 93 94 95 96 97 Source: ONS and Bank of England.

was 1.1 percentage points lower than services inflation in June, a somewhat smaller gap than the long-run average (see Chart 5.11). The gap has been reduced recently by high petrol prices and low utilities prices. High petrol prices—caused by increases in the oil price—pushed up retail goods prices in late 1996 and early 1997. And on the services side, utilities inflation has been low during the past few years (except for the sharp rise in 1994 caused by the imposition of VAT on domestic fuel and power), largely because of pricing restrictions by the utility regulators (see Chart 5.12). These effects will be compounded in future months by measures announced in the July Budget. Rises in petrol duty will probably push up petrol prices from July. And the reduction in VAT on domestic fuel and power, which takes effect from 1 September, is likely to depress utilities prices.

The petrol and utility price effects have both recently reduced the gap between RPIX goods and services inflation. With petrol stripped out of the goods index and utilities out of the services index, twelve-month goods inflation in June was over $2^{1/2}$ percentage points below services inflation. The gap often changes with movements in the effective exchange rate. So the rapid appreciation of sterling since August 1996 may help to explain this large difference. As noted earlier, the appreciation has affected food prices (despite the strong rise in seasonal food prices in June) more than non-food manufactured goods prices. Food prices have a weight of around one quarter in the RPI retail goods basket. Falling food prices have been responsible for much of the divergence between underlying goods and services retail price inflation in recent months.

5.6

Other price indices

Because some prices change infrequently, measured inflation can be more volatile than the underlying pattern of price level rises. The Bank has constructed indices that limit these effects, the median and trimmed mean measures (see Table 5.D). Price rises in each month are weighted by the importance of each component in the RPIX basket and then ranked by size. The median is the middle observation. The trimmed mean is obtained by stripping out the 15% highest and lowest changes of the weighted price distribution and taking the average of the remainder. These measures are usually lower than RPIX because the distribution is usually skewed—the large increases are generally bigger than the large decreases. Though some large falls in utility prices—such as electricity and telephone charges-were stripped out of

Structural differences between goods and services inflation

The RPIX basket comprises about 60% retail goods prices and 40% services prices. Over time, retail service price inflation has been higher than retail goods price inflation. This structural difference between goods and services consumer price inflation is also evident in other countries. The actual difference varies around the average over time because of temporary shocks, cyclical effects, the level of general inflation itself and the influence of the exchange rate.

The structural gap can be explained by the different rates of measured productivity growth in the manufacturing and service sectors. Annual productivity growth in the industrial production sector (excluding utilities) was on average 3.2 percentage points higher than that in the service sector (plus utilities) between 1984 and 1997. Higher productivity growth in the manufacturing sector means that manufactured goods can be produced increasingly cheaply compared with services, and so the relative price of goods will fall. There is no precise connection between manufacturing output prices and retail goods prices-not least because some value is added to retail goods by the retailing and distribution industries, which are part of the service sector. But the link is strong enough to create structural differences that can be observed in the data.

In the United Kingdom, the United States, Germany, France and Japan, twelve-month service inflation was on average $1^{3/4}$ percentage points higher than goods inflation between 1984 and 1996. Econometric analysis





Sources: ONS and Bank of England.

(a) Logarithmic scale.(b) Water, electricity, gas, postage, telecommunications and rail fares.

of the United States and the United Kingdom shows that this gap tends to widen during a period of exchange rate appreciation, because goods prices are more subject than services prices to international competition.

Goods minus services price inflation(a)



It tends to narrow when the economy is expanding rapidly, possibly because manufacturing output and margins are more pro-cyclical than those of services, though this effect is relatively weak in the United Kingdom.

the index in the second half of 1996, trimmed mean inflation (along with that of the median) continued to be less than or equal to RPIX inflation in the first six months of 1997.

HARP and THARP inflation, which contain a measure of owner-occupied housing costs, have been consistently higher than their counterparts of RPIX and RPIY for the past year (see Table 5.D). This is because of relatively large rises in house prices during that period.

5.7

GDP deflator

The GDP deflator is the price of value added in the domestic economy, and so is a measure of domestically generated inflation. The four-quarter change in the GDP deflator at factor cost was 2.2% in the first quarter of 1997. The GDP deflator at market prices also rose by 2.2% in the year to Q1, lower than RPIX inflation of 2.9%. This was because of falls in export prices and small increases in the investment and government

Table 5.DAnnual inflation(a)

Percentage increase in prices on a year earlier

	1996					
	Jan.	Feb.	Mar.	Apr.	May	June
HARP	3.7	3.5	3.4	3.2	3.2	3.4
THARP	3.4	3.2	3.1	2.9	2.9	3.1
Trimmed mean	2.8	2.7	2.6	2.4	2.5	2.4
Median	2.3	2.3	2.2	2.0	2.1	2.1

Sources: ONS and Bank calculations.

(a) Data are seasonally adjusted by the Bank.

spending deflators. Exports, investment goods, and goods and services purchased by government do not appear in the retail price basket.

5.8

Summary

Sterling's appreciation—20.5% between 2 August 1996 and 8 August 1997—has not been fully reflected in most import prices. But the strength of sterling has helped to drive down indigenous food prices and this, together with very low input and output price inflation in the manufacturing sector, has contributed to relatively weak retail goods price inflation. Retail service price inflation, except for some utilities prices, has continued to rise. This section provides a summary of the economic news since the May *Report* and of the decisions of the Monetary Policy Committee (MPC) in the light of this news. It is not a detailed account of the MPC meetings—that can be found in the minutes of the June and July MPC meetings which are attached as an Annex to this *Report*. The Bank of England's official dealing rate—the repo rate—has been raised three times since the May *Report* was published. The rate was increased by 0.25 percentage points following each of the June, July and August MPC meetings, reaching 7%.

Despite the strength of sterling, which was expected to restrain retail price inflation temporarily, the May Inflation Report concluded that 'the central projection for inflation, and the risks surrounding it, suggests that, on the present evidence, there is still likely to be a need for some further moderate tightening of policy in the months ahead'. And at the monetary meeting in May, when interest rates were raised by 0.25 percentage points, the Bank argued that there was a case for a 0.5 percentage point rise in interest rates then, given the strength of the domestic economy indicated by recent data. At the June meeting (5–6 June), the MPC reviewed the recent monetary and economic data and concluded that the latest evidence was consistent with the outlook described in the May Report. The Committee accordingly voted to raise the Bank's repo rate by 0.25 percentage points to 6.5%.

At the next meeting, on 9–10 July, the Committee again reviewed the latest monetary and economic data against the background of the May *Report* and the 0.25 percentage point rise in official interest rates announced on 6 June. The combination of continued rapid expansion of domestic demand, led by consumption, and the further $4^{1/2}$ % appreciation of sterling between the June and July meetings was thought to have sharpened the monetary policy dilemma.

The national accounts had been revised significantly. The balancing of the accounts greatly reduced the discrepancies among the three measures of GDP, all of which were revised up. The expenditure measure was revised most—up by 1.5% for 1997 Q1 compared with the previous estimate. But even the output measure—

Chart 6.1 GDP data revisions^(a)



thought to be the most reliable—was revised up by 0.4% (see Chart 6.1). Though the upward revisions to GDP growth were concentrated in 1994 and 1995, the pattern of growth in recent quarters was also revised slightly.

The Budget on 2 July added further tightening to that implied by the existing fiscal stance of significant falls in the general government deficit. The Treasury's latest *Red Book* projects that the general government fiscal deficit will fall from 4% of GDP in 1996/97 to $1^{1}/_{2}$ % of GDP in 1997/98 and to $^{1}/_{4}$ % of GDP in 1998/99.

The MPC's task is to allow nominal demand to grow along a path that, given the supply potential of the economy, is consistent with the Government's inflation target. Continued growth of output at rates well above trend is likely to lead to upward pressure on inflation. The Committee concluded that the latest evidence notably the upward revision of estimated output growth for the fourth quarter of 1996 and recent developments in monetary growth and retail sales-indicated that a further tightening of monetary policy was necessary, despite the further appreciation of the exchange rate and the contractionary effects of the July Budget. The Committee decided that the size of the required increase in interest rates would be easier to assess in the light of projections being prepared for the August Inflation Report. Consequently, the Committee voted to raise the repo rate by 0.25 percentage points to 6.75%.

Sterling has continued to rise since the May *Report*. The sterling ERI was 101.3 on 8 August, a rise of $2^{1}/_{2}$ % from the level at the time of the May *Report*, and around 20% above the trough at the time of the August 1996 *Report*. But it was even higher prior to the third rise in the Bank's repo rate, on 7 August. Sterling has been particularly strong against the Deutsche Mark and other European currencies.

Strong broad money growth has continued since the May *Report*: the pace of annual growth has picked up since the start of the year to above 11%. Real broad money increased by nearly 9% in the year to Q2. Much of this growth reflects increasing deposits held by other financial institutions, rather than persons or companies. Unless bank debt is repaid or new borrowing falls, such monetary growth in the medium to long term is inconsistent with meeting the inflation target.

The first estimate of 1997 Q2 output shows annualised non-oil GDP growth of 4%, well above its long-run

average. The 1997 Q2 figures and the national accounts revisions suggest that output growth was broadly as expected at the time of the May *Report*.

Since the May *Report*, the estimated value of windfall gains from demutualisations in 1997 has been revised up from £28 billion to £36 billion. This revaluation reflects a general rise in equity prices. The bulk of the payments took place between April and July. Around 90% of the total expected has now been paid. The upward revision to the value of windfall gains, and reassessment of the evidence on how much is likely to be spent initially, suggest that the impact on consumption will be larger than expected at the time of the May *Report*. There remains an upside risk if more than expected is spent initially, and the possibility of further demutualisations may also influence consumption.

The windfalls are likely to have led to a rebalancing of household wealth portfolios, which include both financial and physical assets. This will temporarily increase the level of spending on consumer durables and residential investment as households seek to increase the flow of services from these assets. Though aggregate consumers' expenditure on durables has been strong for several quarters, growth up to 1997 Q1 has not been significantly out of line with previous cyclical movements. But the 1997 Q2 consumption data have not yet been released, so it is too early to draw firm conclusions. More recent data are available for retail sales, which grew by over 5.3% in the year to 1997 Q2. And in June, retail sales by household goods stores recorded the largest monthly increase for more than a decade, consistent with a windfall effect. Nonetheless, the size of windfall gains is small when set against the £230 billion rise in total household wealth in the year to 1997 Q1.

The official trade figures still show few signs of the effects of sterling's appreciation. Prices of imported goods in May were only about 5% lower than before the appreciation started last August, and volumes have grown only slowly. Export volumes have been volatile from month to month and have continued rising. In contrast, business surveys have shown an increasing effect on export orders. In particular, the CBI quarterly Industrial Trends Survey showed a significant fall in both actual and expected export orders. Evidence from the Bank's regional Agencies suggests that the delayed response of exports relates to how permanent the exchange rate appreciation is perceived to be. Over half

of the 150 firms consulted in June said they had not yet experienced an effect on their export volumes, primarily because they had lowered their margins. But over half of firms surveyed expected a deterioration in export volumes if the appreciation persisted.

The ONS measure of underlying earnings growth fell to $4^{1/4}\%$ in May from the 5% recorded for February at the time of the May *Report*. Much of this apparent fall reflects subsequent downward revisions to the February figure, which is now $4^{1/2}\%$. Section 4 suggests that after smoothing the effect of bonuses, earnings growth has been broadly flat at just under $4^{1/2}\%$ since January this year.

The spring Labour Force Survey provides fresh evidence that the labour market has continued to tighten. The 74,000 fall in unemployment in the spring quarter was broadly in line with the recent falls in the claimant count, which should now be largely free of the one-off incentive effects from the introduction of the Jobseeker's Allowance. The LFS measure of short-term unemployment has now fallen below the trough reached in the late 1980s. Employment rose by 91,000 (0.4%) in the spring, according to the LFS. And total hours worked increased by 1%. The strong rise in hours in the spring LFS suggests that the fall recorded in the winter may have been because of changing seasonal patterns.

The prices of some foods have fallen, partly because of sterling's appreciation. Very low input and output inflation in the manufacturing sector has also restrained retail goods prices. But costs and prices in the services sector and the prices of most retail services continue to rise.

RPIX inflation fell from 2.7% in March to 2.5% in May, but rose unexpectedly back to 2.7% in June. The rise in June was largely accounted for by seasonal foods, the supply of which was affected by the adverse weather conditions. This rise in seasonal food prices should not affect the projection two years ahead.

The August meeting of the MPC took place on 6–7 August. The Committee decided to raise the Bank's repo rate by 0.25 percentage points to 7%. The outcome of this meeting reflects the prospects for inflation discussed in Section 7. The Press Notice released following the meeting is contained in the Annex to this *Report*.

Prospects for inflation

7.1 The medium-term inflation projection

The Monetary Policy Committee's projection for inflation is based on the assumption that official interest rates will remain unchanged at 7% over the next two years. The projection was agreed by the Monetary Policy Committee (MPC) on 7 August, and has not been updated to take account of changes in market rates or other information since that date. The sterling effective exchange rate index, starting from a value of 105.1-its average over the 15 working days prior to the MPC meeting—is assumed to depreciate rather faster than is implied by the differential between UK and overseas interest rates. This reflects the expectation that some of the portfolio and erratic factors that have contributed to sterling's appreciation over the past year will unwind. In the central projection the effective exchange rate is assumed to fall to around 90 by the end of the forecast period. Government expenditure plans and effective tax rates have been taken from the July Budget.

Broad money and credit growth poses some important and difficult questions about the outlook for inflation. Much of the recent growth relates to the OFI sector of the economy. And there has been a long-term trend decline in broad money velocity. Even so, to be consistent with the path for demand and output implied by the central projection, the rate of broad money growth will need to decline. Money therefore remains an important upside risk to the inflation projection.

A rapid increase in household wealth over the past year, partly associated with the rise in equity values and the recovery in house prices, has led to strong consumption growth. Consumption is likely to rise further, reflecting the demutualisation windfalls. So consumption growth will be inflated this year but should fall back through 1998 and early 1999 as the initial impact of the windfalls wears off.

The investment figures have been revised up since the May *Report*. The recovery in the business investment to GDP ratio now looks more consistent with the indicators of investment highlighted in previous *Reports*. Section 3 shows that the picture is not the same across all sectors and types of asset. But the incentives for

business investment remain strong and some further increase in the aggregate investment to GDP ratio is probable. Surveys of investment intentions are consistent with this.

The central projection assumes that the rise in retail stocks in 1997 Q1 reflected quarterly volatility rather than weaker-than-expected demand. The strong growth of retail sales in May and June does not seem consistent with a picture of weaker-than-expected demand. The aggregate stock-to-output ratio seems likely to resume its long-term decline.

Assessment of the impact of the July 1997 Budget measures on the inflation outlook requires an estimate of the impact of taxation and spending plans on economic activity. The Government confirmed in its July 1997 Budget that cash spending plans for 1997/98 and 1998/99 would be unchanged, apart from the Welfare to Work programme and additions to local authority housing investment. The implications for real spending depend on the outlook for inflation. Growth in nominal spending is planned to rise by around $2^{1/2}$ % a year, suggesting that there will be little change in the overall volume of public spending over the two-year period.

Estimating the effect of the 1997 Budget on economic activity is particularly hard for two of the main fiscal measures: the windfall tax on utilities and the changes to Advance Corporation Tax (ACT) credits. In both cases the ultimate burden of the tax falls on households—as shareholders or employees. A one-off measure, such as the windfall tax on utilities, is unlikely to change economic behaviour, as it will have little effect on income expectations. Moreover, since this policy change was widely expected, the market may already have discounted it before the announcement. The price of the utilities sub-sector actually rose relative to the FT-SE All-Share index following the Budget announcement, so any adjustment to profit and dividend expectations may already have occurred.

The Treasury estimate that the abolition of payment of ACT credits to pension funds will raise around £4 billion in 1998/99. In due course, this will reduce the consumption of shareholders of companies which will have to meet the higher cost of pension commitments, and of employees whose earnings or pensions may bear part of the additional burden.

The preliminary output estimate for 1997 Q2, together with recent monthly indicators of the components of total



Chart 7.2

Chart 7.1 Current RPIX inflation projection

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

demand, suggests that net trade may have made a negative contribution to GDP growth in the second quarter. And survey evidence indicates a growing impact on export orders from sterling's appreciation. The strength of domestic demand and sterling's appreciation are likely to lead to more rapid import growth, despite the subdued fall in import prices recorded so far following the appreciation. So the effect on net trade is likely to come through during the second half of the year and into next.

Taken together, the July Budget measures, the timing of the impact of demutualisation windfalls on consumption and the net trade effect from sterling's appreciation suggest that output growth is likely to slow considerably towards the end of this year and into 1998. Towards the end of the forecast period, however, output growth is projected to pick up again as the longer-term influence of fast money growth on demand reasserts itself.

The Bank's medium-term projection of the twelve-month RPIX inflation rate is shown in Chart 7.1. The projection was discussed and agreed by the MPC. It is shown next to May's projection (see Chart 7.2).

Chart 7.3 Distribution of RPIX inflation forecasts for 1997 Q4



Chart 7.4 Distribution of RPIX inflation forecasts for 1998 Q4



Table 7.A Expected RPIX inflation(a)

Probability,					
	Range:				
	Less	1.0%	2.5%	4.0%	More
	than	to	to	to	than
	1.0%	2.5%	4.0%	5.5%	5.5%
1997 Q4	4	46	44	6	1
1998 Q4	5	30	48	14	4

(a) 34 outside forecasters provided the Bank with their assessments of the likelihood, at two time horizons, of expected twelve-month RPIX inflation falling in the ranges shown above. This table presents the means of the responses for each range. For example on average, forecasters assign a probability of 5% to inflation turning out to be less than 1% in 1998 Q4. Rows may not sum to 100, because of rounding.

The short-term projection continues to be influenced by the one-off impact of sterling's appreciation since August 1996 and the recent rise of seasonal food prices. The profile for RPIX is also affected by changes in indirect taxation announced in the July Budget. Any remaining effect from the exchange rate appreciation is likely to appear quite quickly and will remain in the twelve-month rate of inflation for a year. The twelve-month rate of inflation is likely to fall below $2^{1/2}$ % over the next year or so, but then begin to rise as growth in the economy picks up.

The central projection for inflation two years ahead—the horizon most relevant for monetary policy—is somewhat lower than in the May *Report*, at around $2^{1/2}$ %. The main reasons for this are the three 0.25 percentage point rises in interest rates in June, July and August, and the fiscal tightening announced in the July Budget. The further appreciation of sterling is likely to depress UK net trade and to lower inflation two years ahead. The main factors partly offsetting these influences are the acceleration of money and the rise in wealth. And the forecast horizon has been pushed out an additional quarter since the May *Report*, which by itself raises the central projection because the trend in inflation two years ahead is expected to be upward.

The risks around the central projections are more on the upside than in the May *Report*, and this stems mainly from the possibility of faster growth in demand if, in the event, the pace of expansion of wealth, money and credit does not moderate. The main downside risk throughout the forecast period stems from net trade, and from a combination of factors in the labour market which may act to hold down real earnings growth.

7.2

Other forecasters

Chart 7.3 shows that the median forecast for twelve-month RPIX inflation in 1997 Q4 among the 52 outside forecasts surveyed by the Bank was 2.5% in July, slightly lower than in April. Chart 7.4 shows that the median forecast for 1998 Q4 was just under 3.0% in July 1997, little changed from the April survey. The distribution remains slightly skewed, but the bimodal distribution evident at the time of the February and May *Reports* has disappeared.

Thirty-four outside forecasters have provided the Bank with their assessments of the probabilities they attach to various possible inflation outcomes (see Table 7.A). On average, the outside forecasters place equal weight on inflation in 1997 Q4 being above or below the target of $2^{1/2}$ %. At the time of the May *Report* they gave a greater than 50% chance of inflation being above $2^{1/2}$ %. The shift in the distribution probably reflects the impact of sterling's continued appreciation and the tightening of monetary and fiscal policy. Looking further ahead, the Bank survey shows that the probability of inflation being above $2^{1/2}$ % in 1998 Q4 was judged to be around twice as high as the probability of being below the target.

Conclusions

The dilemma facing monetary policy has remained acute over the past quarter. Buoyant domestic demand, fuelled by rapid growth of wealth, money and credit, has led to faster output growth. At the same time, the large rise in the effective exchange rate over the past year is now leading to severe pressures on those sectors most exposed to international competition, especially manufacturing businesses.

7.3

Two things are crucial to understanding the effect of sterling's appreciation. First, it is necessary to know the sources of the appreciation. Second, the response to the exchange rate will depend, in part, on its perceived persistence. The rise in sterling since last August is partly a reflection of a weak Deutsche Mark and associated continental currencies rather than a reflection of domestic economic factors. Indeed, sterling has fallen against both the dollar and the yen since the beginning of the year. While the sources of the weakness of continental currencies persist, it is difficult to avoid the current dilemma for monetary policy. But the exchange rate appreciation has been larger and more persistent than expected at the time of the May *Report*, although sterling fell back in the week before this Report was finalised.

Broad money and credit growth has risen and asset values continue to rise rapidly. The growth of broad money over the past year in real terms was almost 9%. Unless that growth rate declines, possibly in response to the policy tightening that has occurred, or there is a large fall in velocity, demand and output are unlikely to moderate in line with the central projection. Over the first half of the year, non-oil output grew at 4% a year, well above any plausible estimate of trend growth. It is difficult to find evidence of any significant margin of spare capacity in the economy. The labour market has continued to tighten. Using the internationally comparable Labour Force Survey measure, short-term unemployment has now fallen to 4.5%, lower than at any point since the survey started and close to levels in the United States. So far that has not led to any noticeable upward pressure on UK earnings. The growth rate of earnings has risen by less than 1 percentage point over the past year and, adjusted for the timing of bonuses, has been broadly flat during this year. But further rises would take earnings growth above the level consistent with the inflation target in the medium term.

Output growth is likely to fall back later this year and through 1998, reflecting the impact not only of the higher exchange rate but also of the monetary and fiscal tightening that has been put in place over the past quarter and the unwinding of the windfall effect. Despite a fall of some 4% in the week leading up to the finalisation of this *Report*, the sterling effective exchange rate remains around 20% above its level of a year ago. The marked reduction in the general government deficit over the two-year period from last fiscal year to next year, and the 0.75 percentage point increase in interest rates since May, will both play a part in bringing output growth down from unsustainable levels.

The outcome for inflation will depend on the balance between the factors sustaining domestic demand and those exerting a contractionary influence. The outlook for the next year or so is favourable. Much of the first round effect of a rise in sterling on the domestic price level has yet to come through. Import prices are flat or falling and output price inflation remains subdued. Further out, the recent policy tightening will help to keep inflation down, although the central projection picks up to around $2^{1}/_{2}$ % by the end of the forecast period.

As ever, there are uncertainties and risks to the central projection on both sides. At present, they appear to be more on the upside. In the short run, asset prices, such as the exchange rate and the level of the stock market, are volatile. Looking further ahead, there is uncertainty about the impact of money and credit growth on the pace of domestic demand expansion. Given those uncertainties, the MPC concluded that monetary policy has now reached a position at which it should be possible to pause in order to assess the direction in which the risks are likely to materialise.

Glossary and other information

Glossary of selected terms

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

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

THARP index: the HARP index excluding indirect taxes.

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

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

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

GDP(E): the expenditure measure of GDP. **GDP(I):** the income measure of GDP. **GDP(O):** the output measure of GDP.

BCC: British Chambers of Commerce.
BSAR: British Social Attitudes Report.
CBI: Confederation of British Industry.
CIPS: Chartered Institute of Purchasing and Supply.
ERI: exchange rate index.
GFK: Gesellschaft Für Konsum, Great Britain Ltd.
ICCs: industrial and commercial companies.
JSA: Jobseeker's Allowance.
LFS: Labour Force Survey.
MORI: Market Opinion Research International.
MPC: Monetary Policy Committee.
OFIs: other financial institutions.
PSBR: Public Sector Borrowing Requirement.
WIE: Workforce in Employment.

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

Symbols and conventions

Except where otherwise stated, the source for the data used in charts and tables is the Office for National Statistics (ONS).

The measures of inflation included in this *Report* have been adjusted by the Bank for an ONS error in under-recording RPI and RPIX inflation between February and May 1995. n.a. = not available.

Because of rounding, the sum of the separate items may sometimes differ from the total shown.

On the horizontal axes of graphs, larger ticks denote the first observation within the relevant period, eg data for the first quarter of the year.

Other information

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



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

1 Sections I to V of this minute summarise the analysis presented to the Monetary Policy Committee by Bank staff and the Bank's regional agents, and incorporate also information that became available to the Committee after the presentation but prior to the 6 June meeting.

I Monetary conditions

2 The 12-month growth rate of notes and coins had fallen back since January, when it was 7.1%. It had fallen to 6.3% in April and the provisional estimate for May was 6.1%. It was not yet clear whether the fall simply reflected a deceleration in demand for cash following the recent fall in retail price inflation, or whether it had implications for future spending.

3 Broad money, too, decelerated in April: its 12-month growth rate fell back to 10.2%, having been above 11% in February and March. M4 went up by 0.2% in April: retail M4 fell and wholesale M4 decelerated, perhaps partly because the month's public finances were stronger than expected. Individuals' M4 holdings had accelerated modestly this year—to a 12-month growth rate of 6.5% in April, from 5.8% in December. The last monthly data followed a quarter (Q1) in which ICCs' holdings grew by 9.3% (annualised). The trend growth of real M4 remained around 8%, which continued to indicate strong future real demand growth.

4 Lending growth continued at around 9% in April. Borrowing by ICCs, which had decelerated in Q1, picked up again in April, and unused credit facilities (mainly to ICCs) continued to rise quickly (the 12-month increase was about 13% in April). Interest rate spreads seemed to have narrowed for ICCs and OFIs in Q1, which suggested that banks had become more willing to lend, perhaps in response to competition from other forms of financial intermediation.

5 Lending to individuals remained robust in Q1 and in April: unsecured lending went up by 16.7% in the year to April and secured lending by 5.2%, consistent with the recovery in the housing market. Loan-deposit interest rate spreads widened slightly for the personal sector in 1996 Q4, so the recent growth probably reflected strong demand for credit, particularly for unsecured loans.

6 Gilt yields had fallen sharply since the announcement of independence of the Bank on 6 May. Index-linked yields had not changed much, and so the implied future rate of inflation calculated from a comparison of the yield curves for conventional and index-linked gilts had fallen: the implied rates for ten years ahead had fallen by about 0.5 percentage points on 6 May itself. That could in principle reflect either lower inflationary expectations or a lower inflation risk premium. If the true explanation had been a lower inflation risk premium, a fall in the volatility implied by options on long gilt futures might have been expected to occur. In fact it had not occurred to a material extent. That, and the absence of a material change in the spot exchange rate were both consistent with the view that the explanation of the fall in conventional gilt yields had been a fall in inflationary expectations. In that case, it was suggested that the main effect would be modestly to increase the likelihood that inflation would turn out below the central projection over the next year or two, as indicated in the May Inflation Report. Even after the fall in bond yields following the announcement of Bank independence, the inflation rate implied by the conventional and index-linked gilt yield curves for 10 years ahead was still around $3^{1/2}$ %. That was one percentage point above the Government's target; one percentage point was at the top end of the range of estimates of the risk premium.

II Demand and output

7 There were substantial discrepancies, dating back to 1995, among the three estimates of GDP. The output estimate had in the past typically been revised by less than the expenditure estimate, and it seemed likely that the expenditure estimate would be revised upwards to bring it into line with the output estimate. Revisions were due on 27 June.

8 The most recent estimate of GDP growth in 1997 Q1 was 0.9% (revised down from the preliminary estimate of 1.0%, though estimated non-oil growth remained at 1.0%), but the recent pattern of strengthening output growth was unchanged. Of the expenditure components of GDP in Q1, investment growth was surprisingly strong (3.3%), though there was no clear change of trend. Net exports made a negative contribution in Q1 but this was not exceptional. Services output growth remained very strong in Q1 (1.2% on the quarter); manufacturing picked up a little (to 0.6%) and the revival of construction went further (up 1.8% on the quarter). Manufacturing output rose by 0.6% in April; taking account of revisions to estimates for earlier months, it was 1.7% up on a year earlier. New construction orders rose in April.

9 Consumer spending had been growing at an average of about 1% a quarter since the beginning of 1996, consistent with the growth of real personal disposable income. Retail sales had risen by only 0.1% in April but the estimate for March in particular had been revised upwards. The Bank's Agents reported a sharp rise in spending at the end of March (which could account for the revision) followed by a slowdown in April and a pick up in May, but the CBI distributive trades survey indicated some deceleration of retail sales in May. Because of recent rises in the prices of shares, and particularly bank shares, the expected size of windfall gains arising from demutualisation of building societies and other institutions in 1997 had increased to perhaps £35 billion from the £28 billion quoted in the May *Inflation Report*.

10 House price inflation (measured on a 12-month basis), having risen quite sharply in 1996, had not risen appreciably further so far this year, though the Nationwide index suggested that there might have been a pick-up in May. Indicators of housing market activity showed a similar pattern, with relatively stable levels in 1997 after sharp rises in 1996, although mortgage approvals rose sharply in April.

11 The small rise in total stocks in Q1 was broadly consistent with the expected longer-run trend of a falling stock-output ratio. Stocks had increased in the retailing, construction and manufacturing sectors. In manufacturing the rise had been concentrated in raw materials and work in progress; stocks of finished goods had fallen.

12 There was as yet no clear downtrend in net exports. Exports to non-EU countries had risen sharply: the USA had grown very fast in Q1, but it was expected by US commentators to slow down spontaneously. Net exports to EU countries had been resilient. GDP growth in France and Germany (though not Italy) had picked up to just below trend, but domestic demand growth in those countries had been subdued.

13 Comment from the corporate sector suggested that the effects of exchange rate appreciation on net exports and output were likely to appear only after a lag, because of contracts in which the price and quantity were fixed for a period, because UK exporters seemed to be prepared to accept lower margins for a period in order not to lose markets that had taken time to develop, and because in some cases forward cover taken out by either the exporter or importer meant

that the exchange rate appreciation had not yet affected either party's profits. Some manufacturers expected to benefit from lower imported material prices. Nevertheless, the Agents reported that some companies had lost export orders, and that cheaper imports had made domestic markets more competitive. Manufacturers' output expectations were still positive according to the CBI and CIPS surveys although export orders were weakening.

III Labour market

14 Indicators of employment and unemployment pointed to a rapidly tightening labour market. Income from employment had risen unusually fast in Q1, by 2.1%. Claimant unemployment had fallen by 59,000 in April. Unfilled vacancies, which edged up further, were at their highest since the series began in 1980. The Agents were reporting growing skill shortages, and the fact that receipts of PAYE and national insurance contributions had been unexpectedly high in April suggested that employment income growth was remaining strong. Surveys showed increasing percentages of employers planning to recruit.

15 Recent claimant unemployment figures had been influenced by the introduction of the Jobseekers' Allowance. Claimants now had to sign a Jobseekers' Agreement, and to be genuinely seeking work, in order to be eligible for benefit, which was now available without means testing for six months rather than 12 as hitherto. The six month transition period ended in April, by when all claimants had to have signed a Jobseekers' Agreement. The changes had deterred a number of former claimants. Analysis by Bank staff suggested that about half of the fall in claimant unemployment over the six months to April might be attributed to non-searching claimants leaving the register. Excluding the JSA deterrent effect, the monthly fall in unemployment seemed to have been around 30–35,000.

16 The main news about earnings was the downward revision of estimated underlying average earnings growth in the year to February from 5% to $4^{1/2}$ %, at which rate it remained in March. About half of that revision reflected late information. In addition, the estimate of underlying average earnings incorporated a forecast of earnings a month ahead because it was a 3-month centred moving average. The ONS had over-forecast bonus payments in March when compiling the February figure, and had corrected the over-forecast when revising the figure. The Bank staff estimate of underlying average earnings growth excluding bonuses had been revised down as a result of the ONS revision, but only slightly: from $4^{1}/_{2}$ % to $4^{1}/_{4}$ %– $4^{1}/_{2}$ %.

17 Average earnings had been growing faster in the private than in the public sector since around 1993. The gap between the growth rates was currently wide by historical standards.

18 The decline in the preliminary estimate of three-month average of pay settlements in April reflected the large number of phased public sector settlements in April, and probably did not indicate a change of trend: indeed the three-month average of private sector settlements had risen slightly in April.

IV Prices

19 Commodity prices (including oil), as measured by the Bank's index, had fallen by 2.4% in April.

20 Recorded import prices were little changed (down 0.7%) from November to March, and were only 5% lower in March than a year earlier, despite the exchange rate appreciation. Changes in prices of imports from EU and non-EU sources had been surprisingly similar, given the difference in the extent of exchange rate appreciation. Both the trade statistics and reports from the Agents suggested that imported intermediate products had fallen more in price than imported finished products. Export prices had fallen by less than the exchange rate appreciation might have suggested, though the contrast between prices of exports to EU and non-EU countries was more marked than was the case for imports.

21 Manufacturers' input prices fell by 1.9% in April, and were 10.5% down on a year earlier. The CIPS survey had indicated that input prices had continued to fall in May, but the input price index had in fact risen by 0.6%, reflecting a rise in oil prices. Output prices had been flat or falling in every month of this year, and were up 0.8% in April on the same month a year earlier (only 0.1% excluding excise duties); in May they were up by 1.0% on a year earlier (0.2% excluding excise duties).

22 Twelve-month RPIX inflation fell for the third consecutive month to 2.5% in April. Elsewhere in Europe consumer price inflation had continued to fall, in spite of significant exchange rate depreciation; and inflation had also fallen back this year in the United States.

23 In the UK, there was a continuing contrast between goods and services inflation. Goods inflation fell further in April, to 1.9%, compared with 2.1% in March and over 3% in late 1996. Services inflation, which had been as low as 2% in spring 1996, was unchanged at 3.2% between March and April this year. The April figure for services inflation was particularly significant because approaching half of services prices are recorded in a survey held in the first month of each quarter. Within the category of services, utility and rent inflation fell between March and April, while other services inflation continued to rise.

24 Although manufacturers' output prices had been flat, their margins on domestic sales appeared to have been rising, mainly owing to falling costs and productivity improvements rather than rising prices. Within services, many rents and utility charges were fixed in April for a year, suggesting that 12-month inflation of these items was likely to remain low. But there were not similar factors affecting inflation of other services.

V Financial markets

25 Short-term interest rates expected over the next couple of years appeared to have fallen immediately after the announcement that the Bank was to be given operational independence, but the fall had since been broadly reversed. Prices of short sterling futures were consistent with three-month LIBOR of 6.99% in December 1997 and 7.32% in December 1998, compared with a cash market rate of 6.59% on 5 June 1997. Expectations that the Bank would increase interest rates in June had been growing.

26 The sterling ERI, which stood at 99.7 (1990 average = 100) at the close of business on 5 June, had not changed much on balance since the eve of the announcement of the Bank's operational independence. It was up $17^{1/2}$ % since August 1996. Market comment suggested that sterling had in the last few days been supported by uncertainties about EMU and an associated softening of the Deutsche Mark, and by growing expectations of a rise in interest rates.

27 The evolving prospects for EMU had continued to be an important influence on sterling. As the £/DM exchange rate had appreciated since last summer, the pattern of correlations among the exchange rates of European currencies had been consistent with a growing market expectation of a broader monetary union but not including sterling, and with the view that sterling had been regarded as a safe haven.

28 Equity prices had risen by 0.8% over the last month as measured by the FT-SE 100 index, which stood at 4,557 on 5 June, compared with 4,519 on 6 May. The continuing rise was difficult to explain by changes in either real interest rates or announced dividends, and might therefore reflect either a rise in expected future real dividend growth or a reduction in perceived uncertainty about future dividends.

VI Policy implications of the analysis

29 The Committee began its review of the policy implications of the analysis by discussing the problems posed for policy by the combination of strong domestic demand growth and a sharp appreciation of the exchange rate. Members agreed that the main issue at present was to assess the prospective strength of domestic demand against the effect of the exchange rate appreciation.

30 The latest data pointed to continuing strength in domestic demand growth. The Committee noted the increase, through the rise in equity prices, in the estimated size of windfall gains arising from demutualisation of building societies and other institutions in 1997, and discussed the likely effects on consumer demand. For consumers who were not liquidity constrained, the effect on spending in the near term might be no greater than the annuity value of the windfalls. Consumers who were liquidity constrained were likely to spend more than the annuity value of the windfalls in the near term, though if they did so, the increase in their future wealth would be correspondingly smaller.

31 In discussing asset price developments, members noted the rise in house prices since summer 1995, and the fact that prices in south east England had risen more than in other parts of the UK. They noted that rising equity prices might reflect either a strengthening outlook for corporate profits or a falling risk premium in equity yields.

32 The most likely outturn for consumer spending over the next few months was continued growth at around the rates observed recently, notwithstanding indications (from notes and coins and the CBI distributive trades survey) of some possible softening in retail sales, and of regional variations in the strength of demand. Asset price developments—rising house prices and equity prices implied some upside risk to that outlook.

33 Conditions for investment were promising: the stock market valuation of the corporate sector was well above the estimated replacement cost of its capital equipment, and ICCs' M4 balances were high in relation to estimated demand.

34 It was surprising that the effects of the exchange rate appreciation on external demand had not yet become apparent in recorded export or import volumes, but the Committee thought it most likely that they had simply been delayed and that a deterioration in net exports, consistent with survey indications, was to be expected. The projection in the May *Inflation Report* had incorporated such an assumption. Nevertheless, taking account of the outlook for both domestic and external demand, total output was likely to continue growing at above-trend rates.

35 The Committee discussed the labour market. It was not clear how low a level of unemployment would be compatible with maintaining a stable rate of inflation, but members viewed the gradual rise in real average earnings growth since late 1995 as evidence that labour market conditions had been tightening. In discussing recent price developments members noted the contrast between falling goods price inflation and rising service sector inflation (other than rents and utilities). The fall in goods inflation was probably a temporary reflection of the appreciation of sterling, which was likely to have a one-off effect on the price level rather than a material continuing effect on inflation. The rise in services inflation (other than rents and utilities) however seemed to be mainly the result of growing demand, which was likely to continue. There were therefore sound reasons for expecting goods price inflation and overall inflation to rise, when the one-off effect of the exchange rate appreciation had worn off.

36 Members discussed financial market developments and noted that financial markets appeared to be discounting a rise in three-month interbank interest rates to around 7¹/₄% over the coming twelve months. They discussed the appreciation of sterling since the summer of last year and its possible causes, including changes in current and expected future monetary policy in the UK and overseas, and possible safe-haven portfolio effects related to EMU. It was difficult to be confident about the relative significance of various possible causes, but there was little reason to change the analysis in the May *Inflation Report*. The effect of the appreciation on the economy would depend on what the causes were and how persistent the rise in sterling proved to be.

37 The Committee reviewed current uncertainties related to the domestic economy, which included the specific uncertainty about the forthcoming Budget as well as the normal uncertainties about the economic outlook and about the reaction of financial markets—particularly the foreign exchange market—to any change in interest rates.

38 Taking all the evidence into account, members agreed that the prospect for domestic demand was sufficiently buoyant that, despite the probable future impact of the higher exchange rate on activity, there was a need for tighter monetary policy in order to hit the inflation target looking two years or so ahead.

39 The Committee then turned to its immediate decision. They considered whether the timing of a rise in interest rates should be influenced by the timing of the Budget, but concluded that there was no strong reason why it should be. They also discussed the likely influences on the exchange rate in the near term, and the possible effect of a rise in interest rates. The Committee noted that the foreign exchange market was now expecting a small rise in interest rates to be decided at the meeting, and that sterling might be pushed up further by EMU uncertainties in the next month or so. It debated whether delaying a rise in interest rates would be any less, but concluded on balance that there was no strong reason to think that that was so, while a delay would mean some increase in the inflationary risks to the domestic economy.

40 Taking all the factors into account, the Committee judged that a modest increase in interest rates was needed immediately and all members voted for an immediate increase of ¹/₄% in interest rates.

VII Procedures

41 The Committee discussed the timing of the publication of the minutes of its meetings, and concluded that as a general rule the minutes of each meeting should be published on the Wednesday after the following meeting.

42 The following members of the Committee were present:

The Governor The Deputy Governor Professor Buiter Professor Goodhart Mr King Mr Plenderleith

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

Text of Bank of England press notice of 6 June 1997

Bank of England raises interest rates by 0.25% to 6.50%

The Bank of England has today raised its official dealing rate (the repo rate) by 0.25% to 6.50%.

The Bank's Monetary Policy Committee has reviewed the latest monetary and economic data. It concluded that the latest evidence is consistent with the outlook described in the Bank's *Inflation Report* published on 13 May. Notwithstanding the strength of the exchange rate, which is expected to restrain retail price inflation temporarily in the near term, the *Report* concluded that 'the central projection for inflation, and the risks surrounding it, suggests that, on the present evidence, there is still likely to be a need for some further moderate tightening of policy in the months ahead.'

The Committee accordingly voted to raise the Bank's repo rate by 0.25% to 6.50%. It believes that this action to tighten the monetary stance, taken with the aim of meeting the government's inflation target, offers the best chance of achieving continued growth in output and employment at a sustainable pace.

The increase takes immediate effect.

Minutes of the Monetary Policy Committee meeting on 9–10 July 1997

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

I Summary of the analysis presented to the Monetary Policy Committee

(i) Monetary conditions

2 The estimated change in notes and coin in May had been revised upwards to an increase of 0.4%, and the provisional outturn for June was an increase of 0.8%: the increase over the twelve months to June was provisionally estimated at 6.2%. There now appeared to have been little change in the twelve-month increase since February, so the evidence of a continuing deceleration had weakened.

3 Broad money growth was unusually low in April: the revised estimate for the month was 0.3%. It strengthened in May: the provisional monthly estimate was 1.4%. On that basis, the annualised three, six and twelve-month growth rates of M4 were all 11% or more. Within the total, retail M4 accelerated in May and its twelve-month growth rate was estimated at 6.5%. Wholesale M4 growth showed no sign of softness in May. In real terms, broad money was growing at an annualised rate of nearly 8¹/₂%, the highest rate since spring 1990.

4 Strong lending growth was continuing: the increase of total M4 lending in the twelve months to May was estimated at 9.4%, much the same as the rates recorded during 1996 and earlier in 1997. M4 lending to industrial and commercial companies appeared a month ago to have picked up in April, having decelerated in Q1. The estimate for April had now been revised upwards and the provisional estimate for May was also strong. Unused credit facilities available to the corporate sector had increased by over 18% in the year to 1997 Q1, which suggested that corporate borrowing might remain strong.

5 Lending to persons also remained strong. Unsecured lending increased by about 17% in the twelve months to May, and secured lending by about 5.3%; total personal lending increased by about 7%—the largest twelve-month increase since early 1992.

6 There was evidence of a rise in short maturity real interest rates between Q1 and Q2, both from the index-linked gilt yield curve and from comparing survey evidence of inflation expectations with the rise in market nominal interest rates. Nevertheless, even after the increase, real short-term interest rates seemed to be a little lower than in late 1994, and substantially lower than at the peak of the previous interest rate cycle in the late 1980s and early 1990s; and only slightly above the long-term real interest rate implied by index-linked gilt yields.

(ii) Demand and output

7 There were substantial revisions to the national accounts, mostly concerning the period since 1994, resulting from the arrival of new information, including from the Inland Revenue. Estimated GDP growth in 1997 Q1 was unchanged at 0.9%, but the estimated level in 1997 Q1 had been revised upwards by 1%. The estimated growth of domestic demand in 1997 Q1 had been revised downwards from 1.2% to 0.7%, but its estimated level in 1997 Q1 had been revised upwards by 1.2%. The estimated change in net exports in 1997 Q1 had been revised, surprisingly, from a fall equivalent to 0.3% of GDP to a rise of the same size, and the

estimated rise in investment had been revised downwards from 3.3% to 0.9% (though the estimated level was now higher). Estimated growth of consumer spending remained strong. On the new estimates, the personal saving ratio had peaked at 12.9% at the beginning of 1996 and had been falling since then, reaching 10.4% in 1997 Q1, but estimates of the personal saving ratio were particularly subject to revision.

8 Following the data revisions, GDP growth appeared to have picked up at the end of 1996: the new estimate of growth in 1996 Q4 was 1.1%. The estimated level of manufactured output had been revised upwards following the re-classification of output between manufacturing and services in the move to SIC92. On the new estimates, GDP rose by 3.1% over the year to 1997 Q1. Non-oil GDP also rose by 3.1%, and within that services output rose by 4.1% and construction by 3.7%. Over the two quarters to 1997 Q1, GDP had grown at an annualised rate of 3.9%. The CBI quarterly survey conducted in April suggested that capacity utilisation in manufacturing was below its 1995 peak, and the British Chambers of Commerce survey conducted in Q1 suggested that capacity utilisation in both manufacturing and services fell between 1996 Q4 and 1997 Q1.

9 Recent strong growth in consumer spending had been concentrated on durables, sales of which were up by 7.8% in 1997 Q1 on a year earlier. Total retail sales were estimated to have risen by 1.1% in May: such a large increase was not unusual in a single month and came after a flat April: it was consistent with reports from the Agencies of a slowdown in April and a pick-up in May. Nevertheless retail sales had risen at an estimated annualised rate of nearly 8% since the turn of the year. That rapid growth might reflect anticipation by consumers who were not liquidity constrained of windfall gains arising from demutualisation of building societies and other institutions. Consumer confidence appeared to be very strong: the MORI index was at the highest level recorded since the survey began in 1979.

10 There had been a divergence over the last few months between the Nationwide and Halifax house price indices: the Nationwide indicated rising house price inflation, with the twelve-month increase in prices reaching 11% in June, whereas the Halifax reported that the twelve-month increase in prices had been 7.1% in June, little changed during the course of this year so far. Indicators of housing market turnover had been volatile but with no clear trend since the beginning of the year; new housing starts had fallen back since the winter.

11 The revisions to estimated investment had accounted for the larger part of the revisions to estimated GDP over the period since 1994. The picture of a downward trend in aggregate investment (measured at constant prices) relative to GDP during the current recovery did not appear greatly changed, though the ratio of business investment (ie excluding government investment and investment in dwellings) to business output now appeared to have been rising quite strongly and was now higher than its long-run average. Service sector investment had been growing fast, and manufacturing investment had been recovering; investment intentions were strong in the service sector.

12 The ratio of stocks to output, which had risen during 1995, appeared to have reverted to its downward trend. The large rise in the ratio of retail stocks to retail sales which had begun in 1993 was partly the consequence of retailers internalising the wholesaling function and should not therefore be taken at face value.

13 The current account of the balance of payments recorded a surplus of $\pounds 1.5$ billion in 1997 O1—the largest surplus since 1983.

Import volumes were surprisingly weak in Q1, and the indications thus far about volumes of goods exports in Q2 looked stronger than might have been expected. Demand growth in France and Italy remained weak; there were some signs that it had become a little stronger in Germany, and it was strong in the United States.

14 The Agencies had discussed the impact of sterling's appreciation with around 150 of their contacts. About 60% of the manufacturers had seen no major impact on their export order volumes, and the larger firms had generally seen less impact than the smaller ones. However 80% had experienced a fall in the profitability of exports, and some (a minority) were now exporting at a loss. Looking ahead, 60% of the manufacturers expected their order books to be affected, mainly in the next 3-6 months. The longer the exchange rate remained at or around current levels, the greater the concerns. The largest effects had been in steel, metal processes, machinery, agriculture and some engineering industries. The weakest effects had been in aerospace and defence, cars, electronics and telecommunications. The main reasons given for the durability of export volumes were the length of existing contracts, willingness to accept lower margins and the fact that foreign exchange cover had been taken out. Some firms producing niche products or products currently in very strong demand had been protected, and others which were part of multinational groups had been protected by internal pricing arrangements which were reviewed only every 12-18 months.

15 The effects on exporters of services among the Agencies' contacts had generally been less than on exporters of manufactures. Retailers and wholesalers were reporting lower foreign expenditure, for example at hotels and airport shops.

16 On the import side, less than 10% of manufacturers reported that the appreciation had affected their own import volumes. Importers and distributors had not been under great pressure to reduce prices charged to retailers, because domestic demand was strong. Retailers were likely to take a considerable time to switch to new sources of supply: they had to find new suppliers and get the design right.

17 Industrial production fell by 0.9% in May after rising by 0.9% in April. Manufacturing output fell by 1.1% in May after rising by 0.5% in April. The fall in manufacturing output in May had been widely spread among industrial sectors and was not obviously concentrated on exports.

18 Although estimated GDP had been revised upwards by about 1%, it was not clear that the upward revisions would have a major impact on the outlook for inflation. Much of the revision to growth rates related to the period up to 1995 Q1, and the effects on inflation of faster growth in that period would be expected to have become evident by now. The upward revision to estimated output growth in 1996 Q4 could nevertheless indicate that inflationary pressures were likely to build up faster than might otherwise have been expected.

19 The outlook for fiscal policy had been changed by the Budget presented on 2 July. The projections made in the light of the 1997 Budget, excluding the windfall tax and the spending of the proceeds, could usefully be compared with those made after the November 1996 Budget, adjusted to allow for the changes in assumptions made following the NAO audit. On that comparison, the PSBR for 1997/98 was now put at $1^{3}/4\%$ of GDP (£13.3 billion), some $3^{3}/4$ percentage points lower than the adjusted November estimate; and the PSBR for 1998/99 was projected at $3^{3}/4\%$ of GDP (£5.4 billion), some $1^{1}/4$ percentage points lower than the adjusted November estimate.

20 It was difficult to estimate how much additional structural tightening was embodied in the Budget. One method of estimation was to subtract any projected real change in spending (abstracting from the effects of the economic cycle) from any change in taxation

from an indexed base. There were three particular sources of difficulty. First, it was not clear how to treat the windfall tax and associated spending, given that they were one-off measures and neutral in cash terms over a five-year period. Second, the government had confirmed that cash (control total) spending plans for 1997/98 and 1998/99 were unchanged. The implications for real spending consequently depended on a forecasting assumption of the outlook for inflation. Third, estimates of the economic impact of the abolition of tax credits on dividends seemed to be unavoidably very uncertain.

21 Acknowledging all the uncertainties, the best assessment was that the Budget would put moderate downward pressure on the rate of inflation further ahead, over and above the contractionary effect from the tightening already in the pipeline.

(iii) Labour market

22 Claimant unemployment fell by some 18,000 in May and the rate of unemployment was down to 5.8%. May was the first month after the completion of the administrative arrangements for the introduction of the Jobseekers' Allowance, and the May change in claimant unemployment could be expected to have been largely free of transition effects. The monthly fall was lower than the estimate (of around 30-35,000 a month) of the rate at which claimant unemployment had been declining excluding the JSA deterrent effect, but it was too soon to say whether the trend was slower than earlier thought. The Labour Force Survey due the following month would shed more light on the issue. The workforce in employment data showed an increase in employment of 86,000 in Q1 and some 360,000 (1.4%) in the year to Q1. The estimated increase in income from employment in Q1 had been revised down from 2.1% to 1.9%, but income tax and national insurance returns for April and May together had remained quite buoyant. The stock of vacancies reported to Jobcentres was little changed over the last few months, at a historically high level.

23 Business surveys and reports from the Agencies continued to indicate both growing demand for labour and growing recruitment difficulties, particularly for skilled workers but also in some cases for unskilled labour. The Agencies were also reporting a preference for recruitment from among those already employed rather than the unemployed, and accompanying increases in labour market turnover and poaching of staff. Voluntary quitting of jobs was more widespread in service industries.

24 The rise in employment in the year to Q1 was concentrated in service industries, where employment rose by 376,000. Manufacturing employment was down a little over the period, but it had risen in the latest two months. Reports from the Agencies, supported by business surveys, suggested that manufacturers were planning to increase employment, though there were some reports of exporters cutting jobs in response to falling orders.

25 In the first four years of the economic recovery, most or all of the additional jobs created were part-time. In the latest year the pattern had changed and most of the additional jobs created over that period were full-time. Moreover, according to the Labour Force Survey, during 1996 the rise in employment were about one and a half times as large as the fall in unemployment. This was in contrast to the earlier part of the recovery, when the rise in employment was roughly the same as the fall in unemployment. The effective supply of labour appeared to have increased in 1996—partly because the population of working age continued to grow, and partly because there was no further rise in economic inactivity among the population of working age.

26 Underlying average earnings growth in the whole economy was estimated to have remained unchanged at $4^{1/2}\%$ in April. There was a possibility, however, that this figure could be revised downwards to $4^{1/4}\%$. Information on pay settlements in the NHS and for local authority employees was not yet available, but the

employment-weighted mean of settlements in the three months to April had been revised upwards from 2.8% to 3%, and the median from 2.4% to 2.5%, in the light of new information reporting higher settlements in the private sector. The current estimates for the three months to May were the same as for the three months to April. The twelve-month average remained at 3.2% in April and May. Employment-weighted mean settlements seemed to have drifted down to 2.7% in the public sector in the twelve months to May from 3% in the twelve months to March, but there had been a slight rise in the private sector to 3.4% from 3.3%. Within the private sector the rise appeared to be concentrated in service industries.

(iv) Prices

27 The Bank's commodity price index rose by 1.7% (provisional figure) in May, having fallen by 3% (revised figure) in April. The May increase was mainly attributable to oil; metals and coffee prices had also risen. Oil prices fell back in June.

28 Non-oil import prices fell by 1% in April and by a total of 5.2% since August 1996; prices of non-oil imports from non-EU countries were unchanged in May. It remained puzzling that prices of imports from EU countries had not fallen by more in response to the appreciation of sterling.

29 Producer input prices rose in May by 0.6%—the first monthly increase since October last year—mainly on account of higher oil prices. They were 9.1% lower than in May 1996. The CIPS survey indicated continuing falls in input prices, though the speed of fall seemed to have decreased. Producer output prices rose by 0.2% in May. The index excluding excise duties (PPIY) recorded its first monthly increase since October 1996, and was 0.2% higher than a year earlier. Non-oil export prices fell by 0.7% in April and by 3.3% since August 1996. Manufacturers' margins on domestic sales appeared to be wider than a year earlier, owing to falling material and fuel costs, but export margins had narrowed as export prices had fallen.

30 The twelve-month increase in RPIX was 2.5% in May—the same as in April—but the twelve-month increase in RPI rose from 2.4% to 2.6% as last year's reductions in mortgage rates had dropped out of the calculation. In June, RPIX inflation rose to 2.7%. The increase was largely accounted for by an unexpected rise in seasonal food prices, which was unlikely to affect the medium-term outlook. On the RPI measure, inflation rose even further in June, to 2.9%, following rises in mortgage rates. The Harmonised Consumer Price Index rose by 1.6% in the twelve months to May: the comparable figures in France, Germany and Italy had been 0.9%, 1.4% and 1.7% respectively. CPI inflation in May in the United States was 2.3% and in Japan 1.9%.

31 Within RPIX, goods price inflation rose to 2.0% in June from 1.8% in May. Services price inflation fell to 3.1% from 3.2%: utilities and rent inflation fell from 0.7% to 0.4% while inflation of other services prices was unchanged at 4.7%. It was to be expected that services would normally rise faster in price than goods: historical experience across countries suggested that service price inflation had normally exceeded goods price inflation by about $1^{3}/4^{6}$ per year. The United Kingdom experience in 1995–96, when the reverse had been true and goods had risen faster in price than services, had been exceptional: it might have been a result partly of rising goods inflation following the rise in commodity prices and the depreciation of sterling in spring 1995, and partly of productivity improvements in utilities (which were continuing) and in other services, in particular insurance. The re-emergence of the normal pattern in the United Kingdom, with services rising faster in price than goods, probably partly reflected the more recent appreciation of sterling.

(v) Financial markets

32 The sterling ERI stood at 104.1 (1990 average = 100) at the close of business on 9 July: it had risen by 4.4% since 5 June. at

the time of the previous MPC meeting, of which 2% had come since 30 June, before the Budget. The appreciation since 2 August 1996 was 23.8%.

33 The ERI fell slightly immediately after the interest rate increase on 6 June following the previous Monetary Policy Committee meeting, which had been discounted in foreign exchange markets. Most of the appreciation since then had taken place since the release of the retail sales and broad money data in mid June; and there had been an upward movement after the Budget. EMU developments also appeared to have continued to influence sterling. Sterling had appeared sensitive to expressions of official concern about its current level, but any setbacks had tended to be short-lived.

34 In domestic markets, as in foreign exchange markets, the interest rate increase on 6 June had not come as a surprise. Since then, the short-end of the yield curve had moved up, particularly after the release of the retail sales and broad money data, and there had been some further upward movement after the Budget, though gilt yields had fallen in response to the prospect of reduced official gilt sales and the news that interest would be paid gross, and the short-term interest rates 5 years and more in the future implicit in the gilt-edged yield curve had fallen. Three-month LIBOR on 9 July was 7.06%; the levels indicated by futures markets for September 1997, December 1997 and December 1998 were 7.22%, 7.45% and 7.54% respectively.

35 Since 5 June, current and implied future short-term interest rates in the UK had risen relative to the overseas average for periods up to around 5 years in the future, though for periods further in the future, implied future UK rates had fallen modestly relative to the overseas average. Almost half of the appreciation of the sterling ERI from 5 June to 30 June, and perhaps three quarters of the further appreciation since then, could be associated with such yield curve shifts.

36 Until mid June, options markets suggested that the market attached a significant probability to the prospect of no further change in official short-term interest rates by mid September. Since mid June, however, the distribution had shifted up. After the Budget the market appeared to attach very little probability to the prospect of no change, and roughly equal probabilities to the prospects of increases by September of 1/4%, 1/2% and 3/4%. A clear expectation had developed of a 1/4% rise in July.

37 Equity prices, as measured by the FT-SE 100 index, had risen by a further 4.1% since 5 June from 4576 to 4762 on 9 July, though the FT-SE 250 index had fallen by 1.6%. In the United Kingdom, work done by Bank staff suggested that the equity risk premium appeared to have fallen in recent years. But part of the rise in equity prices over that period should probably be attributed to other factors, such as a rise in expected future dividend growth. Additional possible influences on equity prices included the withdrawal of dividend tax credits, though the effect would have been partly offset by the reduction in the rate of corporation tax. The net effect of the tax changes might have partly obscured the underlying strength of the equity market.

II Policy implications of the analysis

38 This section of the minute summarises the Monetary Policy Committee's discussion of the policy implications of the analysis.

39 The Committee began its discussion by reviewing the information that had become available since its previous meeting. It agreed that the main issues were the revisions to the national accounts data, windfall gains from demutualisations and their effect on consumer spending, the behaviour of the exchange rate and its effect on the economy, the Budget, and the behaviour of the labour market. 40 The Committee reviewed the newly available money and credit data, which appeared stronger than a month earlier when there had been indications of possible deceleration. Broad money was growing at an annualised rate of 11% or more, compared with a rate of inflation (RPIX) of 2.7%. Personal money and credit growth had picked up this year at a time of strong consumer confidence. Overall, monetary growth continued to be a source of considerable concern.

41 The Committee considered the upward revisions to the estimated profile of GDP and their implications for the output gap. Members noted that the revisions made no difference to the direct indicators of the output gap, such as labour market indicators and measures of capacity utilisation, which were probably more reliable than indicators based on output data. They also noted however that the estimated annualised growth rate of output in the two quarters to 1997 Q1 had been revised upwards to 3.9%, so that during that period the output gap had been narrowing more quickly than previously thought, and future inflationary pressures were likely to be greater as a result.

42 Members noted the upward revision to the estimated change in net exports in 1997 Q1, and the offsetting downward revision to estimated domestic demand growth: the apparent strength of net exports was surprising against the background of the exchange rate appreciation, which had led to a serious fall in export profitability. After the revision, final domestic demand had risen at an annualised rate of 4% in 1996 Q4 and 1997 Q1.

43 The index of production for May showed a one-month fall of 1.1% in manufacturing output—a surprising figure, even allowing for the normal volatility in the series. There were two reasons for thinking that it might be partly the result of difficulties with seasonal adjustment: the recorded fall in output was spread remarkably evenly across sectors, and surveys of manufacturing industry (including exporters) conducted in May had been quite buoyant. Taking April and May together, the recorded figures indicated some growth in manufacturing output, though not much.

44 The Committee discussed consumer spending and the effect of windfall gains from demutualisations. Theory suggested that recipients who were not liquidity-constrained would increase their flow of consumption by no more than the annuity value of the windfall gains-though they might initially spend in excess of the annuity value to buy durable (including housing-related) goods which would provide a stream of future services. Recipients who were liquidity-constrained were likely to increase their flow of consumption in the short term by more than the annuity value of the windfalls. The Committee noted that retail sales, particularly of durables, had been growing fast this year even before liquidity-constrained consumers had been able to spend their windfalls. Retail sales rose by 1.1% in May; in the past there had been a tendency for unusually strong monthly figures to be followed by unusually weak ones. On that basis, the June figure might be expected to be low. However spending by those recipients of windfalls who were liquidity constrained would have boosted retail sales in June, so that a second consecutive strong figure was possible.

45 The Committee discussed the labour market. It remained surprising that earnings growth had not increased further during the last few years given the recorded increases in employment and falls in unemployment. Over the previous six to nine months, quantity indicators, business surveys and Agencies' reports all suggested that the labour market had continued to tighten but earnings growth had not risen over that period, although it had risen over the last twelve months. It appeared possible that the rate of unemployment compatible with a stable rate of inflation was lower than had earlier been thought. That might be the case, for example, if job insecurity had had a larger effect on wage behaviour than previously thought or if inflationary expectations were lower than had been previously thought. But it was also possible that there could be a sudden sharp increase in earnings growth, as there had been in the late 1980s, when earnings growth had risen after what had seemed at the time a surprisingly long period of stability.

46 Twelve-month RPIX inflation rose from 2.5% in May to 2.7% in June. This could be attributed to rises in prices of food, and especially seasonal food, the price of which had previously been unusually low. It therefore seemed largely to represent a temporary shock to supply, and as such would not have any medium-term effect on inflation. Prices of consumer durables were a little lower than expected in June, and inflation of utilities prices was at its lowest ever, though partly on account of temporary influences.

47 The Committee noted the divergent estimates of the rate at which house prices were rising. It seemed possible that the rise in mortgage loan approvals in April and May was a leading indicator of a future pick-up in house prices. It was puzzling that, at a time when prices were rising, indicators of housing market activity were not stronger.

48 UK equity prices had continued to rise quickly. It was pointed out that the rise in the UK market was less than in some other countries. Nevertheless, the rise would add to financial wealth.

49 The Committee discussed the macroeconomic effects of the Budget. The Treasury projections of the General Government Financial Deficit were lower than at the time of the 1996 Budget by the equivalent of 1% of GDP in 1997/98 and some $1^{1}/4\%$ of GDP in 1998/99. The Treasury estimated that the structural deficit would fall by around $1^{1}/_{2}\%$ of GDP in 1997/98 and by around a further $3^{1}/_{4}\%$ in 1998/99.

50 It was argued that the assessment of the demand effects of the Budget should take into account relative movements of tax revenues and public expenditure. It was pointed out that, by comparison with the November 1996 Budget, projected tax revenues had risen relative to public expenditure as a share of GDP.

51 The direct effect on the real economy of the decision to leave the nominal control total for public spending unchanged depended on the outlook for inflation. On the basis of the change in the Treasury's projection for the GDP deflator, the effect in 1998/99 would be to reduce the real value of public spending by the equivalent of about 1/2% of GDP compared with the 1996 Budget. On the basis of changes in, for example, the National Institute and LBS forecasts of the GDP deflator, the effect would be smaller. The gap between public and private sector earnings would affect the outlook for the volume of public spending. Accordingly, it was difficult to assess the effect of the Budget on the real value of public spending, which had been very tightly constrained even in the 1996 Budget. However, to the extent that lower prices for public expenditure reflect lower real incomes for those employed in or supplying goods and services to the public sector, there may be negative demand effects elsewhere in the economy.

52 Members discussed the incidence of the tax measures. The abolition of dividend tax credits to pension funds would affect both the cost of meeting pension entitlements already earned and the cost of pension entitlements yet to be earned. The former cost would fall mainly on company shareholders, though there would also be costs, for example to local authorities, and a possible impact on Council Tax. The additional cost of pension entitlements yet to be earned would fall partly on employees. The measure therefore seemed likely to have a larger effect on the personal sector than had widely been recognised, and the reduction of MIRAS and the excise duty measures would have a direct impact on the personal sector. The windfall tax and the welfare to work programme were largely offsetting and taken together seemed likely to have little macroeconomic effect in the short term. Some of the tax measures seemed likely to have a delayed effect, for example because they

were not being implemented immediately (MIRAS) or because they would affect consumers only after a lag (dividend tax credits).

53 Overall, on the basis of the analysis currently available, members thought that the real contractionary effect of the Budget (both spending and tax measures) probably lay between $\frac{1}{2}$ % and 1% of GDP. The Budget seemed likely to have its full effect on the economy only after some delay. It was agreed that the economic effects of the Budget would need to be further examined in the August *Inflation Report*.

54 The Committee discussed financial market developments. Sterling's exchange rate index had appreciated further since the previous meeting. Sterling interest rate futures markets were now indicating three-month interest rates of around 7% in September and $7^{1/2}$ % in December, with little change indicated thereafter. The upward shift in the short-term yield curve over the last month reflected both the emerging indicators and the market's perception that the Budget did less than it had previously expected to restrain demand growth, so that in the market's view interest rates were likely to be increased by more in the immediate months ahead than the market had previously expected.

55 The further appreciation of sterling had intensified the difficulties of industries exposed to international competition. Given the relative positions of the yield curves in the United Kingdom and abroad, some gradual depreciation of sterling was to be expected, thus reversing part of the earlier appreciation. A higher proportion of the latest month's exchange rate appreciation could be related to changes in relative yield curves than with the earlier appreciation. The residual appreciation in the latest month seemed likely to reflect in part EMU-related influences (a smaller proportion of the appreciation against the Deutsche Mark seemed to be yield-curve related than in the case of other currencies).

56 The Committee agreed that a great deal of new information about the monetary and economic situation had emerged in the last month and that the Bank's *Inflation Report* due in August would provide a clearer view of its implications. Members agreed nevertheless that it was clear that domestic demand was growing significantly faster than any plausible measure of potential output and that a further tightening of monetary policy was needed.

57 The Committee discussed the relative merits of a rise in interest rates of $^{1}/_{4}$ % or $^{1}/_{2}$ % this month. A number of possible arguments were considered. First, domestic demand was growing strongly. A further large increase in retail sales volumes in June seemed quite possible, for example, and the news could harm confidence in

monetary policy unless clearly pre-emptive action had been taken. There was a danger of adjusting interest rates by too little too late. Second, there were a number of reasons for expecting output to decelerate in 1998: spending of windfall proceeds would decrease, net exports were likely to fall, and the contractionary effects of the Budget would increasingly affect the economy. In those circumstances, bringing forward the tightening of monetary policy—and any subsequent easing—might help to smooth the path of output by causing spending to be deferred from 1997 to 1998. Third, it could be argued that an increase in interest rates large enough to create some market uncertainty about the direction of the next move might put less upward pressure on the exchange rate than an equivalent series of small increases.

58 On the other side, it was argued that strong retail sales in June, if they occurred, could be explained as a one-off increase in spending arising from windfalls. Some members had doubts about how effective an immediate rise in interest rates, even of $\frac{1}{2}\%$, would be in restraining demand in 1997, and others thought that a $\frac{1}{4}\%$ increase with the expectation of a further $\frac{1}{4}\%$ to follow might have much the same effect on spending as a $\frac{1}{2}\%$ increase. And it was not clear how large an increase in interest rates would be needed either to achieve the inflation target or to create market uncertainty about the direction of the next move: there would be a risk that an increase of $\frac{1}{2}\%$ would lead to an upward revision of the expected level at which interest rates would peak and would cause the exchange rate to appreciate unnecessarily.

59 Members agreed that the analysis in the August *Inflation Report* was likely to make it clearer whether a further increase in interest rates of more than $\frac{1}{4}$ % was likely to be needed to bring the projection of inflation two years or so ahead into line with the inflation target, and if so, how large it would need to be. For the present, an increase of $\frac{1}{4}$ % to $\frac{6}{4}$ % seemed appropriate.

60 In the light of the discussion, all members of the Committee voted for an immediate increase of 1/4% in interest rates.

61 The following members of the Committee were present:

Eddie George (Governor) Howard Davies (Deputy Governor) Willem Buiter Charles Goodhart Mervyn King Ian Plenderleith

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

Text of Bank of England press notice of 10 July 1997

Bank of England raises interest rates by 0.25% to 6.75%

The Bank of England's Monetary Policy Committee has today voted to raise the Bank's official dealing rate (the repo rate) by 0.25% to 6.75%. The increase takes immediate effect.

The combination of rapid expansion of domestic demand led by consumption and the further appreciation of sterling has sharpened the dilemma for monetary policy. The Monetary Policy Committee's task is to aim to balance nominal demand and the supply potential of the economy, in order to meet the inflation target and create the conditions for sustained growth of output and employment. Continued growth of output at well above trend rates would be sustainable.

The Committee reviewed the latest monetary and economic data and against the background of the Bank's *Inflation Report* published on 13 May and the 0.25% rise in official interest rates announced on 6 June. It concluded that the latest month's evidence—notably the upward revision of estimated output growth in the fourth quarter of 1996 and recent developments in monetary growth and retail sales—indicated that a further tightening of monetary policy was necessary, notwithstanding the further appreciation of the exchange rate and the contractionary effects of the recent Budget.

Minutes of today's Monetary Policy Committee meeting will be published on Wednesday 13 August. Minutes of the meeting held on 6 June will be published on Wednesday 16 July.

Text of Bank of England press notice of 7 August 1997

Bank of England raises interest rates by 0.25% to 7.00%

The Bank of England's Monetary Policy Committee has today voted to raise the Bank's official dealing rate (the repo rate) by 0.25% to 7.00%. The increase takes immediate effect.

The Committee reviewed the latest monetary and economic data and discussed the analysis and inflation projection to be incorporated in the Bank's *Inflation Report* which will be published on 13 August. It recognised that the appreciation of the exchange rate over the past year is putting severe pressure on businesses exposed to international competition. Nevertheless, in the light of the prospect for domestic demand and on the basis of all the evidence currently available, the Committee judges that today's rise is necessary to put the economy on track for achieving the inflation target of $2^{1}/_{2}$ % looking two years ahead. Although the present strength of sterling reflects in large part factors outside the influence of UK monetary policy, upward pressures on the exchange rate should be reduced by the perception that interest rates have reached a level consistent with the inflation target.

The previous change in interest rates was a rise of 0.25% on 10 July.

Minutes of today's Monetary Policy Committee meeting will be published on Wednesday, 17 September. Minutes of the meeting held on 10 July will be published on Wednesday, 13 August.