Inflation Report

November 2002

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

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

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

The Monetary Policy Committee:

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The Overview of this *Inflation Report* is available on the Bank’s web site at [www.bankofengland.co.uk/inflationreport/infrep.htm](http://www.bankofengland.co.uk/inflationreport/infrep.htm) The entire *Report* is available in PDF at [www.bankofengland.co.uk/inflationrep/index.html](http://www.bankofengland.co.uk/inflationrep/index.html)

## Overview

*The recovery in the world economy remains fragile and global stock markets have continued to be volatile. In the United Kingdom, quarterly output growth has picked up to around trend. The consumer continues to be the primary engine of growth in demand. That has been associated with rapid house price inflation and accelerating household borrowing. The Committee’s central projection at the current level of official interest rates is for four-quarter GDP growth to settle at around trend over the next two years. Pay pressures remain subdued. Annual RPIX inflation averaged 2.0% in the third quarter. It is projected to move above the 2.5% target in the near term, dip slightly below it towards the end of next year, and then edge back up towards target as the two-year horizon approaches. Significant risks to the outlook for growth and inflation remain.*

The global economic recovery remains patchy. In the United States, output growth picked up in the third quarter, as consumers increased purchases of motor vehicles in response to generous financing deals. But that stimulus is likely to prove temporary and a drop in consumer confidence suggests household spending could moderate. The euro area has experienced below-par growth in output, with sluggish consumer spending and weak business investment holding back domestic demand. Japan has seen a modest pick-up in activity, led by external demand, but prospects there remain subdued.

However, strong domestic demand has ensured output growth has held up relatively well in a number of other Asian economies.

Global equity prices fell sharply again during late summer, but regained most of that lost ground in October. Notwithstanding the recent rise, equity indices stand well below their levels at the start of the year and there is considerable uncertainty about the impact of that correction on future consumer spending and investment. The Federal Reserve has cut official interest rates by 0.5 percentage points, while official rates have remained unchanged in the other major economies. In the face of the continued accommodative monetary stance, market interest rates have softened and that will help to counteract any weakness in global activity. The Committee continues to expect UK-weighted world demand to strengthen gradually. But although prospects are broadly the same as in the August *Inflation Report*, there are significant risks to the outlook.

In the United Kingdom, GDP is provisionally estimated to have risen by 0.7% in Q3, slightly up on the second-quarter growth rate, although the impact of the Jubilee holidays has masked the

underlying trends in some of the constituent series. So while output in the manufacturing sector expanded by over 1% in the third quarter, the underlying trend since Q1 appears to have been broadly flat. The Jubilee effects were probably rather less significant for the services sector, which grew by 0.8% in Q3.

Taking the second and third quarters together, the underlying picture is one of around-trend output growth.

The growth in consumers’ expenditure picked up sharply to 1.3% in the second quarter, though some of that may reflect the timing of Easter. More muted growth is likely to have occurred in Q3, but record levels of consumers’ confidence in their own financial position and rapid growth in borrowing suggest that the outlook is for spending to remain strong in the near term.

The resilience of consumer spending in recent quarters has been associated with a rise in annual house price inflation to around 25%–30%. That has allowed owner-occupiers to increase their secured borrowing, thus supporting consumer demand and offsetting the impact of lower equity prices. But recent rates of house price inflation are unsustainable.

Together with slowing growth in real disposable incomes and lower equity wealth, slower house price inflation would act to dampen future spending growth.

Underlying government spending has been rising strongly, though recent quarterly movements have been erratic.

Government consumption in Q2 was 4.6% up on a year earlier, while capital spending was almost 12% higher. Continued strong growth in public expenditure is planned for the next two years.

Business investment was little changed in Q2, but around 11% lower than a year earlier after especially sharp falls around the turn of last year. Sufficient capacity, weak profitability, pressures on corporate balance sheets and subdued investment intentions all point to a sluggish near-term outlook for capital spending. Destocking reduced second-quarter growth, but that may have been partly related to the Jubilee and some reversal is likely to have happened in Q3.

Net exports boosted growth in the second quarter, but recent movements in exports and imports have been erratic and trade data point to a return to a negative contribution in Q3. In every year since 1996, net exports have detracted from growth, though improved terms of trade have limited the impact on the current account deficit.

Chart 1 shows the MPC’s assessment of the outlook for GDP growth, on the benchmark assumption that the official interest rate remains at 4.0%. Under the central projection, robust consumer demand pushes four-quarter GDP growth up to a

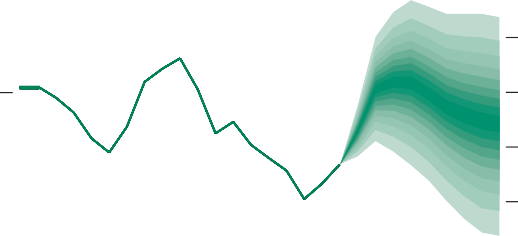
*Overview*

Chart 1

**Current GDP projection based on constant nominal interest rates at 4%**

Percentage increase in output on a year earlier 6

5



4

3

2

1

+

0

–

1

little above trend early next year. Growth then settles back, as a deceleration of household spending offsets a recovery in external demand, higher public expenditure and a modest

pick-up in business investment. The profile for output growth is broadly similar to that shown in the August *Report*.

Among other factors, inflationary pressure depends upon the balance of demand relative to supply in labour and product markets. The employment rate has changed little through the slowdown, as job losses in manufacturing have been offset by increased recruitment in the public sector and construction, though some easing in underlying labour demand is suggested by the decline in total hours worked. In the three months to August, the ILO unemployment rate was 5.2%, just

1998 99 2000 01 02 03 04

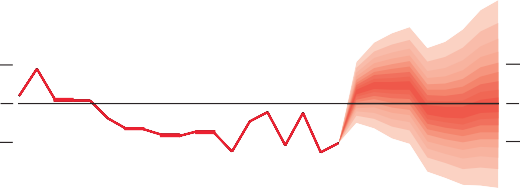
The fan chart depicts the probability of various outcomes for GDP growth in the future. The darkest band includes the central (single most likely) projection and covers 10% of the probability. Each successive pair of bands is drawn to cover a further 10% of probability, until 90% of the probability distribution is covered. The bands widen as the time horizon is extended, indicating increasing uncertainty about outcomes. See the box on pages 48–49 of the May 2002 *Inflation Report* for a fuller description of the fan chart and what it represents.

Chart 2

**Current RPIX inflation projection based on constant nominal interest rates at 4%**

Percentage increase in prices on a year earlier

5

4

3

2.5

2

1

0

1998 99 2000 01 02 03 04

The fan chart depicts the probability of various outcomes for RPIX inflation in the future. The darkest band includes the central (single most likely) projection and covers 10% of the probability. Each successive pair of bands is drawn to cover a further 10% of probability, until 90% of the probability distribution is covered. The bands widen as the time horizon is extended, indicating increasing uncertainty about outcomes. See the box on pages 48–49 of the May 2002 *Inflation Report* for a fuller description of the fan chart and what it represents.

* 1. percentage points above its May 2001 trough. Along with other indicators, that suggests only a slight easing in labour market tightness. Headline earnings growth has been running at a little under 4% since May, but may soon edge up as the delayed local authority pay settlement takes effect.

Growth in productivity per head had been unusually weak during the slowdown—though productivity per hour held up better—but the growth of unit wage costs has eased as output growth has picked up. Concerns about the possibility of military action in Iraq produced a spike in oil prices, and increases over the course of this year are now working through into input costs. While there are significant differences across sectors, survey measures and other indicators suggest that capacity utilisation is, on average, a little below normal. RPIX inflation ticked up to 2.0% in Q3, though monthly movements remain volatile. The marked divergence between goods and services price inflation has persisted, reflecting sectoral differences in market conditions as well as in productivity growth.

Chart 2 shows the Committee’s assessment of the outlook for RPIX inflation. In the central projection, inflation rises above the 2.5% target by the end of this year reflecting the impact of higher oil prices and an unusually high contribution from housing depreciation. It remains at that higher level for most of next year, and then drops a little below target as those influences unwind, subsequently edging back up as the two-year horizon approaches. Compared with the August *Report*, the profile is rather higher in the first year and slightly lower during the second year.

Among the many uncertainties surrounding these projections, the Committee identified a number of particular risks. First, that US consumer spending might falter and the euro area remain sluggish, thus threatening the global recovery. Second, that the exceptional rate of house price inflation might

continue for a while yet, leading ultimately to a more abrupt slowdown in both house price inflation and consumer spending growth. Third, that the pass-through into wages and prices of the increase in National Insurance contributions next spring might be greater than in the central projection. The crystallisation of any of these risks could have material implications for the prospects for growth and inflation, and thus for policy. But, overall, the Committee judges that, relative to the central projection, the balance of risks to growth is weighted somewhat to the downside, with those to inflation slightly on the upside.

At its November meeting, the Committee noted that, although uneven, the profile for inflation under the central projection remained close to target over the forecast period. Bearing in mind the substantial risks, the Committee judged that it was at present appropriate to leave official interest rates at 4%. But the Committee observed that prompt action might be required if any of those risks appeared to be crystallising.

**Contents**

* + 1. [Money and asset prices](#_bookmark0) 3
       1. [Asset prices](#_bookmark0) 3

[Equity markets](#_bookmark0) 3

[Monetary policy](#_bookmark1) 4

[Government bond yields](#_bookmark2) 5

[Exchange rates](#_bookmark3) 6

[Property prices](#_bookmark3) 6

* + - 1. [Money and credit](#_bookmark4) 8

[Monetary aggregates](#_bookmark4) 8

[Households](#_bookmark6) 10

[Private non-financial corporations](#_bookmark7) 11

*Boxes* [*Developments in the velocity*](#_bookmark5)

[*of narrow money*](#_bookmark5) *9*

[*International housing-market* developments](#_bookmark8) 12

* + 1. [Demand](#_bookmark9) 15
       1. [External demand and UK net trade](#_bookmark9) 15

[Euro area](#_bookmark9) 15

[United States](#_bookmark10) 17

[Asia](#_bookmark11) 18

[Net trade](#_bookmark12) 19

* + - 1. [Domestic demand](#_bookmark12) 19

[Consumption](#_bookmark12) 19

[Public sector spending](#_bookmark13) 22

[Investment](#_bookmark13) 22

[Inventories](#_bookmark14) 23

*Box* [*Base years and the National Accounts*](#_bookmark15) *24*

* + 1. [Output and supply](#_bookmark16) 27
       1. [Output](#_bookmark16) 27
       2. [Capacity utilisation](#_bookmark17) 28
       3. [Labour productivity](#_bookmark18) 30
       4. [Employment](#_bookmark19) 32
       5. [Labour supply](#_bookmark21) 34

[Working-age population](#_bookmark21) 34

[Participation](#_bookmark21) 34

[Unemployment](#_bookmark22) 35

*Box* [*The 2001 Census*](#_bookmark20) *33*

* + 1. [Costs and prices](#_bookmark23) 37
       1. [Earnings and settlements](#_bookmark23) 37
       2. [Commodity prices](#_bookmark24) 39
       3. [Import prices](#_bookmark25) 40
       4. [Costs and prices in manufacturing](#_bookmark25) 40
       5. [Costs and prices in the service sector](#_bookmark26) 41
       6. [Retail prices](#_bookmark27) 42
    2. [Monetary policy since the August *Report*](#_bookmark28)45
    3. [Prospects for inflation](#_bookmark29) 49
       1. [The inflation projection assumptions](#_bookmark29) 49
       2. [The output and inflation projections](#_bookmark30) 52

*Box* [*Other forecasters’ expectations of*](#_bookmark31)

[*RPIX inflation and GDP growth*](#_bookmark31) *63*

[Agents’ summary of business conditions](#_bookmark32) 65

[Press Notices](#_bookmark33) 69

[Glossary and other information](#_bookmark34) 70

Money and asset prices 1

Chart 1.1

*Global equity prices rose a little following publication of the August* Inflation Report*, but then fell sharply during September. Most indices have now recovered to stand at levels close to those seen three months previously. There have also been large fluctuations in the prices of government bonds, with equity prices and bond yields tracking each other closely.*

*Some early indicators point to a possible slowdown in housing market activity. But this has not yet fed through to weaker house price inflation—the annual rate in October looks to have been somewhere in the range 25%–30%. Household borrowing has accelerated. In Q2, less than half the total amount of secured borrowing was invested in the housing stock. It is likely that most of the remainder was used to fund additional consumption.*

**World equity markets since the August *Report***(a)

Index; 31 July 2002 = 100

110



S&P 500

FTSE All-Share

Topix

Euro Stoxx

105

100

95

90

85

80

Aug. Sept. Oct. Nov.

2002

Sources: Bank of England, Bloomberg and Thomson Financial Datastream.

(a) All equity price indices have been converted into sterling.

##### Asset prices

Equity markets

There has been considerable turbulence in world equity markets during the past three months. In the period between 31 July and 6 November, the price of a broad basket of UK equities varied by almost 20%—the FTSE All-Share index reached a peak of 2147 in late August, and a low of 1783 in late September. For most of the time, other major equity price indices followed paths similar to that of the FTSE All-Share, which suggests that some of the factors driving equity markets were global in nature (see Chart 1.1). Equity price movements have been large in comparison to news about some of the factors that ought to be driving them—for example, expectations of corporate earnings growth over the medium term have changed little in recent months. This, together with high measures of implied volatility as derived from options prices, suggests that market participants have been very uncertain about the valuation to place on equities. The average of the FTSE All-Share index in the 15 working days up until 6 November was 1955, close to its average of 1985 in the 15 working days up until 31 July. The starting point for the equity price projection contained in this *Report* is a little below the starting point used in August.

Although the overall change in UK equity prices during the past three months has been small, by 6 November, when data for this *Report* were finalised, the FTSE All-Share index had fallen more than 20% since the beginning of the year, and was 40% below its value at the end of 1999. Chart 1.2 shows how

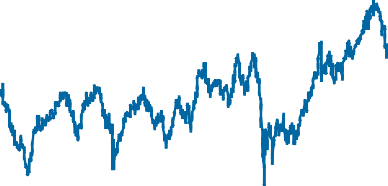
Chart 1.2

**Real UK equity prices since 1915**(a)

Index; Jan. 1915 = 100 (log scale)

1,000

UK equity prices have changed, in real terms, since 1915. Although dominated by the collapse in real equity prices during 1973 and 1974, the recent decline has been large by post-war standards. And it unwound much of the real increase that had occurred between January 1992 and December 1999.



1915 25 35 45 55 65 75 85 95

100

10

Monetary policy

On 7 November, the MPC maintained the Bank of England repo rate at 4%. This two-week official interest rate has now been left unchanged for a year. On 6 November, the

US Federal Open Market Committee reduced its target for the federal funds rate by 0.5 percentage points to 1.25%. Official interest rates in the euro area have remained unchanged since the August *Report*.

Sources: Bank of England, Bloomberg, Global Financial Data and ONS.

(a) Equity prices are measured at the end of each month and deflated by an RPI series that has been seasonally adjusted by the Bank.

The chart ends in September 2002, which is the final data point for the RPI.

Chart 1.3

**Two-week forward interest rates**(a)

Per cent

Policy-makers have an interest in knowing what financial market participants expect will happen to the official rate of interest. These expectations affect the terms on which individuals can both lend and borrow money. Moreover, when policy-makers are informed about what people expect them to do, it can help them to judge whether the actual policy decision will be a surprise, and hence what influence it might have on other financial market prices, and on the economy.

Each day, Bank staff estimate two nominal forward interest rate curves—known as the government liability curve and the commercial bank liability (CBL) curve—from which information about financial market expectations can be obtained.(1) But this is not a straightforward exercise.







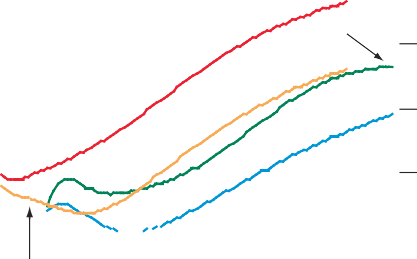




Government 31 July (c)

6.0

5.5



CBL 6 Nov. (b)

CBL 31 July (b)

Government 6 Nov. (c)

5.0

4.5

4.0

3.5

3.0

0.0

The government liability curve is based on a combination of

general collateral (GC) repo rates with a maturity of up to six months, and gilt yields.(2) Interest rates implied by the government liability curve are often thought to approximate risk-free interest rates. The commercial bank liability curve is fitted through a sequence of rates at which commercial banks lend money to each other on an unsecured basis, known as London Interbank Offer Rates (or Libor), and a number of derivative instruments that settle against Libor. In the period since the August *Inflation Report*, both curves have shifted down and to the right (see Chart 1.3). One interpretation is that, by 6 November, financial market participants believed

July

2002

Jan.

July Jan.

03

July

04

that the timing of an official interest rate rise had been further

Source: Bank of England.

1. A forward interest rate is the rate implied for a future period by comparisons of current shorter-term and longer-term rates.
2. Commercial bank liability curve. Based on Libor rates and a number of derivative instruments that settle against Libor.
3. Government liability curve. Based on GC repo rates and gilt yields.

delayed.

The government liability curve, as derived, can be an imperfect measure of expectations about the official two-week repo rate, if the yields on particular gilts are affected by fluctuations in

1. The government liability curve has previously been referred to in the *Inflation Report* as the GC repo/gilt curve. Estimates of both the government liability curve and the commercial bank liability curve are published daily on the Bank of England web site at [www.bankofengland.co.uk/statistics/yieldcurve/main.htm](http://www.bankofengland.co.uk/statistics/yieldcurve/main.htm)
2. A GC repo rate is the rate that one financial institution pays to borrow money from another when it effectively offers any gilt as security against the risk of default.

Chart 1.4

**Nominal and real forward rate curves**(a)

Per cent

6

Nominal 31 July

5

Nominal 6 Nov.

4

Real 31 July 3

Real 6 Nov.

2

1

0

0 5 10 15 20 25

Maturity (years) Source: Bank of England.

* 1. A forward interest rate is the rate implied for a future period by comparisons of current shorter-term and longer-term rates.

Chart 1.5

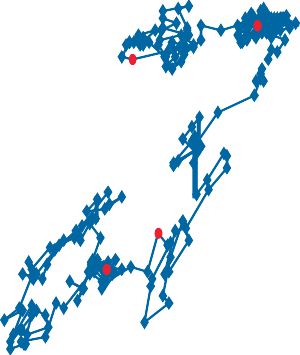
**Equity prices and conventional gilt yields in the United Kingdom in 2002**(a)

FTSE All-Share index

the demand for them that are unrelated to monetary policy. Some of the dip in the government liability curve towards the middle of next year may have reflected such factors. Interest rates implied by the commercial bank liability curve incorporate a time-varying credit risk premium, to compensate for the risk of default on unsecured loans to private sector organisations. In addition, both curves are affected by term premia, which tend to widen the gap between the implied forward rate and the expected policy rate at longer maturities. Each curve can give misleading signals about market expectations of official rates from time to time, but the large movements down and to the right shown in Chart 1.3 are likely to be significant nonetheless.

In the week before each regular monthly meeting of the MPC, Reuters conducts a survey of economists working in the financial sector. Such surveys, though less timely than information obtained from financial market prices, are still helpful because they provide a direct measure of expectations. In the most recent survey, published on 31 October, 18 of the 32 respondents expected that the Bank of England repo rate would be left unchanged at the meeting on 6 and 7 November. The average expected rate for the end of 2002, at 3.87%, was a little below the current repo rate. The rate expected for the end of 2003 was 4.45%. These forecasts were both around half a percentage point lower than the equivalent forecasts published on 25 July. All of the available evidence suggests that expectations of the two-week Bank of England repo rate during the next twelve months or so, have fallen since the August *Report*. Survey-based measures of inflation expectations have tended to fall too (see Section 4), though by a smaller amount, so the short-term real rate of interest has probably fallen.

2600



8 May

6 Feb.

31 July

6 Nov.

2500

2400

2300

2200

2100

2000

1900

Government bond yields

The Government liability curve, and a real forward interest rate curve derived from index-linked gilt yields, provide measures of the implied rates, both nominal and real, at which financial markets would be willing to lend to the UK government at different points of time in the future. The rates at which households and firms can borrow money will be related to these forward interest rates, but will generally be higher.

4.2 4.4 4.6 4.8 5.0 5.2 5.4

Ten-year conventional gilt yield (per cent) Sources: Bank of England and Bloomberg.

(a) Each dot represents the FTSE All-Share index and the ten-year

1800

1700

Chart 1.4 shows that, by 6 November, nominal forward interest rates had fallen by around 0.2 percentage points at maturities up to five years, but were broadly unchanged further out. There had been little movement in real forward

conventional gilt yield at close of business on a particular day. Red

dots represent the final data available to the Committee when projections contained in this and past *Inflation Reports* were finalised.

interest rates.

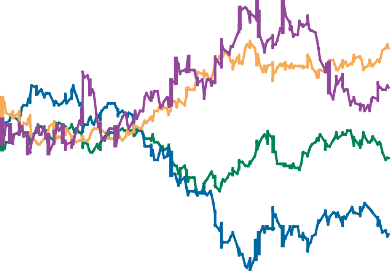
Just as equity prices have varied substantially during the past three months, so too have gilt yields, with the ten-year nominal

Chart 1.6

**Effective exchange rate indices**

1 January 2002 = 100

110



Japanese yen

Euro

Sterling

US dollar

105

100

95

90

yield reaching a high of 4.8% and a low of 4.4%. Chart 1.5 shows how UK equity prices have moved closely in line with gilt yields since May, with both tending to fall. This pattern is consistent with an increase in equity risk resulting from greater uncertainty about equity returns. If investors started to demand less risky assets, such as gilts, that would lead to a rise in their price and a fall in their yield. News about growth prospects might also produce the kind of relationship apparent in Chart 1.5, with a weaker economic outlook leading to expectations that dividend payments would be lower and monetary policy looser.

Exchange rates

Jan.

85

Apr. July Oct.

2002

With the exception of the Japanese yen, effective exchange rate indices for most major currencies have been broadly stable

Source: Bank of England.

Chart 1.7

**One-year implied exchange rate volatilities**

Per cent

10

£/US$

£/€

9

8

7

6

5

0

since the August *Report* (see Chart 1.6). This is also consistent with the view that the major events driving financial markets have been international in nature. The amount of uncertainty surrounding the position in twelve months’ time of the sterling/US dollar, and particularly the sterling/euro bilateral exchange rates, as measured by implied volatilities, has declined since the beginning of the year (see Chart 1.7).

Property prices

When preparing the projections published in the August *Inflation Report*, the Committee judged that house price inflation would slow markedly over the next two years, to reach a level a little below the growth rate of nominal earnings. Are there any signs that a slowdown in the housing market has

Jan.

Apr. July Oct.

2002

begun?

Source: Bloomberg.

Table 1.A

**The housing market**(a)

2002

Q1 Q2 July Aug. Sept. Oct.

HBF survey

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Site visitors (b) | 22.3 | 19.8 | 11.9 | 12.7 | 27.6 | n.a. |
| Net reservations (c) | 33.9 | 35.3 | 23.6 | 8.7 | 24.3 | n.a. |
| Approvals (d) | 113 | 118 | 118 | 109 | 117 | n.a. |

Monthly change in house prices (e)

The diagram opposite, based on a survey conducted on behalf of the former Department for the Environment, Transport and the Regions (DETR), depicts the approximate timing of events that led up to a typical house purchase in 1998.(1) According to the survey, the median time interval between deciding to look for a property and completing the transaction was then around five months. The median time interval between securing a mortgage approval and completing the transaction was five to six weeks.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Halifax | 1.1 | 2.5 | 1.8 | 0.2 | 4.4 | 4.7 |  |
| Nationwide | 0.9 | 2.7 | 2.5 | 2.5 | 2.1 | 1.4 | Table 1.A lists some measures of housing market activity. Some |

Particulars delivered (f) 126 136 133 152 132 n.a.

Sources: Bank of England, Halifax, House Builders’ Federation, Inland Revenue and Nationwide.

1. Quarterly data are averages of the three monthly observations.
2. Percentage balance of respondents reporting more site visitors than during the same month of the previous year. Seasonally adjusted by the Bank of England.
3. Percentage balance of respondents reporting more net reservations than during the same month of the previous year. Seasonally adjusted by the Bank of England.
4. Number of loans approved for house purchase (thousands).
5. Per cent.
6. The number of transactions in England and Wales registered with HM Land Registry (thousands).

of the early indicators in the chain began to slow down in the third quarter. In particular, the balance of respondents to the House Builders Federation survey reporting more net reservations was lower in July and August than during the first half of the year. Although there was some rebound in the September figure, it remained below the averages for Q1 and Q2. There was a small reduction in the number of loan approvals in Q3.

* 1. See *DETR Housing Research Report*, No. 91.

The house purchase timeline

Stages in the house purchase process

Published housing market data

1. Begin search



HBF site visits

(new property only)

9–10 weeks

1. Make verbal offer

HBF net reservations (new property only)

4–5 weeks

|  |  |  |
| --- | --- | --- |
|  | Appears in loan approvals data | |
|  | Price recorded by lenders |  |

1. Receive mortgage approval

4–5 weeks

1. Exchange contracts

1 week

1. Transaction completed

Appears in net secured lending data

4–6 weeks

1. Change of

Particulars delivered

ownership recorded by HM Land Registry

Sources: Bank of England and DETR.

Chart 1.8

**Monthly changes in the Halifax house price index**

Per cent

6

5



Actual

Trend (a)

4

3

2

1

+

\_ 0

1

2

3

4

1984 90 96 2002

Source: Halifax.

(a) Trend is a 13-month centred moving average.

Because lenders record house prices at the mortgage approval stage, one might expect to see an approximately contemporaneous relationship between housing market activity, as measured by the number of approvals, and the

rate of change of house prices. But monthly house price inflation can be quite erratic. It declined, on the Halifax measure, from 1.8% in July to 0.2% in August, only to rise again to 4.4% in September, and 4.7% in October—the strongest one-month increase since the data were first collected in 1983 (see Chart 1.8). Consequently, economic commentators tend to focus on annual measures. Chart 1.9 shows that mortgage approvals have tended to lead annual house price inflation.

Putting together data from both the Halifax and the Nationwide, house price inflation in the year to October appears to have been somewhere in the range 25%–30%. That was considerably stronger than expected by the Committee at

Chart 1.9

**Housing market activity and house price inflation**

Thousands Per cent

the time of the August *Report*, and is clearly unsustainable. By region, house price inflation in London and the South East has recently been a little below the national average. In

170

150

130

110

90

70

40

the year to Q3 the most rapid house price increases



Annual house price inflation (a)

(right-hand scale)

Mortgage approvals

(left-hand scale)

30 occurred in the Midlands, followed by the South West and East Anglia (see Chart 1.10). In light of the tentative signs

20 of an easing in housing market activity, the Committee continues to anticipate that house price inflation will soon

10 begin to slow.

+

0

\_ According to the Investment Property Databank, the capital

10 value of commercial property rose by just 2.0% in the year to September. Commercial property prices have risen much

50 20

1984 86 88 90 92 94 96 98 2000 02

Sources: Bank of England and Halifax.

(a) Halifax measure.

Chart 1.10

**Regional house price inflation**(a)

2002 Q3

2002 Q2

London and the South East

South West and East Anglia

Midlands

North

Northern Ireland, Scotland and Wales

United Kingdom

0 5 10 15 20 25 30

Percentage changes on a year earlier

Sources: Halifax and Nationwide.

(a) Unweighted average of data from the Halifax and the Nationwide.

Table 1.B

**Growth rates of the monetary aggregates**

Percentage changes on a year earlier

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 2001 | | 2002 | | | | | |
| Q4 | | Q1 Q2 Q3 | | | | | |
| Notes and coin | 8.5 |  | 7.5 |  | 9.6 |  | 8.2 |
| M0 | 8.1 |  | 7.2 |  | 9.5 |  | 8.2 |
| M4 | 6.5 |  | 5.7 |  | 6.1 |  | 5.4 |
| M4 lending (a) | 8.9 |  | 8.0 |  | 8.4 |  | 9.6 |
| Source: Bank of England. |  |  |  |  |  |  |  |

(a) Excluding the effects of securitisations.

more slowly than residential property prices for the past two years, reflecting the relative weakness of the corporate sector.

##### Money and credit(1)

Monetary aggregates

The rates of growth of seasonally adjusted notes and coin and M0 have been quite volatile in recent months, largely reflecting unusual patterns of economic activity associated with the timing of Easter and the Jubilee celebrations

(see Section 2). In the year to 2002 Q2, the stock of M0 rose by 9.5% (see Table 1.B). At the same time, nominal household expenditure increased by just 4.7%. The box on page 9 of this *Report* suggests that M0 could continue to grow more quickly than consumption for some time to come.

Aggregate M4, the sum of notes and coin and sterling deposits with UK banks and building societies held by households, private non-financial corporations (PNFCs) and other financial corporations (OFCs), rose by 5.4% in the year to 2002 Q3 (see Table 1.B). Its major counterpart, M4 lending (excluding the effects of securitisations), which measures sterling lending by UK banks and building societies to those same three sectors, rose by 9.6% during the same period. The growth rates of these two aggregates have been declining for the past two years or so. However, much of the decline can be accounted for by the OFCs sector. Changes in OFCs’ money and credit are thought to have fewer direct implications for nominal demand than those of households and non-financial corporations. Excluding the OFCs component, growth in M4 and M4 lending has been steadier in the recent past (see Chart 1.11).

* + 1. An account of the way in which money and credit data are analysed at the Bank of England is contained in Hauser, A and Brigden, A (2002), ‘Money and credit in an inflation-targeting regime’, *Bank of England Quarterly Bulletin*, Autumn, pages 299–307.

##### Developments in the velocity of narrow money

During the past two years, the annual rate of growth of M0 has averaged 8.0%. By contrast, the annual rate of growth of nominal consumption has averaged just 5.0%. Should policy-makers be concerned by this rapid growth in the

Chart A

**Narrow money velocity and the short-term interest rate in the United Kingdom**(a)

quantity of narrow money? Does it signal that inflation will soon pick up, or perhaps that consumption is being underrecorded? Not necessarily—the relationship between economic activity and M0 is complicated by changes in interest rates and the associated process of financial innovation.

Per cent

18

16

14

12

Eligible bill rate (left-hand scale)

Ratio

21

15

Chart A compares the velocity of circulation of narrow money, defined here as the ratio of nominal consumption per annum to M0, with a nominal interest rate. The nominal interest rate is a measure of the opportunity cost of holding cash. It measures the cost of the interest foregone (represented here by the return on eligible bills) when an individual chooses to hold cash in preference to other forms of wealth. When the opportunity cost of holding cash is high, then other things equal, narrow money holdings should be low relative to consumption—in other words velocity should be high.

For most of the period since 1870 the two series have moved together. During the early part of the 1970s, the nominal interest rate began to rise sharply, reaching a peak of 17.4% in 1980 Q1. This unprecedented increase in the opportunity cost of holding narrow money may have

10

8

Velocity (right-hand scale)

6 9

4

2

0 3

1870 90 1910 30 50 70 90

(a) Velocity series is based on annual data before 1970 and quarterly data thereafter. Interest rate data are annual before 1975 and quarterly thereafter.

Chart B

**Narrow money velocity and the short-term interest rate in the United States**

Per cent Ratio

18 21

Commercial paper rate

contributed to the development of cash-saving innovations, 16

such as the introduction of Automated Teller Machines 14

(ATMs), encouraged payment of salaries by cheque, or by

direct money transfer, and promoted the introduction of 12

credit and debit cards. These innovations were associated 10

with a significant upward shift in velocity.

8

But since the early 1990s, interest rates have fallen 6

precipitously. Chart A suggests the puzzle is not the current strength of M0 growth, but rather its weakness. Why has 4

M0 not grown more quickly to bring velocity back into line 2

with the low levels seen before the high inflation/high

0

Velocity

(right-hand scale)

(left-hand scale)

15

9

3

nominal interest rate era of the 1970s and 1980s? Part of

the explanation is perhaps that people have grown accustomed to holding less cash, and that the technology enabling them to do this, while expensive to set up, is relatively cheap to maintain.

It can be instructive to look at narrow money velocity trends in other countries. Nominal interest rates also rose sharply during the early part of the 1970s in the United States and Canada, but these countries did not experience, to the same degree, a second period of high nominal interest rates at the

1870 90 1910 30 50 70 90

Chart C

**Narrow money velocity and the short-term interest rate in Canada**

Per cent Ratio

18 21

16

14

end of the 1980s. In the United States, narrow money velocity has now returned to pre-1970s’ levels (see Chart B). However, this series may have been distorted by the increasing use of dollar bills outside the United States. In Canada, narrow money velocity began to decline around ten years after the peak in nominal interest rates. Although it has not yet returned to pre-1970s’ levels, it has fallen further than in the United Kingdom (see Chart C). Given the current low rates of interest, and the experience of other low nominal interest rate economies, it seems plausible that M0

12

10 Velocity

(right-hand scale)

8

6

4

Bank of Canada discount

2 rate (left-hand scale)

0

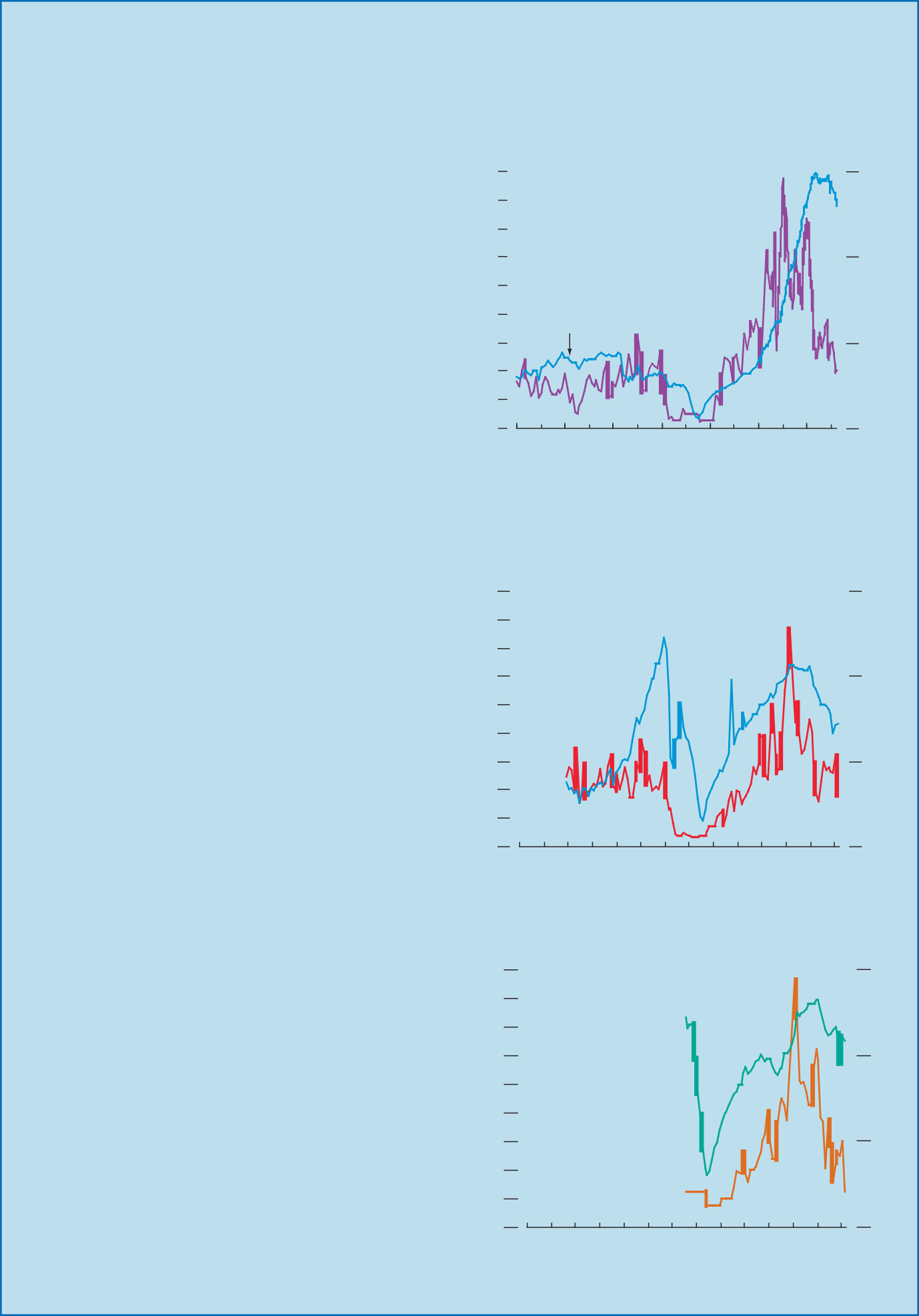
1870 90 1910 30

15

9

3

50 70 90

could continue to grow in excess of nominal consumption for some time to come, without necessarily jeopardising the inflation target.

Sources: Mitchell, B R (1988), *British Historical Statistics*, Cambridge University Press; Mitchell, B R (1983), *International Historical Statistics: The Americas and Australasia*, MacMillan; Homer, S and Sylla, R (1991), *A History of Interest Rates*, Rutgers University Press; The Economist (1989), *One Hundred Years of Economic Statistics*, The Economist Publications; IMF; NBER; and ONS.

Chart 1.11

**Annual growth in M4 and M4 lending**(a) **including and excluding OFCs**

Per cent

14.0

Households

Households’ M4 deposit growth has remained firm. Annual growth in Q3, at 8.1%, was close to rates seen for the past year

M4

(excluding OFCs)

M4L

M4L

(excluding OFCs)

M4

12.0

10.0

8.0

6.0

4.0

2.0

0.0

or so. Growth in lending to individuals continued to

strengthen. Total lending to individuals, which measures lending by a broader set of institutions than just banks and building societies, rose by 13.1% in the year to Q3, the fastest rate of growth since 1990. Lending secured on dwellings grew by 12.4% while the remainder, which includes credit card and store card lending, as well as personal loans and overdrafts, grew by 15.8%.

House price rises boost secured lending through two separate channels. First, for a given loan-to-value ratio, first-time

1998 99 2000 01 02

Source: Bank of England.

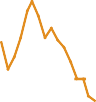
(a) Excluding the effects of securitisations.

Chart 1.12

**Net housing wealth and MEW**

Per cent Per cent

85



Net housing wealth (left-hand scale) (a)

MEW

(right-hand scale) (b)

80

75

70

1.0

0.8

0.6

0.4

0.2

buyers will require larger mortgages than before. Second, existing homeowners will see an improvement in their net housing wealth, giving them the scope to undertake further secured borrowing at lower rates than on unsecured debt. Of the £18.6 billion net secured borrowing by individuals in Q2, it is estimated that £10.6 billion, or more than half, was not invested in the housing stock. It is likely that some of this

£10.6 billion, known as mortgage equity withdrawal (MEW), was used to purchase financial assets, and some used to repay existing unsecured debt. But a further portion will have been used to fund additional consumption. Chart 1.12 shows how,

65

60

1987 92 97 2002

+

0.0

–

0.2

0.4

in recent years, the fraction of net housing wealth that is withdrawn each quarter, has varied closely with the quantity of net housing wealth. A box on pages 12–13 of this *Report* examines the relationship between changes in house prices and consumption in different countries.

Sources: Bank of England and ONS.

1. Gross housing wealth minus total secured lending to individuals as a percentage of gross housing wealth.
2. Mortgage equity withdrawal as a percentage of net housing wealth.

Chart 1.13

**Average duration of credit card balances**(a)

Months

6.0

5.5

5.0

4.5

4.0

3.5

3.0

0.0

Credit cards have become an increasingly popular source of finance. Their share in the flow of total unsecured lending to individuals rose from around 30% in the mid-1990s to around 40% so far this year. It is sometimes argued that the rapid growth in credit card debt reflects their greater acceptance as a means of payment. But this seems to be only part of the story. Since the mid-1990s, the average time taken to repay credit card debt has increased from a little over three months to nearly five months (see Chart 1.13). People have come to rely increasingly on credit cards as a means to borrow money for a period of time, and not just as a convenient alternative to using cash or a cheque. This may be because, over the past few years, the effective interest rate on credit card debt has fallen by more than the equivalent rate on personal loans or overdrafts (see Table 1.C).

1996 97 98 99 2000 01 02

Source: Bank of England.

(a) Average duration is calculated as the outstanding stock of credit card debt divided by the monthly flow of repayments. The series is presented as a three-month moving average.

The ratio of household sector liabilities to annualised household sector income reached a new record high in

2002 Q2 (see top panel of Chart 1.14). But household sector liabilities are dwarfed by household sector assets. Even when

Table 1.C

**Household loan rates**(a)

Per cent

2000 2001 2002

Q1 Q1 Q1 Q2 Q3

housing is excluded, and even after sharp falls in equity prices, household sector financial assets are still worth more than three times as much as household sector liabilities (see bottom panel of Chart 1.14).

Unsecured loan rates (b)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Credit cards (c) | 16.56 | 15.54 | 14.36 | 13.97 | 13.85 |
| Overdrafts | 10.65 | 10.77 | 9.83 | 9.64 | 9.65 |
| Personal loans | 11.62 | 11.34 | 9.93 | 9.75 | 9.62 |
| Secured loan rates (d)  Two-year fixed | 6.85 | 5.88 | 5.43 | 5.65 | 5.08 |
| Two-year discounted | 5.68 | 5.72 | 4.21 | 4.29 | 4.26 |

Source: Bank of England.

1. Quarterly data are averages of the three monthly observations.
2. Effective interest rates. These are derived from data on interest payment flows and loan stocks supplied by a sample of banks and building societies.
3. Effective interest rate on interest-bearing balances only.
4. Quoted interest rates. These are based on loan rates advertised by a sample of banks and building societies.

Chart 1.14

**Ratios of household sector assets and liabilities to household sector income**

Ratio

Of course, the fact that the household sector has far more assets than liabilities is not necessarily cause for comfort. First, the capital value of the majority of household assets, such as equity and housing, is uncertain. The sums of money owed to banks, building societies and other lenders vary by comparatively little from quarter to quarter. This is evident from the chart. Second, when thinking about the risks to consumption from an excessive build-up of household debt, the distribution and type of assets and liabilities held by individual households matters, as well as the financial balance sheet of the sector as a whole.

Financial and physical assets

Financial liabilities

1990 95 2000

Chart 1.15

Financial assets

Ratio

1.25

1.20

Financial liabilities

1.15

1.10

1.05

1.00

0.95

8.00

7.00

6.00

5.00

4.00

3.00

2.00

1.00

0.00

The British Household Panel Survey (BHPS), conducted in 2000, records the responses of more than 5,000 households to questions about the nature of their assets and liabilities. The survey showed that people with significant liabilities also tended to own valuable assets. The correlation between the total liabilities and the total assets of individual households was 0.39. This positive correlation is not surprising—people with large mortgages also tend to own expensive houses. But housing and similarly illiquid assets may be difficult to realise at short notice. In evaluating the potential vulnerability of households, it may make better sense to compare total liabilities with liquid assets.

Chart 1.15 shows the distribution of total liabilities and liquid assets across a randomly chosen 10% sample of the BHPS for the year 2000.(1) A large number of respondents were

Distribution of total liabilities and liquid assets across individual households(a)

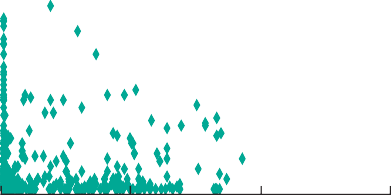
Liquid assets (£ thousand)

80

70

60

50



40

30

20

10

0

0 50 100 150

Total liabilities (£ thousand)

Source: British Household Panel Survey, 2000.

1. The full BHPS survey for 2000 contains information on the total liabilities and the liquid assets of more than 5,000 households. Households in the upper percentile of either the liquid assets or the total liabilities distribution were removed. This chart is based on a random 10% sample of the remaining households, with each dot representing one of those households.

positioned on at least one of the axes: 40% had no liabilities

and 33% no liquid assets. The correlation between the liabilities and the liquid assets of individual households was just 0.01. In the event that house prices were to fall, or unemployment were to rise, then the observed distribution of total liabilities and liquid assets across households might indicate that the financial position of the household sector would be less resilient than suggested by the aggregate balance sheet data.

Private non-financial corporations

The rate of growth of PNFCs’ M4 deposits picked up from 4.4% in the year to Q2 to 6.1% in the year to Q3. The rate of growth of PNFCs’ M4 borrowing (excluding the effects of securitisations) was 3.8% in the year to Q3, compared with

* 1. The wording of the question about liquid assets was ‘Thinking first about your savings accounts, TESSA or ISA, about how much do you currently have in total in these accounts?’.

##### International housing-market developments

Movements in equity markets and housing markets reflect underlying shocks to the economy, and are themselves important influences on economic activity and thus inflation. The sharp gains and subsequent falls in real equity prices(1) over the past few years have been highly synchronised across most industrialised countries (see Chart A). In contrast, movements in real house prices have been less uniform across countries (see Chart B), so they may have supported activity in some countries and weakened it in others.

Chart A

**Real equity prices**(a)(b)

Index; 1995 = 100

330

desired consumption of both housing and other goods and services. To the extent that the supply of housing is not perfectly elastic in the short run, higher housing demand will be translated into higher prices. So consumption and house prices can be correlated because they share a common cause.

Chart C

**Average annual growth in consumption and real house prices, 1995–2001**

Real consumption growth (per cent)

60

50

40

France

30

280

United States

Switzerland

Netherlands

Germany

Ireland

20

230

10

180

0

United Kingdom

40 20 \_

0 + 20 40 60 80 100

Italy

130

Real house price growth (per cent)

Sources: BIS (using national data), Thomson Financial Datastream, ONS.

80

1995 96 97 98 99 2000 01

Sources: BIS (using national data), Thomson Financial Datastream.

1. Deflated by the consumers’ expenditure deflator.
2. Datastream price indices covering around 80% of total equity market capitalisation. Annual average of daily data.

Chart B

**Real house prices**(a)

Index; 1995 = 100

A rise in house prices may also stimulate an increase in consumption. Owner-occupiers both own and consume the housing services provided by their dwellings, so a change in the price of a claim to this flow (ie a change in house prices) will not have the same effect as a change in the value of other wealth,

Ireland Netherlands

United Kingdom United States

France Italy

200

180

160

140

120

100

80

such as shares. But an increase in house prices may

facilitate cheaper borrowing, as housing wealth may be offered as collateral for loans. This will make it easier for households to bring forward consumption of future income, and also to smooth consumption against temporary shocks to income flows. So higher house prices may encourage higher consumption in the short run as well.

The strength of this ‘collateral effect’ will depend on how easy it is to extract housing equity for

Switzerland

Germany

60

consumption (mortgage equity withdrawal). This has changed over time, varies widely across countries,

1995 96 97 98 99 2000 01

Sources: BIS (using national data).

1. Deflated by the consumers’ expenditure deflator.

Looking across countries, changes in house prices are typically associated with changes in household consumption (see Chart C). Consumer confidence and income expectations will determine households’

and depends on the institutional and regulatory characteristics of mortgage finance institutions. In countries such as the United Kingdom where it is relatively cheap and easy to extract housing equity, rising house prices may be providing support for consumption, and thus mitigating the negative effects of the recent stock market falls.



* 1. Deflated by the consumers’ expenditure deflator.

The response of housing construction to changes in

house prices will be a key determinant of long-term price trends. In some areas, an increase in the demand for housing, due to an increase in incomes, population or credit availability, will lead to the construction of new houses. In other areas, where either land availability or planning constraints inhibit increased supply,the price of houses must rise to bring demand back in line with the fixed supply.

Evidence from the United States(2) suggests that the price of housing is close to marginal costs of construction in most areas, with land constituting a small share of total costs. Where land availability or planning restrictions prevent additional supply of similar dwellings, house prices are far above physical replacement cost.

**Chart D**

**Real house prices**

Index; 1995 = 100

200

Ireland

180

160

United Kingdom

Netherlands

140

120

100

80

60

40

20

1970 75 80 85 90 95 2000

Source: Bank for International Settlements (using national data).

To the extent that the supply of land with planning

approval, relative to the demand for it, varies across countries, the long-run response of national average house prices to an increase in housing demand will differ. In countries and regions where land availability and planning regulations facilitate new construction, real house prices will rise in line with construction costs in the long run. Where new construction is in some manner constrained, real house prices may rise faster, as rising real incomes bid up the price of the scarce factor (land with planning permission). Long-term trends in house prices indeed vary widely across countries (see Charts D and

E) as well as across regions, although problems of quality adjustment make international comparisons only tentative, and the low frequency of the cycles make it difficult to assess the trend.

**Chart E**

**Real house prices**

Index; 1995 = 100

200

180

160

Switzerland

United States

140

120

100

80

Germany

60

France

40

20

1970

75

80

85

90

95 2000

Source: Bank for International Settlements (using national data).

(2) Glaeser, E and Gyourko, J (2002), ‘The impact of zoning on housing affordability’, *NBER Working Paper ,*No. 8835.

Chart 1.16

**PNFCs’ gearing ratios**

Income gearing

Capital gearing



at replacement cost

Per cent

35

30

25

20

15

3.5% in the year to Q2. But the total amount of external finance raised by PNFCs, which includes capital market issues, and borrowing in foreign currency in addition to borrowing in sterling from UK banks and building societies, was £14.9 billion in Q3. That was the strongest outturn since 2001 Q2. There were increases in sterling bond and sterling equity issuance.

There was a small fall in PNFCs’ capital gearing at

Capital gearing

at market value 10

5

0

1984 86 88 90 92 94 96 98 2000 02

replacement cost in Q2. Nevertheless, it remains at a historically high level. Capital gearing at market value rose sharply in Q2, reflecting the fall in equity markets (see Chart 1.16). A credit default swap offers insurance against the risk that a company defaults on its debt. The average price of a credit default swap for a sample of 37 UK companies, although broadly at the same level as at the time of the previous *Report*, has remained above levels seen during the first half of the year. Sterling-denominated

Chart 1.17

**Measures of credit risk**

Basis points

200

180

Credit default

swap (a)

Sterling corporate

bond spread (b)

160

140

120

100

80

corporate bond spreads over the yield on government debt tell a similar story (see Chart 1.17). Nevertheless, reductions in government bond yields mean that the absolute yield on sterling-denominated corporate bonds has fallen, from an average of 6.53% in May to an average of 5.92% in October.

Despite the high burden of debt, the rate of company insolvencies has remained broadly constant for the past five years.

60

40

20

0

Jan. Mar. May July Sept. Nov.

2002

Sources: Bank of England, Credit Trade and Merrill Lynch.

1. A credit default swap offers insurance against the risk that a company defaults on its debt. The series shown in the chart is the average price of a credit default swap for a sample of 37 UK companies.
2. Option-adjusted spread over UK government bonds for companies rated BBB or higher. Includes sterling-denominated bonds issued by non-UK corporates.

Demand 2

*Economic growth in the major overseas economies slowed in the second quarter, in line with the MPC’s assessment in the August* Report*. Net trade made a large positive contribution to UK GDP growth in Q2, compared with a mostly negative contribution during the past six years. Private investment has remained weak, with little sign of an imminent turnaround. Consumer spending was strong in the second quarter and confidence remains high. However, recent UK data have been affected by the timing of Easter and the Jubilee Bank Holidays, which have obscured the underlying trends. The unravelling of these effects is likely to depress consumption growth temporarily in Q3. But relatively robust consumption growth is expected in the following six months.*

Table 2.A

**GDP growth in the major industrialised countries**

Percentage changes on a quarter earlier

2001 2002

Q3 Q4 Q1 Q2 Q3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| United States | -0.1 | 0.7 | 1.2 | 0.3 | 0.8 |
| Euro area | 0.2 | -0.3 | 0.4 | 0.4 | n.a. |
| Japan | -0.7 | -0.7 | 0.0 | 0.6 | n.a. |
| Major six (a) | -0.1 | 0.2 | 0.8 | 0.4 | n.a. |

Sources: Bank of England, IMF and Thomson Financial Datastream.

(a) Major six economies are Canada, France, Germany, Italy, Japan and the United States. Growth is weighted using GDP shares, based on 2001 purchasing power parity exchange rates.

Table 2.B

**Contributions to euro-area GDP growth**

Percentage point contributions to quarterly growth (a)

Averages 2001 2002

2000 2001 Q3 Q4 Q1 Q2

Consumption 0.3 0.2 0.1 0.0 -0.1 0.2

Fixed investment 0.2 -0.1 -0.1 -0.2 -0.1 -0.1

Government 0.1 0.1 0.1 0.1 0.2 0.1

Change in inventories 0.0 -0.2 -0.3 -0.2 0.2 0.1

Domestic demand 0 . 5 0 . 0 - 0. 3 - 0. 3 0 . 1 0 . 2

Net trade 0.1 0.1 0.5 0.0 0.2 0.2

GDP 0 . 7 0 . 1 0 . 2 - 0. 3 0 . 4 0 . 4

Source: Eurostat.

(a) Components may not sum to totals due to rounding.

Chart 2.1

**Private sector consumption**

Percentage changes on a year earlier

6

United States

United

Kingdom

Euro area

+

\_

5

4

3

2

1

0

1

##### External demand and UK net trade

In line with the MPC’s assessment in the August *Report*, growth in the major six economies (Canada, France, Germany, Italy, Japan and the United States) slowed in the second quarter, mainly reflecting weaker US activity (see Table 2.A). US GDP grew by 0.3% in Q2, compared with 1.2% in Q1.

The advance estimate for Q3 was 0.8%. Growth in the euro area in Q2 was 0.4%, unchanged from Q1. Japanese GDP rose by 0.6% in Q2, following a revised figure of no growth in Q1.

Euro area

Growth in the euro area reached a trough in 2001 Q4, but the subsequent pick-up has been modest, reflecting prolonged weakness in consumption and investment (see Table 2.B). The falls in equity prices since 2000 have dampened consumption growth in the major economies. But consumer spending in the euro area has weakened more sharply than in the United Kingdom and the United States (see Chart 2.1). And it seems unlikely that the predominant cause of weak euro-area consumption has been the decline in equity wealth.

Households’ direct share ownership remains less widespread and the ratio of equity market capitalisation to GDP is lower than in the United Kingdom and the United States.(1) So although equity prices fell further in the euro area, they probably had a smaller impact on consumption. Moreover, these equity price falls cannot have been the initial cause of the consumption slowdown, as that started in early 1999, when stock prices were still rising rapidly. By contrast, the start of

1992 94 96 98 2000 02 2

Sources: Bureau of Economic Analysis, Eurostat, ONS and Thomson Financial Datastream.

(1) See Norman, B, Sebastia-Barriel, M and Weeken, O (2002), ‘Equity wealth and consumption—the experience of Germany, France and Italy in an international context’, *Bank of England Quarterly Bulletin*, Spring, pages 78–85.

Chart 2.2

**Consumption and real household disposable income**

the US and UK consumption slowdown coincided more closely with the peaks in their respective equity markets.

Germany

Percentage changes on a quarter earlier 4

3



Consumption

Real disposable income

2

1

+

0

\_

1

2

3

Which other factors could account for the weakness of consumption in the euro area? In answering this question it may help to focus on recent developments in Germany.

Although consumption growth has slowed in the main euro-area economies, it has been particularly weak in Germany, where the level of consumer spending actually contracted between 2001 Q3 and 2002 Q1.

Households are typically assumed to consider consumption

1991 93 95 97 99 2001 4

France Percentage changes on a quarter earlier 4 Real disposable income

3



2

1

+

0

\_

1

Consumption

2

3

4

1991 93 95 97 99 2001

United States Percentage changes on a quarter earlier

4

3

Consumption

+

\_

2

1

0

1

Real disposable income 2

3

4

1991 93 95 97 99 2001

Source: Thomson Financial Datastream.

Chart 2.3

**Actual and perceived inflation in Germany**

and saving decisions in the light of expectations of income over the longer term (or ‘permanent’ income), rather than simply their income in the current period, which may be prone to short-term fluctuations. Nevertheless, consumption might still move in line with current income if this was thought to contain news about future income, or if households were unable to borrow or liquidate assets to fund consumption when income was temporarily low.

German consumer spending appears to follow real household disposable income more closely than in other countries (see Chart 2.2). So the weakness in German household income (which has, on average, grown in real terms by less than half that in France and the United States since 1999) has probably been a key factor behind the consumption downturn there.

Energy and food price increases, as well as the depreciation of the euro against other major currencies, may have depressed German real incomes in 2000 and 2001. In 2002, the continued rise in unemployment may have further weakened them. And perceptions of price increases resulting from the changeover to euro notes and coins in January may have encouraged households to believe that their real incomes had fallen by more than they actually have (see Chart 2.3), possibly also putting some downward pressure on their spending.

Percentage change on a year earlier

8

* + 1. Actual (a)



(left-hand scale)

6

Perceived (b)

5 (right-hand scale)

4

3

2

1

Balance

80

70

60

50

40

30

20

10

Not all consumption in Germany has been financed out of current income. When bank lending to households grew quickly in Germany during 1999, consumption growth peaked and exceeded income growth. But households’ bank borrowing has slowed in Germany since end-1999 (and also, although less so, in the whole euro area), whereas it remained robust in the United States and rose vigorously in the United Kingdom (see Chart 2.4). Some of the slowdown in German

+

0\_

1 1991 93 95 97

+

\_ 0

99 2001 10

households’ bank borrowing may have reflected a downward adjustment of their long-term income prospects. Falling house

prices may also have been a cause of the weak borrowing.

Sources: European Commission and Thomson Financial Datastream.

1. As measured by the consumer price index (all items).
2. Balance of consumers responding that prices had risen over the past twelve months relative to those reporting falls.

House prices in Germany have fallen in real and nominal terms over the past decade, in contrast to the rises in the

Chart 2.4

**Households’ bank borrowing**

Percentage changes on a year earlier 16

14

United Kingdom (a)

United States

Euro area

Germany

12

10

8

6

4

2

1999 2000 01 02 0

Sources: Bank of England, Deutsche Bundesbank, ECB and Board of Governors of Federal Reserve System.

(a) Excluding the effects of securitisations.

United Kingdom, the United States and France (see the box on pages 12–13, which examines house price trends in a number of countries and their relationship with consumption). To some extent, the decline in German house prices may have been related to excess supply, resulting from subsidies for construction investment in the early 1990s. Borrowing secured against the value of their home enables households to raise finance more cheaply than at unsecured rates. So part of the fall in credit and hence consumption growth in Germany may be explained by weakness in the housing market reducing the value of households’ collateral.

Euro-area retail sales increased by 0.4% in the three months to August compared with the previous three months, suggesting somewhat faster consumption growth in Q3. But, looking further ahead, consumer confidence data for October suggested that consumers have become more pessimistic about the outlook for the economy as a whole and their own financial situation during the next twelve months.

Chart 2.5 Investment

United States

Percentage changes on a year earlier 10

8

6

4

2

+

0

\_

Investment in the euro area continued to fall in Q2 and was 2.7% lower than a year earlier. This was mainly accounted for by a 6.4% annual fall in German investment (see Chart 2.5). German investment has been falling since 2000 Q4, largely as a result of a decline in construction investment (which represents around 50% of the total) following the

post-reunification boom. But reconstruction work following the floods in August may provide some temporary stimulus to

Japan Euro area 2

4

Germany 6

8

10

1999 2000 01 02

Source: Thomson Financial Datastream.

Table 2.C

**Contributions to US GDP growth**

Percentage point contributions to quarterly growth (a)

Averages 2001 2002

2000 2001 Q3 Q4 Q1 Q2 Q3

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Consumption | 0.6 | 0.5 | 0.2 | 1.0 | 0.6 | 0.3 | 0.7 |
| Fixed investment | 0.2 | -0.3 | -0.2 | -0.4 | 0.0 | 0.0 | 0.0 |
| Government | 0.1 | 0.2 | -0.1 | 0.5 | 0.3 | 0.1 | 0.1 |
| Change in inventories | -0.1 | -0.4 | 0.0 | -0.3 | 0.6 | 0.3 | 0.0 |
| Domestic demand | 0 . 8 | 0 . 0 | 0 . 0 | 0 . 7 | 1 . 4 | 0 . 7 | 0 . 8 |
| Net trade | -0.2 | 0.0 | -0.1 | -0.1 | -0.2 | -0.4 | 0.0 |
| GDP | 0 . 6 | 0 . 0 | - 0. 1 | 0 . 7 | 1 . 2 | 0 . 3 | 0 . 8 |

Source: Bureau of Economic Analysis.

(a) Components may not sum to totals due to rounding.

investment in the near future.

Partly reflecting flood-related disruptions, the recovery in euro-area industrial production remained weak in Q3.

Although production was higher than its November 2001 trough, it was still down on levels of a year ago. Industrial activity in the euro area, as measured by the Reuters manufacturing purchasing managers’ index (a weighted average of the survey balances for new orders, output, employment, suppliers’ delivery times and the stock of items purchased), rose to 49.1 in October, still below the 50 ‘no change’ level.

The Committee continues to expect a small pick-up in euro-area GDP growth early next year. But the recovery is

likely to be slightly more subdued than was expected at the time of the August *Report*.

United States

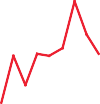
US GDP increased by 0.3% in Q2, compared with unusually fast growth of 1.2% in Q1, which was partly due to a large contribution from inventories (see Table 2.C). The Q2 slowdown reflected lower contributions from all components.

Chart 2.6

**US new auto sales and interest rate on new loans at auto finance companies**

Per cent Percentage change on a year earlier

0 25



New auto sales volume (right-hand scale)

Interest rate (a) (left-hand scale)

1 20

2 15

3 10

4 5

+

5 0

\_

6 5

7 10

8 2000 01 02 15

Source: Thomson Financial Datastream.

(a) Inverse scale.

Table 2.D

**Shares in value of international trade of goods and services**

Per cent

The advance estimate showed that growth picked up to 0.8% in the third quarter, reflecting a rise in consumption growth.

The latter was largely accounted for by strong new auto sales in July and August. The widespread availability of zero-per cent finance deals on new auto purchases reduced the average interest rate on auto loans (see Chart 2.6) and

may, in part, have brought forward future spending on autos. But data for September suggest a fall-back in new auto sales as incentives have been withdrawn. The strength of the US housing market has helped to underpin consumer spending by encouraging increased mortgage refinancing. But refinancing has begun to fall back recently. And consumers appear to have become more gloomy about the future. Consumer confidence fell sharply on both the University of Michigan and Conference Board measures in October.

The preliminary estimate suggested that US fixed investment rose by 0.1% in Q3, following seven consecutive quarters of decline. But spare capacity, high corporate debt levels, weakening credit flows, credit-rating downgrades, wider credit spreads and lower equity prices suggest that recovery will be sluggish.

US industrial production fell in August and September, following seven months of growth. But the longer-term profile continued to show a gradual recovery. In its central projection, the Committee expects US GDP growth to ease back in the fourth quarter, with a slowdown in consumer spending. Thereafter, growth should strengthen gradually, underpinned by continued improvements in productivity and the low level of interest rates.

Asia

Japanese GDP grew by 0.6% in Q2. GDP growth in Q1 was revised to 0.0%, from 1.4% in the original release, reflecting the adoption by the Japanese authorities in August of a new method for calculating GDP. The recovery in Japan in

2002 Q2 was largely driven by a strong contribution from net trade, and in particular a sharp rise in exports to other

Asian economies. Investment was the only component to make a negative contribution to GDP growth. In recent

World trade UK exports UK imports

(2000) (2001) (2001)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Euro area | 28.3 |  | 49.6 |  | 48.7 |
| Japan | 6.0 |  | 2.5 |  | 3.7 |
| Non-Japan Asia (a) | 17.3 |  | 6.4 |  | 10.2 |
| United Kingdom | 5.4 |  | - |  | - |
| United States | 18.7 |  | 17.4 |  | 14.4 |
| Other | 24.3 |  | 24.1 |  | 23.1 |

Sources: IMF, ONS and Bank of England.

(a) Defined here as China, Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand.

months, industrial production growth has picked up

significantly, though output fell in September. But despite these signs of recovery, there is little change to the Committee’s view that the prospects for Japan remain weak in the near term.

GDP in other Asian countries continued to grow rapidly in the second quarter, reflecting the strength of domestic demand.

Although the region continues to be highly dependent on demand in the major industrialised economies, and therefore

Chart 2.7

**UK current account balance**(a)

Per cent

6

4

+

\_

2

remains vulnerable to any slowing in world growth, rising domestic demand may insulate some of these economies more from external shocks than has been the case historically. The region accounts for around 6% of UK exports, and for around 17% of international trade (see Table 2.D). So the strength of demand in the region may stimulate world activity and UK growth.

1970 75

0

2

4

6

80 85 90 95 2000

Net trade

Economic activity overseas affects UK growth via its contribution to net trade. In Q2, UK export volumes rose at a faster rate than import volumes, although both may have been affected by the Jubilee Bank Holidays. The net trade

(a) As a percentage of GDP.

Chart 2.8

**UK net trade**(a) **and terms of trade**

contribution to GDP growth rose to 0.9 percentage points, compared with a negative contribution of 0.6 percentage points in Q1. But the Q2 fall in the terms of trade (the ratio of export to import prices) led to a slight increase in the current

£ billions (1995 prices)

0

Terms of trade

(right-hand scale)

Net trade

(left-hand scale)

-5

-10

-15

-20

Index; 1995 = 100

115

110

105

100

95

90

account deficit to 1.6% of GDP. The current account has been in deficit for most of the period since 1986 (see Chart 2.7).

Developments in trade volumes and prices in Q2 were unusual relative to trends over recent years. During the past six years, import growth has outstripped that of exports almost continuously, so net trade has detracted from UK growth. But the impact on the current account has been mitigated by a steady improvement in the terms of trade (see Chart 2.8).

In the three months to August, goods export volumes fell by more than goods import volumes, compared with the previous

1996 97 98 99 2000 01 02

(a) Exports minus imports at 1995 prices.

Table 2.E

**UK export outlook**(a)

Series 2001 2002 average (b) Q4 Q1 Q2 Q3 Q4 (c)

BCC export orders

Manufacturing 6.9 -20 1 5 2 n.a.

Services 10.4 -8 -1 8 0 n.a.

CIPS export orders (d)

Manufacturing 49.5 45.6 49.4 53.4 50.3 49.8

CBI Industrial Trends

Export orders -9.0 -36 -18 -14 -19 n.a.

EEF

Export orders -3.6 -31 -24 -6 -8 n.a.

Sources: BCC, CIPS, CBI and EEF.

1. Unless otherwise stated, numbers reported are percentage balances of respondents reporting ‘higher’ relative to ‘lower’. Responses are attributed to the quarter that is most closely associated with the reference period of each survey. For example, the October CBI *Quarterly Industrial Trends* survey is shown as Q3 because respondents are asked about orders in the four months to October.
2. BCC since 1989; CIPS since 1996; CBI since 1972; EEF since 1994.
3. CIPS figure is October only.
4. Average of seasonally adjusted monthly indices. A reading above 50 suggests expansion; below 50 suggests contraction.

three months, suggesting that net trade will make a negative contribution to Q3 GDP growth. Survey measures of export orders weakened in Q3 (see Table 2.E).

##### Domestic demand

Growth of real final domestic demand in the United Kingdom slowed to 0.3% in 2002 Q2 (see Table 2.F). Consumer spending grew strongly after a subdued first quarter, but government consumption fell back sharply following a very marked increase in Q1. Quarterly growth of domestic demand in the second quarter was the weakest since 1995, in part because of a significant negative contribution from inventories. However, recent data may not be a good guide to underlying trends because of the impact of the timing of Easter and the two Jubilee Bank Holidays.

Consumption

Consumer spending rebounded in 2002 Q2, to grow at its fastest quarterly rate since early 2000 (see Chart 2.9), following a muted first quarter which saw the slowest growth since 1997. Nevertheless, the four-quarter growth rate has been consistently above 3% since 1995. However, as discussed

Table 2.F

**Expenditure components of demand**(a)

Percentage changes on a quarter earlier

Average Average 2001 2002

2000 2001 Q3 Q4 Q1 Q2

below, the effects of the timing of Easter and the Jubilee Bank Holidays mean that quarterly consumption growth is expected to fall back sharply in Q3. If it does so, the average growth rate over the first three quarters of 2002 might be somewhat lower than for any comparable period over the previous few years,

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Consumption:  Household | 1.2 | 1.0 | 1.0 | 1.1 | 0.5 | 1.3 | though still above the long-run trend rate. |
| Government | 0.3 | 1.3 | 2.7 | 1.8 | 2.9 | -2.7 |  |
| Investment: | 1.1 | -1.7 | -0.7 | -3.3 | -1.5 | -0.6 |  |
| *of which, business*  *investment* | *1.4* | *-2.2* | *-1.0* | *-4.5* | *-5.4* | *-0.2* | Recent *Reports* have highlighted the extent to which durable |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Final domestic demand  Change in inventories (b) | 1 . 0  -0.2 | 0 . 6  -0.1 | 1 . 0  -0.5 | 0 . 5  0.3 | 0 . 6  0.1 | 0 . 3  -0.6 | goods, and especially vehicles, have underpinned the strength |
| *Excluding alignment*  *adjustment* (b) | *-0.2* | *-0.2* | *-0.1* | *-0.5* | *0.7* | *-0.4* | of consumption. But the latest data contain indications that |

1. At constant 1995 market prices.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Domestic demand | 0 . 8 | 0 . 6 | 0 . 5 | 0 . 8 | 0 . 7 | - 0. 3 |
| Exports | 2.1 | -1.3 | -3.2 | -1.6 | -0.1 | 3.5 |
| Imports | 2.6 | -0.6 | -2.3 | 0.3 | 1.4 | 0.6 |
| Net trade (b) | -0.3 | -0.2 | -0.2 | -0.6 | -0.6 | 0.9 |
| GDP at market prices | 0 . 6 | 0 . 4 | 0 . 3 | 0 . 2 | 0 . 1 | 0 . 6 |

1. Percentage point contribution to quarterly growth of GDP.

Chart 2.9

**Consumer spending**

Percentage changes

6

On a year earlier

5

4

3

2

spending on durables may be weakening.(1) The contribution to consumption growth in 2002 Q2 from durable goods other than vehicles was the lowest for nearly five years. A substantial factor in this weak performance was a 9.5% fall in purchases of major household appliances—the weakest quarterly growth in this component for nearly ten years. However, this fall in spending on major household goods sits uneasily with the present strength of the housing market, as the two markets are generally assumed to be complementary. Vehicle purchases rebounded strongly in the second quarter, and accounted for around half of the increase in quarterly consumption growth (see Chart 2.10). But there are signs of a sharp slowing in the third quarter. Private vehicle registrations in Q3 were 2% lower than a year earlier, down from 10.4% growth in the year to Q2.

1997 98

Chart 2.10

99 2000

1

0

On a quarter earlier

01 02

The ONS monthly retail sales index covers around 35% of household consumption—the latter also includes vehicles, energy and consumer services. The most recent retail sales data, up to September, have shown some slowing in growth (see Chart 2.11), with quarterly growth of 0.7% in Q3—the lowest since 2000 Q2.

Contributions to quarterly consumption growth

However, retail sales data and consumer spending this year

Services

Non-durable goods Semi-durables

Other durables Vehicles

Total (per cent)



Percentage points

2.0

0.5

1.5

1.0

0.5

+

0.0

\_

have been affected by the timing of Easter as well as the two Jubilee Bank Holidays. A box in the May *Report* highlighted how seasonal patterns and other factors can affect economic data. A particular challenge this year was presented by the timing of the Easter holiday period, straddling the first and second quarters rather than the more usual timing of being exclusively in April. Although the ONS attempted to take account of this timing change, it would appear that the seasonal adjustment this year may still have given too much of a boost to sales in April, and perhaps too little in March. On seasonally adjusted data, retail sales this year rose by 0.1% in March and 1.7% in April.

1999 2000 01 02

Although the retail sales data were adjusted for the Bank Holiday falling in June rather than May, the ONS did not

* + 1. The box on pages 24–25 explains how the choice of 1995 as a base year has affected the estimated contribution of durable goods to consumption growth in recent years.

Chart 2.11

**Volume of retail sales**

2.0

1.5



Percentage changes Latest three months on

previous three months

April

+

\_

June

March

Latest month on previous month

1.0

0.5

adjust the retail sales data for the additional Bank Holiday in June, as this was a one-off event. It seems likely that the level of sales in June was reduced because some shops closed for an extra day. Nevertheless Chart 2.11 suggests that the positive effect in April may have outweighed the negative effect in June, leaving an overall positive impact on the level of sales in the second quarter.

1999

Table 2.G

2000 01

0.0

0.5

1.0

1.5

02 2.0

Table 2.G summarises the potential overall direction of these timing effects on the quarterly levels and growth rates of retail sales. In particular, the timing of Easter may have boosted quarter-on-quarter growth in the second quarter because of both lower sales in the first quarter and higher sales in the second. The level of sales in the third quarter should be

Possible Easter and Jubilee effects on retail sales(a)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | On levels |  | On quarterly growth  rates | Actual  quarter-on-quarter growth (per cent) |
| Q1 | † |  | † | 1.0 |
| Q2 |  |  |  | 1.7 |
| Q3 | — |  | † | 0.7 |

(a) The arrows in the table are indicative of the direction of any effect, not the size.

Chart 2.12 Retail sales

largely unaffected, but the quarterly growth rate would be

reduced because of the exceptionally higher level of sales in Q2.

Such timing effects increase the difficulty of judging the underlying trend in retail sales. Although recent three-month growth rates have been low, Chart 2.12 appears consistent with a broadly constant underlying trend in retail sales growth during the past year.

1995 = 100

Linear trend

136

135

134

133

132

131

130

129

The value of household assets can have an important influence on consumption. Section 1 explains that recent house price inflation has been higher than projected in the August *Report*. That is helping to support strong borrowing and consumption growth through mortgage equity withdrawal. Equity prices fell sharply during late summer, but have since recovered much of that lost ground. As yet, however, there has been little apparent effect of equity market weakness on consumption or consumer confidence. The GfK consumer confidence survey has not picked up any large effect on consumer sentiment from

Sept. Jan. May Sept. 128

2001 02

Chart 2.13

**GfK consumer survey: situation over next twelve months**

Percentage point difference from long-term average

equity prices. Households remain optimistic about their own

financial position over the next twelve months (see Chart 2.13), with the September survey recording the highest ever balance and only a small decrease in October. The reading for the general economic situation has been close to its long-term

30 average since the start of the year.



Household

finances

General economy

1988 90 92

Source: GfK.

94 96

20

10

+

0

–

10

20

30

98 2000 02

As discussed above, households are likely to look beyond income in the current period when making spending decisions. But Chart 2.14 shows that consumption growth has been correlated with income growth, although the relationship has been less strong since 1990.(1) This may be because progressive financial innovation and deregulation have made it easier for households to borrow in order to smooth their consumption.

(1) The correlation coefficient is 0.85 for 1964–89 and 0.50 for 1990–2001.

Chart 2.14

**Consumption and income growth 1964–2001**

1964–89

1990–2001

Consumption growth, per cent 10

8

6

4

2

Household real post-tax income growth slowed during the first half of 2002 (see Chart 2.15). This was mainly due to more volatile components, including a significant reduction in net property income in Q2. As such, consumers may have viewed it as a temporary change more than a reduction in their permanent income, particularly given the climate of greater macroeconomic stability since the early 1990s. However, some of the reduction in net property income reflected lower dividend receipts—which consumers could potentially regard as a more persistent change if it were accompanied by reduced expectations of future earnings from equity holdings.

+

4 2 –

2 4 6 8 10

2

4

Chart 2.15

Real post-tax income growth, per cent

Looking ahead, the Committee expects a sharp, but temporary, slowdown in consumption growth in the third quarter, reflecting a likely fall in spending on vehicles and the timing effects discussed above. But relatively robust growth is expected in the following six months, followed by a moderation

Contributions to real household post-tax

**income growth**(a)

through next year to a little below long-run trend rates.

Taxes and social contributions Net property income

Wages and salaries

Prices Other Total

Contribution to quarterly growth, percentage points



5

4

+

–

3

2

1

0

1

2

3

Public sector spending

For some while, general government spending has been rising strongly, although there have been volatile movements from quarter to quarter. Government consumption rose by 2.9% in 2002 Q1 and then fell by 2.7% in Q2—the largest quarterly increase since 1975 followed by the largest quarterly fall since 1985. Despite the fall in 2002 Q2, the level of government consumption was 4.6% higher than a year earlier.

Government investment was even more volatile, but followed the same pattern of a very strong first quarter and a fall-back in the second quarter. Nevertheless, the level in 2002 Q2 was 11.6% higher than a year earlier.

4

2000 01 02

(a) Deflated by the household consumption deflator. Income is household disposable income before payments to, or receipts from, pension funds.

Chart 2.16

**GDP and business investment**

Percentage changes on

a year earlier

Government spending data for the second quarter may have also been affected by the Jubilee Bank Holidays, for instance reflecting some public services being closed for an extra day in June. So there might be some bounceback in the third quarter. The MPC’s projections are based on the Government’s nominal spending plans, which imply continued

30 robust growth in government spending over the forecast



Business

investment

GDP

25 period.

20

15 **Investment**

10 Business investment is estimated to have edged down slightly

5 in 2002 Q2, following sharp falls in the preceding two

+

0 quarters. These were the most severe falls in business

\_

1966 70 74

78 82 86 90 94

5

10

15

98 2002

investment for nearly ten years, and the Q2 level was almost

11% lower than a year earlier. Moreover, Chart 2.16 shows that such a large year-on-year decrease in business investment is unusual at a time when GDP growth has remained positive.

Note: Shaded areas represent episodes of two or more consecutive

quarterly falls in GDP.

The recent fall in business investment is on a comparable scale

Chart 2.17

**Business investment**

May *Inflation Report* August *Inflation Report* Current

Percentage changes on a quarter earlier

6

4

to those seen in the early 1980s’ and early 1990s’ recessions, when GDP was considerably weaker. The previous episode when business investment dropped sharply while GDP growth remained positive was in the mid-1980s, and was a special case reflecting the effects of phased abolition of tax allowances for investment.

Q1 Q2 Q3

2

+

0

\_

2

4

Q4 Q1 Q2 Q3 Q4 Q1 Q2 6

Revisions to the data since the August *Report* have changed the profile of business investment through 2001.

Chart 2.17 compares the quarterly growth rates of business investment in the latest data with those available at the time of the previous two *Reports*. Although the total fall in investment is similar to that in the August *Report*, the quarterly profile has changed so that the decline is now estimated to have been

2000 01 02

Chart 2.18

**Contributions to business investment growth**

concentrated in 2001 Q4 and 2002 Q1. The latest data are

much more consistent than the August vintage with investment plans having been put on hold because of increased uncertainty in the aftermath of the September 2001 terrorist attacks.

Manufacturing Services

Other Total

Contributions to annual growth,

percentage points

25

20

15

10

+

\_

10

5

0

5

15

Investment by the service sector is around 70% of business investment, so it is not surprising that it has accounted for a large proportion of the recent swings in business investment (see Chart 2.18). In 2000, around one third of service sector investment was in ICT assets. Although later data for the composition of service sector investment are not available, it seems plausible that reduced spending on ICT would have played a substantial part in the overall decline in investment, especially given the recent downturn in ICT output and imports. Output of the electrical and optical engineering sector fell by 18.8% in the year to 2002 Q2, while ICT imports fell by 11.2%.

1997 98 99 2000 01 02

Table 2.H

**Investment intentions**(a)

Series 2001 2002

average (b) Q3 Q4 Q1 Q2 Q3

Looking ahead, there is little sign of a turnaround in investment in the near term. High capital gearing may impede future borrowing, and pension fund shortfalls could reduce the internal funds available for investment. Capacity utilisation is currently close to, or possibly below, normal levels

CBI *Quarterly Industrial*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Trends* (c)  Plant and machinery | 0 | -28 | -28 | -25 | -13 | -25 |
| Buildings | -17 | -29 | -29 | -30 | -18 | -27 |
| BCC manufacturing Plant and machinery | 10 | 0 | -5 | -3 | 7 | 10 |
| CBI/Grant Thornton service sector survey (d) |  |  |  |  |  |  |

Vehicles, plant and

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| machinery | -7 | -21 | -29 | -15 | -9 | -26 | pick up gradually thereafter. |
| Land and buildings | -7 | -25 | -18 | -22 | -14 | -20 |  |
| Information technology | 20 | 2 | -17 | 4 | 20 | -6 |  |

(see Section 3). And uncertainty about the global recovery persists. Table 2.H shows that in 2002 Q3 most survey measures of investment intentions fell to levels below the series averages. The Committee expects business investment to dip a little further in the second half of 2002, and then to

BCC services

Plant and machinery 15 11 8 15 16 13

Sources: BCC, CBI and Grant Thornton.

1. Numbers reported are survey balances, with positive figures denoting more respondents reporting ‘higher’ than ‘lower’.
2. CBI Industrial Trends since 1972, CBI/Grant Thornton since 1998, BCC since 1989.
3. Investment in the next twelve months compared with the previous twelve. Latest survey was published in October but is shown in Q3 as the survey was conducted between 19 September to 9 October.
4. Combined balances covering consumer, business and professional services.

Inventories

Inventories (excluding the statistical alignment adjustment) made a negative contribution to growth in four of the past five quarters, largely driven by lower manufacturing stocks. In 2002, the switch from first-quarter stockbuilding to second-quarter destocking reduced Q2 GDP growth by

**Base years and the National Accounts**

Real GDP is estimated by weighting together different components of output or expenditure. The choice of weights for those components affects how aggregate measures behave. The weights are currently constructed according to the share in total output or expenditure of each component in a ‘base year’, most recently 1995.

Chart A

**Stylised impact of changing base years**

Growth rate

There has been a five-yearly interval between base years. At the most recent rebasing, in 1998, the data were rebased to 1995 prices, from 1990 prices.

Rebasing does not mean that all years of a series are recalculated using weights from the new base year. Instead, a ‘link year’ is chosen between the old and the new estimates. The link year between 1990 and 1995 prices is 1994. The new weights are only applied to a series from the link year onwards.

Before that, data are simply rescaled to the new price basis.

Constant growth

Base Base Base Base Base

Chart B

**Stylised impact of rebasing**

Demand is likely to grow more rapidly for goods and services whose relative prices are falling. Hence rapidly growing sectors tend to be those with falling relative prices. So for years after the base year, estimated real GDP growth would tend to be higher using base year weights, which are larger for the rapidly-growing sectors, than it would be using weights based on shares of current nominal GDP. Conversely, growth might be weaker in the years before the base year but after the link year.

Old price basis

Growth rate

Constant growth

New price basis

With periodic rebasing of the National Accounts, a highly stylised version of such a pattern is shown in Chart A, on the purely illustrative assumption that the real growth rate abstracting from the effects of using base year weights would be constant.

With five-yearly rebasing, most years will be no more than two or three years away from a base year.

However, as is common in the run-up to rebasing, the present year is seven years away from the base year. The potential distortion from base-weighting gets larger, the further away from the base year (see

Chart B).

In practice, however, prices and volumes move in ways that can upset the stylised assumptions above.

Growth is not constant over time. And there are many instances where the relative price of a component falls but volume growth is low, for example when

tastes change and relative demand for a product declines. Indeed, a previous rebasing showed that growth was lower at 1990 prices than at 1985 prices, because of falls in oil prices and production between the two base years. So actual GDP growth does not

Base Base Base

always follow the general pattern shown in Charts A and B.

When GDP was rebased to 1995 prices, a number of other methodological changes were introduced, including moving to the European System of Accounts (ESA95).(1) Table 1 summarises the reasons for revisions to GDP growth in the 1998 *Blue Book*.

The effect of rebasing was to reduce estimated growth, and in this case by an increasing amount over time.

Within domestic demand, the main changes in relative prices since 1995 have been a strong general government consumption price deflator and a weak investment price deflator (see Table 2). Using 1995 rather than current prices would give a higher estimate of growth in 1998, when investment was rising rapidly, because investment had a higher weight at 1995 prices than it would have at current prices.

* 1. The effects of changing the base year and other revisions to the National Accounts were described on pages 14–15 of the November 1998 *Inflation Report*.

Table 1

**Revisions to GDP growth estimates in 1998**

Changes to annual growth rates of GDP (a)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1992 |  | 1993 |  | 1994 |  | 1995 |  | 1996 |  | 1997 |
| Rebasing | - |  | - |  | - |  | -0.1 |  | -0.2 |  | -0.4 |
| ESA95 | -0.1 |  | -0.1 |  | -0.1 |  | 0.1 |  | -0.1 |  | 0.1 |
| Non-ESA | 0.7 |  | 0.4 |  | 0.2 |  | 0.1 |  | 0.6 |  | 0.4 |
| Total | 0 . 6 |  | 0 . 2 |  | 0 . 1 |  | 0 . 1 |  | 0 . 4 |  | 0 . 1 |

Source: *United Kingdom National Accounts 1998*.

(a) Revisions introduced in September 1998 *Blue Book*.

The effect can go the other way too. Government consumption has grown strongly recently, but its relative price has risen since 1995. And investment has fallen in the past six quarters despite a declining relative price. Recent demand growth may therefore be higher at current prices than it is at 1995 prices. This is because using current prices would give greater weight to strong government consumption, and less weight to weak investment, than using 1995 prices.

Table 2

**Demand component price deflators**

1995 = 100

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1995 | | 1996 | 1997 | 1998 | 1999 2000 | | 2001 |
| Consumption | 100.0 | 103.1 | 105.5 | 108.3 | 110.1 | 110.8 | 111.3 |
| Government |  |  |  |  |  |  |  |
| consumption | 100.0 | 102.9 | 104.5 | 106.8 | 111.5 | 116.6 | 122.1 |
| Investment | 100.0 | 102.3 | 102.1 | 101.8 | 102.9 | 104.5 | 107.0 |
| Domestic |  |  |  |  |  |  |  |
| demand | 100. 0 | 102. 9 | 104. 8 | 106. 8 | 109. 0 | 110. 6 | 112. 6 |

Similar considerations apply to movements within these broad components of demand. For instance, the price of durable consumption goods has fallen relative to that of non-durable goods. And the past few years have seen strong growth in spending on durable goods. So real consumption growth measured using 1995 prices is likely to be higher than

it would be if measured using more up-to-date prices, which would give lower weight to the rapidly growing durables component.

If the effect of using 1995 prices is to increase measured real consumption growth, then it also reduces the rate of increase in the consumption price deflator, which is the difference between observed nominal spending and estimated real spending. The consumption deflator has indeed risen slowly over the past few years, when compared with other indicators of consumer price inflation, such as RPIX which is annually chain-linked.

The MPC’s judgment is that the effect of weighting using base year relative prices is purely a measurement issue. It affects estimates of both aggregate demand and potential supply, and therefore has no implications for the assessment of capacity pressures and inflation. But, as noted in the August *Report*, it will need to be taken into account when comparing current forecasts, based on 1995 prices, against subsequent published outturns on a different price basis.

On the usual timetable, data for recent years would be rebased onto 2000 prices in the 2003 *Blue Book*.

However, next year the ONS plans to introduce annually chain-linked measures to the UK National Accounts. This will provide a more timely and accurate basis for comparisons and avoid measurement issues from base-year effects in the future. It means that the price base will be updated each year, rather than every five years. The ONS has suggested that the introduction of annual

chain-linking may cause estimates of real GDP growth in recent years to be revised slightly downwards.(2) This is consistent with the effects of rebasing suggested in the discussion above.

* 1. Further details of chain-linking and early estimates of potential effects are given in Tuke, A and Reed, G (2001), ‘The effects of annual chain-linking on the output measure of GDP’, *Economic Trends*, October, pages 37–53; and also Tuke, A and Ruffles, D (2002), ‘The effect of annual chain-linking on components of the expenditure measure of GDP’, *Economic Trends*, October, pages 39–43.

Chart 2.19 Stockbuilding(a)

0.4 percentage points. Chart 2.19 shows that although there was a build-up of retail stocks, manufacturing stocks fell

Other Retail Total



Wholesale Manufacturing

£ millions (1995 prices)

2,500

2,000

1,500

sharply—the largest quarterly fall since 1997. It is likely that there was a Jubilee effect, to the extent that manufacturers’ stocks may have been run down to compensate for lost production in June.

1,000

500

+

\_ 0

500

Despite the reductions in manufacturers’ inventories in recent quarters, the stock-output ratio has continued an increase that began in 1999 (see Chart 2.20). The ratio in 2002 Q1 was the highest for almost ten years. It had been quite steady since the

(a)

1999 2000 01

Excluding statistical alignment adjustment.

1,000

1,500

2,000

02

mid-1990s, following a sharp fall from the early 1980s. If the recent rise were unintended, then it might point to further falls in manufacturing stocks in the quarters ahead. But the CBI Monthly Trends survey of manufacturers suggested that

Chart 2.20

**Manufacturing stock-output ratio**

1995 = 100 160



150

140

130

120

the balance of firms with more than adequate stocks of finished goods was close to its long-run average (see Chart 2.21).

The Committee assumes that the UK stock cycle is close to the end of the destocking phase, which would provide a one-off boost to GDP growth. After that, inventory levels are assumed to move broadly in line with output.

110

100

90

1973 77 81 85 89 93 97 2001

Chart 2.21

**CBI: adequacy of manufacturing stocks**(a)

Balance, three-month moving average

30

25

Long-run

average

20

15

10

5

+

0

\_

1986 90 94 98 2002 5

Source: CBI.

(a) Balance of firms saying that present stocks of finished goods are more than adequate against those saying stocks are less than adequate.

Output and supply 3

*GDP growth in 2002 Q2 and Q3 taken together was a little weaker than expected by the MPC at the time of the August* Report*. Capacity utilisation appears to be slightly below normal levels across the economy as a whole. Aggregate rates of employment and unemployment have barely changed. The*

*2001 Census has led the ONS to revise its estimates of the UK working-age population, but that has not affected the MPC’s judgment about growth in the near-term potential supply capacity of the economy.*

*The Committee expects annual GDP growth to continue to pick up in the next six months.*

##### 3.1 Output

The supply capacity of the economy depends on the available factors of production (such as land, labour and

capital equipment); the work effort of labour and capital; and the efficiency with which all the factors are used.

But the extent to which the growth of potential supply can vary, in part, depends on the horizon. In the very short run, the number of people a business employs, the amount of physical capital it owns, and those factors’ efficiency of use are relatively fixed. So the business’s short-run supply decision is how much to produce given its existing workforce and capital stock, in the light of its expectations for demand and the price of its output. The outcome of these short-run supply decisions is reflected in GDP, which is a measure of the output produced in any period. In the medium term, businesses have more flexibility with respect to the production process. For example they can decide

how many people they employ and for how long and this will, in total, depend partly on the availability of labour, including the unemployed, and the number of hours people are prepared to work. In the longer run, the economy’s

potential to grow will depend on population growth; the profitability of capital investment; and the extent to which innovations and ideas improve the economy’s ability to turn labour effort into the goods and services that people demand.

Quarterly GDP growth slowed to 0.1% in 2002 Q1, but

has since picked up. Nonetheless, GDP growth in 2002 Q2 and Q3, taken together, was lower than the Committee believed at the time of the August *Report*. GDP is now estimated by the ONS to have increased by just 0.6% in

Chart 3.1

**Industrial production and the index of services**

Industrial production (right-hand scale) Index of services (left-hand scale)

2002 Q2, somewhat lower than the preliminary estimate of 0.9% reported in the August *Report*. Services output and industrial production increased by 0.6% and 0.3%, respectively, in Q2.

The Jubilee holidays reduced the number of working days in June in many sectors of the economy. In June, the ONS’

130

129

128

127

126

1995 = 100

1995 = 100

103

102

101

100

99

experimental index of services (IoS) fell by 1.8%, while

industrial production fell by 4.3% (see Chart 3.1). These were the lowest monthly growth rates since figures began in January 1995 for the IoS and since January 1979 for industrial production. Weighting together the IoS and industrial production (together representing 93% of GDP), overall output fell by 2.4% in June.

125

124

123

Jan.

Feb. Mar.

Apr. May June 2002

98

97

Quarter 1

Quarter 2

Quarter 3

96

July Aug. Sept.

GDP grew by 0.7% in Q3 according to the preliminary estimate. Service sector output and industrial production grew by 0.8% and 0.4%, respectively. Some pick-up in GDP growth might have been expected in Q3, reflecting the effects of the Jubilee holidays on the level of GDP in Q2. Industrial production did indeed recover in July, it then fell modestly in August and September (see Chart 3.1). Motor vehicles production was affected in June as holiday plant closures, which usually occurred later in the summer, were brought forward to the Jubilee week. As a result, output increased strongly in July and August (see Chart 3.2), raising industrial

Chart 3.2

**Motor vehicles and total industrial production excluding vehicles**

production growth by at least 0.5 percentage points in each month, before falling back in September to around its May

Percentage change on a month earlier

30

Motor vehicles production

(left-hand scale)

Industrial production excluding vehicles (right-hand scale)

20

10

+

0

\_

10

20

30

Percentage change on

a month earlier

6

4

2

+

0

\_

2

4

6

level. Output in most other manufacturing industries was

subdued in August and September. In the electrical and optical goods sector, it fell by 3.9% in August, reducing industrial production growth by about 0.4 percentage points, and was little changed in September.

Construction output increased by 7.0% in the year to Q2, accounting for half of the growth of whole-economy gross value added at basic prices, despite only having a weight of 5.2% in national output. Construction new orders were strong in Q3 and the future business activity index in the October CIPS construction survey continued to suggest rapid

2001 02

expansion in the sector.

Growth in GDP compared with a year earlier reached a trough of 1.0% in 2002 Q1. It has since recovered to 1.7% in Q3. The Committee expects annual GDP growth to continue to pick up in the next six months.

##### Capacity utilisation

Potential supply is difficult to estimate. In part this is because the capital stock and the potential efficiency with which the

factors of production are used cannot be measured directly. Estimates of capacity utilisation provide an indication of whether businesses are operating above or below normal levels of supply capacity, given their existing amounts of factor inputs. So they are potentially useful in assessing the balance between demand and supply in the economy in the short run, and hence the degree of inflationary pressure.

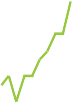
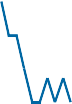
Chart 3.3

**Capacity utilisation: deviations from average**(a)

Percentage points 20

Manufacturing (CBI) (b)

15



Manufacturing (BCC) (c)

Services (BCC)

10

5

+

0

\_

5

10

15

20

25

1990 92 94 96 98 2000 02

Sources: BCC and CBI.

1. Averages are calculated since 1972 for the CBI survey and 1989 for the BCC surveys.
2. Percentage of businesses (deviations from the average) responding ‘No’ to the question ‘are you working below a satisfactory full rate of operation’.
3. Includes agriculture, energy and construction.

Table 3.A

**Surveys of capacity utilisation**

Percentage of employers working at full capacity

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Series 2001  average (a) Q3 Q4 | | | | 2002  Q1 Q2 Q3 | | |
| Manufacturing BCC (b) | 32 | 40 | 33 | 33 | 38 | 35 |
| CBI (c) | 40 | 40 | 33 | 27 | 32 | 33 |
| Services BCC | 32 | 39 | 35 | 38 | 38 | 36 |

Sources: BCC and CBI.

1. Averages since 1972 for CBI manufacturing and 1989 for BCC.
2. Includes agriculture, energy and construction.
3. Percentage of businesses responding ‘No’ to the question ‘are you working below a satisfactory full rate of operation’. The October Industrial Trends survey, which was conducted between 19 September and 9 October, has been allocated to 2002 Q3. Earlier surveys have been allocated to their respective quarters accordingly.

When demand is weaker than businesses expect, initially that surprise may be reflected in some industries by a build-up in inventories. But, thereafter, businesses may decide to lower output by reducing capacity utilisation—that is, the intensity they work their employees and capital equipment—for example by slowing the production line. And businesses might also reduce the hours of their employees, for example by reducing overtime. Hiring and firing costs inhibit frequent changes in employment levels. Hence, businesses tend to hoard labour during slowdowns and only reduce employment if they revise down their expectations of demand in the medium term. Resale values of capital equipment are often so low as to discourage premature disposal by businesses. So it may not be worth their while to reduce the amount of capital significantly and quickly in the face of demand weakness.

The CBI and British Chambers of Commerce (BCC) surveys include questions on capacity utilisation. The CBI Industrial Trends survey asks whether businesses are working below a satisfactory full rate of operation, while the BCC survey asks if businesses are operating at full, or below full, capacity. The CBI survey suggests capacity utilisation in manufacturing is currently well below its average level since 1972 (see

Chart 3.3). This is broadly consistent with the latest output figures described above.

In the service sector, the BCC survey was above its historical average in Q3, despite lower output growth in the past year. The BCC ‘manufacturing’ survey covers the rest of the economy—that is, agriculture, energy and construction, as well as manufacturing. Table 3.A shows the BCC measure of capacity utilisation for these industries in Q3 was slightly above its average since 1989, in contrast to the CBI survey balance for manufacturing which was well below its average since 1972. But recent output trends in construction have been very different to those in manufacturing, so the results from the two surveys are not directly comparable. Moreover, the capacity utilisation questions in the respective surveys are not identical, and may be interpreted differently by respondents.

The Bank of England’s regional Agents ask businesses about their capacity utilisation. In manufacturing, the responses are

Chart 3.4

**Detrended labour productivity**(a)

Per cent difference from trend

2

1



+

–

0

1

2

3

1989 91 93 95 97 99 2001

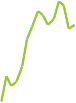
(a) Output per job detrended by a Hodrick Prescott statistical filter.

Chart 3.5

**Whole-economy productivity**

Percentage changes on a year earlier

6



Output per hour

Average growth of

output per job since 1960

+

Output per person (a)

\_

Output per job

4

2

0

2

4

1984 88 92 96 2000

(a) Ratio of GDP at factor cost at 1995 prices to LFS employment. Based on data unrevised for the effects of the 2001 Census (see the box on page 33).

broadly consistent with those from the CBI survey. Capacity utilisation is reported to be below normal levels, if somewhat higher than at the end of 2001. In services, capacity is reported to be close to normal levels, a little weaker than that implied by the BCC survey.

As much of the short-term variation in the supply of goods and services is likely to reflect changes in hours worked and work effort, the variation in labour productivity per person around its trend may also serve as a useful proxy for capacity utilisation.(1) Labour productivity is currently below its

trend level (see Chart 3.4). So the labour productivity data, together with the CBI survey and the reports of the Bank of England’s regional Agents, suggest that, on balance, capacity utilisation is currently close to, but possibly a little lower than, normal.

##### Labour productivity

In the medium term, potential supply will depend on, among other things, the rate of technical progress, the growth of the capital stock and improvements in the skills of the workforce. These will be reflected in the potential growth rate of labour productivity, which measures the volume of output per unit of labour input, expressed either in terms of persons employed or hours worked.

The ONS figures for whole-economy productivity are the ratio of gross value added at basic prices to the total number of jobs in the economy.(2) In the Bank of England’s main macroeconomic model, an alternative measure of productivity is used, based on the Labour Force Survey (LFS) employment figures which are estimated from a survey of households. Output per job increased by 0.9% in the year to 2002 Q2, while this alternative measure of output per person was little changed in this period (see Chart 3.5). Though short-term weakness is to be expected, given movements in capacity utilisation, output per job has increased at an average annual rate of about 1.4% since

the mid-1990s, and output per person by 1.2%. This compares with average productivity growth of just over 2% since 1960. Why has productivity growth slowed in recent years?

Output will depend in part on the average number of hours worked by each employee. Average hours have fallen since the

1. See Larsen, J, Neiss, K and Shortall, F (2002), ‘Factor utilisation and productivity estimates for the United Kingdom’, *Bank of England Working Paper no. 162*.
2. The ONS figures for jobs in its productivity series include employee jobs from the Workforce Jobs survey, working proprietors, the self-employed, government-supported trainees and HM Forces.

Chart 3.6

**Ratio of business investment to GDP at 1995 prices**

Per cent

16

15

14



13

12

11

10

9

8

0

1966 70 74 78 82 86 90 94 98 2002

Chart 3.7

**Ratio of the business investment deflator to the GDP deflator**

1995 = 100

160

150

140

130

120

110

100

90

80

70

1966 70 74 78 82 86 90 94 98 2002

Chart 3.8 Productivity growth

Percentage changes on a year earlier

10

Whole-economy excluding

public administration, 8

education and health

6

4

2

+

\_ 0

2

Public administration,

education and health 4

1980 84 88 92 96 2000 6

onset of the recent slowdown, but they have also fallen steadily since 1998. Falling average hours of full-time employees have probably reflected in part the introduction of the Working Time Directive in October 1998.(1) The growth of output per hour has thus been somewhat stronger than for output per job and per person (see Chart 3.5). Whereas output per job has grown at an average annual rate of 1.4% since 1995, average growth in output per hour has been 1.6% in this period.

Labour productivity growth is affected by the rate of growth of capital employed, net of depreciation. Measuring the capital stock is difficult, in part reflecting the difficulty of measuring scrapping and depreciation. There are official estimates, but the ONS suspended publication temporarily at the time of the 2002 edition of the *Blue Book*. Nevertheless, an indicator of the rate of capital accumulation is given by the ratio of business investment to GDP (measured at 1995 prices). This has been historically high since 1995 (see Chart 3.6). In part, this has reflected the fall in the price of investment goods relative to the general price level (see Chart 3.7), which has encouraged businesses to use more capital equipment rather than increase employment. So the fall in labour productivity growth since the mid-1990s is unlikely to have reflected, even in part, relatively low growth of the capital stock.

Part of the fall in measured productivity growth reflects weak recorded public sector productivity growth since 1998. As with the rest of the service sector, the public sector is labour intensive and measured productivity growth is relatively low. For example, productivity growth per job in

public administration, education and health (which is mostly in the public sector) has averaged just 0.2% a year from

mid-1980 to mid-1998, whereas in the rest of the economy it averaged 2.6% in the same period (see Chart 3.8). Even so, since 1998, measured productivity growth in public administration, education and health has averaged -0.4% a year. The decline in its average annual growth from 0.2% to

-0.4% since 1998 has reduced annual growth of

whole-economy productivity per job by about 0.2 percentage points in this period. But public sector output is very difficult to measure, as it is rarely marketed. For example, estimates of output in the education sector are largely based on the number of pupils, adjusted to allow for their examination results. Other things equal, a decline in the pupil-teacher ratio designed to improve the quality of education could therefore reduce measured productivity. These measurement problems make the public sector productivity estimates particularly uncertain.

1. The Working Time Directive set a limit of an average of 48 hours a week that an employee can be required to work (though employees can choose to work longer).

Chart 3.9

**Part-time share of employment**

The fall in the unemployment rate since 1993, currently to its lowest rate for 27 years (measured by the claimant count), may

Per cent of total employment

25.8

25.4

Persons (left-hand scale)

Hours (right-hand scale)

25.0

24.6

24.2

23.8

23.4

Per cent of total hours worked

12.8

12.4

12.0

11.6

11.2

10.8

10.4

also have depressed productivity growth temporarily. If, as seems likely, the unemployed have lower skills than the average employee, it may have had some temporary depressing effect on productivity growth. Any such effect might gradually unwind as new employees benefit from additional work experience.

##### Employment

Beyond the very short run, one way businesses can increase their collective output is by increasing employment. The box

0.0 0.0

1993 94 95 96 97 98 99 2000 01 02

Chart 3.10

**Workforce Jobs growth by sector**

Average annual growth since 1979 Q2

Growth in year to 2002 Q2 Per cent

3

on page 33 explains how the results from the 2001 Census will affect estimates of employment and other labour market indicators. The ONS has so far released some provisional estimates only up to August 2001. So the more recent

labour market data discussed in the following sections are unaffected by the Census revisions, unless otherwise stated.

Manufacturing

Public

Other services

2

1

+

0

\_

1

2

3

4

5

Construction

Employment measured by the household-based LFS increased by 211,000 in the period June-August compared with the same period a year earlier. Almost all of this increase was in

part-time employment. LFS figures show that the part-time share of employment increased to about 25% in 1996, when it levelled off (see Chart 3.9). It has risen again since mid-2001 and is currently at its highest level since the quarterly LFS began in 1992. The part-time employees’ share of total hours worked has risen fairly steadily since 1993 (although there was a temporary decline in the second half of 2001). This has

administration, education and health

Chart 3.11

**Private and public sector employee jobs**

Percentage changes on a year earlier

8

6

4

Private sector

Public sector

2

+

0

–

2

4

6

1982 84 86 88 90 92 94 96 98 2000

reflected falling average hours worked by full-time employees

and, until the past year, rising average hours worked by part-time employees.

The LFS figures show the number of employees in employment increased by about 180,000 in the year to June-August. But employee jobs measured by the employer-based quarterly Workforce Jobs survey were almost unchanged in the year to 2002 Q2. The apparent difference between these two trends may be reduced by future upward revisions to the Workforce Jobs estimates. This has been the pattern of recent years when new information on jobs becomes available from the ONS’ Annual Business Inquiry in December.

Nevertheless, the Workforce Jobs survey is the most reliable source for the industrial breakdown of employment. Public administration, education and health—which is mostly public sector—accounted for the bulk of the growth of jobs in the service sector in the year to 2002 Q2. Jobs in construction increased by 1.8% in the

##### The 2001 Census



The 2001 Census estimated that the UK population was 58.8 million on Census day, 29 April. This was about 1.2 million less than the mid-2001 projection of the population by the Government Actuary’s Department (GAD). The ONS currently judges that most of this discrepancy is a result of underestimation of emigration(1)—in particular of men between

25 and 44 years of age (see Chart A)—although the precise causes are uncertain and other explanations are possible. In light of the Census, the 1991 mid-year estimate of the population has also been revised down, by about 300,000. As a result, the annual growth rate of the population over the past two decades has also been revised down by an average of around 0.1 percentage points.

Chart A

**Census population revisions for 2001**(a)

Female

Male Age range

80+

65–79

55–64

45–54

35–44

25–34

15–24

0–14

400 300 200 100 \_ 0 + 100

Thousands

(a) Census 2001 data less GAD mid-2001 projections.

Labour Force Survey (LFS) estimates of the whole-economy levels of employment and

unemployment are grossed up using estimates of the household population. So a downward revision to the population reduces the LFS estimates of the levels of employment and unemployment. Moreover, since the Census has also revised down the estimated share of

prime-age (25–44) men in the population, who have high participation and employment rates, these rates are also being revised. On 30 October the ONS released provisional regrossed labour market data for the period 1992–2001. These data show that, for example, in June-August 2001, working-age employment was over 800,000 lower, at about 26.6 million, and the working-age employment rate was 0.3 percentage points lower at 74.3%.

Workforce Jobs estimates of employment will be less directly affected, as they are derived primarily from a survey of companies rather than households and are not grossed up using the population data.

However, the Workforce Jobs estimates for

self-employment, and employment in the agriculture and construction sectors, are based on LFS data and are therefore likely to be revised. National Accounts data for GDP are expected to be largely unaffected. So estimates of labour productivity based on the Workforce Jobs series should be little changed, although estimates derived from LFS employment figures, such as those used in the Bank of England’s main macroeconomic model, will be higher back to the early 1980s.

While the new population figures have important consequences for the interpretation of labour market data, the MPC has concluded that in broad

terms they should not significantly affect the inflation outlook.

(1) The number of births and deaths each year is available from registration records. The gross flow of migrants is estimated using data from the International Passenger Survey and administrative data on asylum applications and visitors who become permanent residents. However, there are other data—for example, on applications for permanent settlement and National Insurance numbers—which can be used to corroborate an estimate of the gross inflow. The determinant of population about which the ONS know least is the gross outflow of migrants. Hence, in the view of the ONS, the Census-based revisions most likely reflect changes in the underlying estimates of the gross outflow.

year to Q2 (see Chart 3.10), reflecting the buoyancy of activity in that sector. The increase in jobs in these two sectors fully offset the decline in manufacturing jobs in this period.

The public sector accounts for nearly 18% of jobs. After two decades of relative decline, public sector employment has grown at a slightly faster rate than that of the private

sector over the period since 1999 (see Chart 3.11). As noted above, employment growth has been particularly strong in education and health. Public spending has risen from 37.4%

of GDP in 1999–2000 to 39.3% of GDP in 2001–02. The

2002 Spending Review projects the ratio rising to 41.9% of GDP in 2005–06.(1) So further significant increases in public sector employment are likely. But reports from the

Bank’s regional Agents suggest that companies’ employment intentions in the private sector have generally weakened a little since Q2.

##### Labour supply

For a given rate of economic inactivity, an increase in the population of working age would provide an increase in labour supply in the long term, thereby adding to potential output. In the shorter term, the most obvious sources of additional labour are the economically inactive and the unemployed.

Chart 3.12

**Working-age population**(a)

Per cent of population

68

Pre-Census 2001 estimates

66

64

62

60

58

Census 2001 estimates 56

54

52

0

1871 81 91 1901 11 21 31 41 51 61 71 81 91 2001

(a) Males aged 15–64, 1871–1961 and 16–64 1971–2001.

Females aged 15–59, 1871–1961 and 16–59 1971–2001.

Working-age population

The number of people of working age (16–59 for women and 16–64 for men) has risen steadily as a share of the total population since the early 1970s (see Chart 3.12). In the following decade, an increasing working-age population mostly reflected a rising birth rate prior to the mid-1960s, associated with the post-war ‘baby boom’.

Since then, births generally have been falling. Nonetheless, the working-age population rate is higher now than in the late 1980s. That reflects inward migration. The 2001 Census has led to a downward revision in the working-age population rate in 2001 of 0.5 percentage points. In particular, the ONS believes that the Census has cast doubt on previous estimates of gross emigration over the past

two decades, notably of men aged 25–44 (see the box on page 33). However, the Census did not change the overall picture of an increasing working-age population rate since 1971.

The data for working-age population during the past twelve months are still to be revised using the results of the 2001 Census. On the basis of unrevised data, the working-age population and LFS-based employment have grown at similar rates in the year to June-August and the working-age employment rate has barely changed.

Participation

Labour force participation trends reveal whether labour supply is rising or falling, relative to the size of the population of working age.

(1) The average ratio of public spending to GDP in the 1990s was just over 41%.

Chart 3.13 Participation rate(a)

Per cent

79.5

79.0

All working age

78.5

The participation rate(1) was broadly unchanged in

June-August compared with the same three months a year earlier (see Chart 3.13). The participation rate has generally been on a modest upward trend since the mid-1990s. The female participation rate increased by about 2 percentage points between mid-1994 and mid-2000. It fell back a little in the second half of 2001 but it has since been rising again and has now returned to its mid-2000 peak. Its increase since 1994 has more than offset a steadily declining rate for men.

1992 93 94 95 96 97 98 99 2000 01 02

(a) Percentage of population of working age.

78.0

77.5

0.0

Increased female participation in part reflects the rise in participation of lone parents. The activity rate of female lone parents with children under 16 was 56% in March-May 2002, up from 50% six years earlier. The rise in activity of lone parents since 1996 explains around one third of the

1.6 percentage point increase in the female participation rate in this period. And they have found jobs: the employment rate of female lone parents has risen by about 9 percentage points in six years, to around 50% in March-May 2002. In part these trends have reflected government policy, especially the New Deal for Lone Parents, the Working Families’ Tax Credit and the National Childcare Strategy.(2) The Government has targeted a 70% lone parent employment rate by 2010. If this were met, and assuming it fully reflected increased activity, rather than falling unemployment, this would increase the overall participation rate by around

* 1. percentage points a year on average during the next eight years—the average rate of increase since 1995.

Chart 3.14 Unemployment rate

Per cent

12

Unemployment

The difference between labour supply and demand is central to the determination of wage inflation.

10

LFS

Claimant count

8

6

4

2

0

1992 93 94 95 96 97 98 99 2000 01 02

The most common measure of the excess of labour supply over demand is the unemployment rate. This has barely changed in the past twelve months. The claimant count unemployment rate was 3.1% in September and has been 3.1%–3.2% for

18 months. The International Labour Organisation (ILO) definition of unemployment used by the LFS was 5.2% in the three months to August, compared with 5.1% in the same period a year earlier (see Chart 3.14). Despite this small increase, ILO unemployment has been extremely stable over the past twelve months. Other indicators are generally consistent with the unemployment figures, suggesting that the

* + 1. The participation rate is defined as the economically active of working age as a percentage of the working-age population. The LFS classifies as ‘economically active’ those people with a job and those who meet the International Labour Organisation definition of unemployment used by the LFS. Chart 3.13 shows the participation rate prior to the revisions resulting from the 2001 Census. These generally reduced its level by about 1/4 percentage point from mid-1993 to August 2001, mostly reflecting the downward revision to the number of working-age males, who have a relatively high participation rate.
    2. See ‘The changing welfare state: employment opportunity for all’ (November 2001), HM Treasury and the Department for Work and Pensions.

labour market remains tight. While some surveys and reports from the Bank’s regional Agents indicate a marginal easing in recruitment difficulties, any such slackening appears to be modest.

Costs and prices 4

*Whole-economy average earnings growth has been stable at just below 4% since May. In the past three months, oil prices have risen steeply and then fallen, probably reflecting changing market sentiment about the prospect of a military attack on Iraq. The increase in the price of oil since the beginning of the year is putting some upward pressure on manufacturers’ input costs and output prices. RPIX inflation rose to 2.0% in the year to Q3; goods prices continued to fall and strong retail services price inflation persisted. The MPC expects RPIX inflation to move above the 2.5% target by the end of the year, largely reflecting the pattern of oil price movements and an increasing contribution from housing depreciation. It is expected to remain above target during much of 2003 and then drop back.*

Table 4.A

**Average earnings growth**

Percentage changes on a year earlier

2002

May June July Aug. Sept.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Headline (a)  Whole-economy | 3.8 | 3.9 | 3.9 |  | 3.8 |  | n.a. |
| Public | 3.8 | 3.5 | 3.6 |  | 3.4 |  | n.a. |
| Private | 3.8 | 4.0 | 4.0 |  | 3.9 |  | n.a. |
| Actual  Whole-economy | 4.0 | 3.8 | 4.1 |  | 3.6 |  | n.a. |
| Public | 3.5 | 3.5 | 3.9 |  | 3.0 |  | n.a. |
| Private | 4.1 | 3.8 | 4.2 |  | 3.8 |  | n.a. |
| Regular pay (b)  Whole-economy | 3.9 | 4.0 | 3.8 |  | 3.4 |  | n.a. |
| Public | 3.4 | 3.3 | 3.2 |  | 2.5 |  | n.a. |
| Private | 4.0 | 4.2 | 4.0 |  | 3.7 |  | n.a. |
| Settlements (c)  Whole-economy | 3.0 | 3.1 | 3.0 |  | 3.0 |  | 3.0 |
| Public | 3.7 | 3.7 | 3.6 |  | 3.6 |  | 3.6 |
| Private | 2.8 | 2.9 | 2.9 |  | 2.9 |  | 2.8 |

Sources: ONS and the Bank of England wage settlements database, that draws on information from the CBI, Incomes Data Services, Industrial Relations Services, Labour Research Department and the Bank's regional Agents.

1. Three-month (backward) average of actual rate.
2. Regular pay does not include bonus payments. It is not seasonally adjusted.
3. Twelve-month weighted mean. The weights are the AEI industry shares of the wage bill.

Chart 4.1

**Earnings and settlements in the private sector**

Per cent

8



Actual annual growth

in earnings (a)

Settlements (b)

7

6

5

4

3

2

1

0

1996 97 98 99 2000 01 02

1. ONS Average Earnings Index measure.
2. Twelve-month weighted mean. The weights are the AEI industry shares of the wage bill. Sources noted in Table 4.A.

Inflationary pressures are determined by the balance of demand and supply in product and labour markets. They are also influenced by developments in the exchange rate, overseas prices, and the inflation expectations of employers and employees.

##### Earnings and settlements

According to the Average Earnings Index (AEI), headline earnings growth has been relatively stable at just below 4% since May. Whole-economy pay settlements have been stable at around 3% (see Table 4.A).

Private sector earnings growth has recovered from the low rates seen at the start of the year (see Chart 4.1). The weakness then was caused by lower bonus payments than in 2001. But in August, for the first time in 18 months, bonus payments grew broadly in line with regular pay and so had no net effect on annual private sector pay growth.

Annual earnings growth in the public sector has continued to ease and settlements have remained stable. In the twelve months to September, public sector settlements were 3.6%, unchanged from August. Chart 4.2 shows that annual public sector earnings growth was 3.0% in August, almost

3 percentage points below its peak in August 2001. This softening in public sector pay growth is somewhat at odds with the continued strength in public sector spending (see Section 2) and the growth in public sector employment (see Section 3). While a number of factors can explain this profile of earnings growth, part of it reflected threshold payments to teachers in 2001, which raised the level of earnings permanently, but raised earnings growth for one year only.

Chart 4.2

**Earnings and settlements in the public sector**

Per cent

8

7

6

Actual annual growth

in earnings (a)

Settlements (b)

5

4

3

2

1

0

1996 97 98 99 2000 01 02

1. ONS Average Earnings Index measure.
2. Twelve-month weighted mean. The weights are the AEI industry shares of the wage bill. Sources noted in Table 4.A.

Chart 4.3

**Regular pay and average hours**

Percentage changes on a year earlier (a)

8

6

Regular pay per hour (b)

Regular pay per head (c)

4

2

+

0

\_

Average hours (d) 2

4

2000 01 02

Sources: ONS, LFS and Bank of England.

1. Three-month moving average.
2. Proxied by regular pay per head divided by average hours worked. Not seasonally adjusted.
3. Excludes bonus pay. Not seasonally adjusted.
4. Average actual weekly hours of work. Seasonally adjusted.

Chart 4.4

**Inflation and inflation expectations**(a)

Percentage changes on a year earlier

5.0

4.5

Quarterly Consensus survey:

mean of professional forecasters’ expectations (b)

RPIX

4.0

3.5

3.0

2.5

2.0

Another factor that might explain the recent fall in public sector earnings growth is the delay to this year’s local authority (LA) settlement. The settlement was due in April, but not agreed until September. The higher settlement was due to enter pay packets from October. As this settlement affects 1.3 million workers (about 25% of the public sector wage bill), the delay has depressed public sector earnings growth. While the recently agreed LA settlement is likely to raise public sector earnings growth, the arrears of this settlement (backdated to April) will not. This is because the ONS does not include arrears in its seasonally adjusted data.

Whole-economy regular pay growth per head has been falling gently since the middle of 2001 (see Chart 4.3). When calculated in terms of pay per hour, the trend in the growth rate has been much flatter, and has perhaps picked up more recently. Why might that matter? If everybody were paid by the hour, then the hourly growth rate would be the more relevant for judging trends in wage pressure. But as the August *Report* noted, only about 40% of employees in the economy are paid by the hour, equivalent to a third of the wage bill. So the pick-up in pay per hour is partly related to the recent sharper fall in average hours. The ONS presents its average hours data as a three-month moving average. The final hours observation in Chart 4.3 refers to the three months to August. So the final three observations in that chart may have been affected by the Jubilee holidays in June. If average hours were to recover, as Jubilee effects pass or for purely cyclical reasons, the gap between pay growth per hour and pay growth per head would narrow, probably with both a slowing in regular pay growth per hour and a pick-up in pay growth per head.

The outlook for real earnings growth depends on employers’ demand for labour relative to the available supply (see Section 3). But nominal earnings growth is also influenced by inflation expectations. Employees care about the purchasing power of their earnings (the real consumption wage) and businesses care about the cost of labour relative to the price of their output (the real product wage). But because the basic wage is typically set at discrete intervals, usually yearly, employees and employers care about future inflation.

Chart 4.4 shows two measures of inflation expectations, the

Bank of England/NOP

inflation survey (c)

1993 95 97 99 2001

(a) Inflation rate expected one year ahead.

1.5

1.0

0.5

0.0

Quarterly *Consensus Forecasts* and the Bank of England/NOP survey.(1) Both fell in Q3 from 2.4% to 2.2%. So inflation expectations seem unlikely to give any upward impetus to wage settlements in the near term.

1. The Consensus Survey was based on RPI forecasts before 1997 Q2 and RPIX thereafter.
2. Mean of the general public’s expected inflation rate. Conducted by NOP who ask for forecasts of general price increases in the shops.
   1. For more details see ‘Public attitudes to inflation’, *Bank of England Quarterly Bulletin*, Summer 2002, pages 147–52. For the latest survey results see [www.bankofengland.co.uk/pressreleases/2002/096.htm](http://www.bankofengland.co.uk/pressreleases/2002/096.htm)

Chart 4.5

**Whole-economy unit wage cost and productivity growth**

Percentage changes on a year earlier



Unit wage cost growth

Productivity growth

5.0

4.0

Looking ahead, earnings growth may edge up at the end of the year as local authority employees receive their new settlement. Thereafter earnings growth is likely to increase somewhat through 2003, given the continued tightness of the labour market.

1995 96 97 98 99 2000 01 02

Chart 4.6

**Brent Oil futures**

3.0

2.0

1.0

+

\_0.0

1.0

The prices that businesses charge for their products depend, among other things, on the cost of producing those goods or services. So price inflation can be influenced by changes in unit wage costs. While transient changes in unit wage costs can affect inflation, it is the underlying growth that is probably more important. This is because businesses incur costs when they change prices—for example the expense of printing new price lists. So they are more likely to change prices infrequently and when they are confident that any change is unlikely to reverse. Though it is often difficult to discern the underlying trend, it is likely that unit wage cost growth in recent quarters has been boosted by a temporary cyclical lull

$ per barrel 40

35



6 November (a)

August *Report* (a)

30

25

in productivity growth (see Chart 4.5). Indeed, the MPC projects unit wage cost growth to fall next year as productivity growth is expected to recover.

##### Commodity prices

1995 97

20

15

10

5

99 2001 03 0

After the publication of the August *Report*, the price of oil continued to increase. It rose to a peak of $29 per barrel on 23 September. But it has fallen sharply in recent weeks (see Chart 4.6). The average price of oil in the 15 days to

6 November was $26 per barrel, similar to the 15-day average

Source: Thomson Financial Datastream and Bank of England.

* + 1. Average during the 15 working days up to the time at which the MPC finalised its projections.

Chart 4.7

**Share of world oil production—2002 H1**

Saudi Arabia

10%

Iraq

3%

OPEC

37%

Other

39%

Other OPEC

24%

to 31 July (the day the MPC finalised its August projections).

The gyrations in the price are likely to have been associated with changing market perceptions over the prospect of a military attack on Iraq, and the related risk of disruption to world oil supply.

In the first half of this year, Iraq produced 2.0 million barrels of oil a day, or 3% of world output (see Chart 4.7). Most countries, with the exception of Saudi Arabia, do not have significant amounts of spare capacity. In this sense, Saudi Arabia can be thought of as the marginal oil producer, able to influence heavily the price of oil. Saudi Arabia could increase production by between 2.4–2.7 million barrels a day, within 30 days, enough to offset any Iraqi shortfall.(1)

Former USSR 12%

United States 12%

In the near term, market participants appear to expect the oil price to continue to fall to around $22 per barrel in two years’ time. The profile of the Brent futures price over the next two years is broadly similar to what it was at the time of the August

Source: The Energy Information Administration.

*Report*. This profile implies that twelve-month oil price

* + - 1. For Energy Information Administration estimates of surplus capacity see <http://www.eia.doe.gov/cabs/opec.html#opectab>

Chart 4.8 Food prices(a)

Index; 1995 Q1 = 100

120

inflation is likely to rise in the final quarter of this year but turn negative in the middle of 2003. The impact on annual RPIX inflation is therefore likely to be positive for the remainder of this year—both directly through higher petrol prices and indirectly via the pass-through to higher costs of production—and negative in the second half of 2003.

August *Report* (b)



6 November (b)

1995 97 99 2001 03

Sources: *The Economist*, Thomson Financial Datastream and Bank of England.

(a) *The Economist* food price index in dollars.

110

100

90

80

70

60

50

The price of non-oil commodities rose by 6.1% in Q3, mainly due to the higher price of food, which rose by 11.3% in Q3. But the futures curve for non-oil commodities—a weighted average of 25 separate commodities—was broadly similar to what it was at the time of the August *Report*. Within the total, however, there were offsetting movements. Food price futures rose (see Chart 4.8) and the price of metals and other

non-food agricultural commodities fell. The rise in spot and futures food prices was quite broadly based and appears to have been driven by a combination of supply-side factors: droughts in different regions of the world have combined to reduce the supply of wheat, corn and soyabean; cocoa prices

(b) Average during the 15 working days up to the time at which the

MPC finalised its projections. Based on futures prices for around 77% of the food price index.

Chart 4.9

**Contributions to annual manufacturing input price inflation**

Other (53%) Total

Food products (26%)

Oil (10%)

Electricity and gas (11%)

Percentage points15

10

5

+

\_ 0

5

have been affected by political conflict in the Ivory Coast—the world’s largest producer; and the recent rise in coffee prices was in part due to producers substituting away from coffee, in response to the exceptionally low prices at the beginning of the year.

##### Import prices

Sterling import prices of goods and services in 2002 Q2 were a little higher than assumed at the time of the August *Report*. The quarterly change in import prices rose sharply from -0.8% in Q1 to 1.6% in Q2. Exchange rate changes seem to account for most of the rise in import prices. The sterling effective exchange rate depreciated by 1.5% between Q1 and Q2. The weighted average price of exports from the major six (M6) economies (a proxy for the prices of internationally traded goods and services) remained unchanged.

The MPC projection for annual M6 export price inflation is little different to its August *Report* projection, but the projection for annual UK import price inflation is a little weaker. In part this can be explained by the around 1% higher starting assumption of the sterling effective exchange rate in the fourth quarter of this year (compared with what was assumed at the time of the August *Report*) which is likely to lower the sterling price of imports.

##### Costs and prices in manufacturing

July Jan. July

2000 01

10

15

Jan. July

02

Input prices fell by 1% in the twelve months to September, compared with a fall of 1.9% in the twelve months to August (see Chart 4.9). The change in the annual rate of inflation

depends on price changes both this year and in the previous year. And it was the precipitous fall in the price of oil in 2001 (or base effects) dropping out of the annual comparison that accounted for most of the pick-up in the twelve-month rate for September. The remainder was due to the rise in oil prices since July this year.

Table 4.B

**Measures of service sector costs and prices**(a)

2001 2002

Q4 Q1 Q2 Q3 Q4(b)

Backward-looking

CIPS average costs index (c) CIPS average prices charged index (c)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 51.8 | 53.1 | 53.9 | 54.6 | 54.2 |
| 49.6 | 50.6 | 51.6 | 51.9 | 52.2 |
| 4.1 | 2.8 | 2.5 | n.a. | n.a. |
| 0.0 | 0.4 | 2.6 | n.a. | n.a. |
| 16 | 20 | 24 | 20 | 19 |
| 23 | -34 | 0 | -8 | -6 |
| -13 | -16 | -1 | 19 | -9 |

CSPI (d)

Private service sector unit wage costs (e)

Forward-looking BCC prices balance (f)

CBI/Grant Thornton selling prices (g)

Consumer services Business and professional services

Sources: CIPS, ONS, BCC, CBI/Grant Thornton and Bank of England.

1. Responses are attributed to the quarter that is most closely associated with the reference period of each survey. For example, the Q2 BCC survey is shown as Q3 because respondents are asked about prices over the next three months.
2. CIPS figures are for October only.
3. A reading of 50 suggests rising prices, a reading below 50 suggests falling prices. The CIPS survey is monthly, and the quarterly values shown are averages over the relevant months.
4. Corporate services price index (experimental index, including rent). Percentage change on year earlier.
5. Private sector unit wage cost is proxied using private sector earnings growth and productivity growth in the service sector less Public Administration, Education and Health.
6. Percentage balance of responses to the question: 'Over the next three months, do you expect the price of your services to increase/remain the same/decrease?'
7. Percentage balance of responses to the question: 'Excluding seasonal variations, what are the expected trends for the next three months with regard to average selling prices?'

Chart 4.10

**Contributions to annual CSPI inflation**

Other CSPI

Property

Headline annual earnings growth in the manufacturing sector has risen steadily since the start of the year, but manufacturing productivity growth rose more sharply. Annual earnings growth rose from 2.9% in Q1 to 3.5% in Q2, and annual productivity growth rose from -1.9% to -0.6% over the same period. These two effects imply that unit wage cost growth eased from 5.0% in Q1 to 4.1% in Q2.

As mentioned above, the underlying growth in costs (of both raw materials and labour) is an important influence on the prices that companies charge for their goods. But it is not the only factor. The pressures on capacity and the degree of competition are also important. Faced with spare capacity (see Section 3) and intense global competition, domestic manufacturing firms have had little scope for passing on cost increases. In the twelve months to September, output prices (excluding duties) rose by 0.4%, unchanged since August.

##### Costs and prices in the service sector

Labour costs account for the majority of service sector input costs and so are key to determining the short-run pressures on service sector output prices. Headline annual earnings growth in the private service sector recovered from 2.2% in Q1 to 4.2% in Q2. Private service sector productivity growth over the same period fell a little. Consequently private service sector unit wage cost growth rose from 0.4% in Q1 to 2.6% in Q2, raising cost pressures since the start of the year (see

Table 4.B). This is consistent with the CIPS survey, which showed a small rise in the balance of firms reporting a rise in input costs since the end of 2001. But private service sector earnings growth rose between Q1 and Q2 because the large negative bonus contribution to annual earnings growth

Oil related

Percentage points

6

5

4

3

diminished in Q2. In terms of regular pay growth, annual private service sector earnings growth did not change much on the quarter. So underlying private service sector unit wage cost growth, perhaps a more important influence on firms’ prices, was relatively flat.

1999

2000

2

1

+

0

\_

1

01 02

The only official measure of output prices in business services is the ONS’ corporate services price index (CSPI). This index captures business-to-business transactions only. This survey remains experimental and to date covers around 50% of its target population. Importantly, it does not yet include insurance premia which, according to the Bank’s regional

Chart 4.11

**Business and retail services price inflation**

Percentage changes on a year earlier

6

Businesses (CSPI)

Retail

(RPIX services)

5

4

3

2

1

0

1999 2000 01 02

Agents, have been rising rapidly recently. The CSPI shows that business services price inflation has been falling since the start of 2001, with the fall being broadly-based across property rental payments, oil-related services (such as sea freight and road transport) and other business services (see Chart 4.10). The fall in the ONS measure of business services price inflation stands in contrast to the increase in the CIPS balance of firms reporting a rise in prices since the start of the year and the continued strength in retail services price inflation (see Chart 4.11). While a large part of the divergence between business and retail services price inflation is accounted for by the impact of the oil price on oil-related business services, some of it may reflect the differences between the state of demand in the respective sectors.

Chart 4.12

**Retail price inflation**

Percentage changes on a year earlier

5.0

4.5

4.0

3.5

3.0

2.5

Forward-looking survey indicators offer mixed signals about what might happen to service sector prices in the near future. The volatility of the CBI/Grant Thornton survey makes it hard to read the underlying trend (see Table 4.B). The BCC survey shows that the balance of respondents expecting to raise prices over the next three months is a little weaker than it was at the start of the year.

##### Retail prices

1995 96 97 98

Chart 4.13

99 2000 01 02

2.0

1.5



RPIX

RPIY

RPI

1.0

0.5

0.0

Annual inflation in retail prices excluding mortgage interest payments (RPIX) rose by 0.1 percentage points to 2.0% in Q3. This rise was echoed in the other main measures of retail price inflation. Annual RPIY inflation (which also excludes indirect and local authorities’ taxes) rose by 0.1 percentage points to 1.9%; and the headline rate of inflation (RPI) rose by

* 1. percentage points to 1.5%.

The Harmonised Index of Consumer Prices (HICP) measure of

Contributions to the differential between annual RPIX inflation and HICP inflation

inflation rose by 0.2 percentage points to 1.1% in the year to

Formula effect Housing Other

Total

Percentage points

1.6

1.2



+

\_

0.8

0.4

0.0

Q3. What accounts for the 0.9 percentage points difference

between HICP and RPIX inflation in Q3? RPIX and HICP measure the average price of a basket of goods and services. The formula used to add together the prices in the RPIX measure is different from that used in the HICP index.(1) This ‘formula effect’ accounts for much of the persistence in the gap (see Chart 4.13). The factor that explains most of the current differential is the inclusion of housing costs(2) in RPIX but not in the HICP, and recently house price inflation has been particularly strong (see Section 1).

1995

96 97 98 99 2000

01 02

0.4

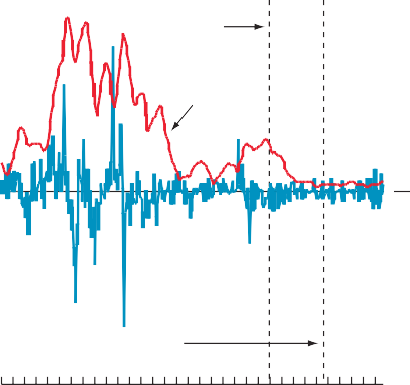
Since the Bank of England was given operational independence in 1997, the annual inflation rate of RPIX has been very stable; it has averaged 2.3% with a standard

* + 1. RPIX uses the arithmetic mean and HICP the geometric mean to aggregate price quotes at the most detailed level.
    2. For an explanation of how housing costs are measured in RPIX see page 44.

Chart 4.14

**The volatility of RPIX inflation**(a)

6



Percentage points

Inflation targeting

introduced

Rolling standard deviation (b)

Monthly change

in annual inflation rate

Bank

independence

4

2

+

\_0

2

4

6

1970 74 78 82 86 90 94 98 2002

1. RPI inflation prior to 1976.
2. Two-year (backward) rolling standard deviation of the annual inflation rate.

Chart 4.15

**Volatility of RPIX inflation and the contribution from seasonal food and petrol**

Percentage points

deviation of 0.3 percentage points. This stability has also been evident since inflation targeting was introduced in 1992.

Chart 4.14 shows two measures of inflation volatility: monthly changes to the annual rate of inflation, and the two year rolling standard deviation of the annual rate. The rolling standard deviation is considerably lower now than it was in the 1970s. But recently inflation volatility has ticked up a little.

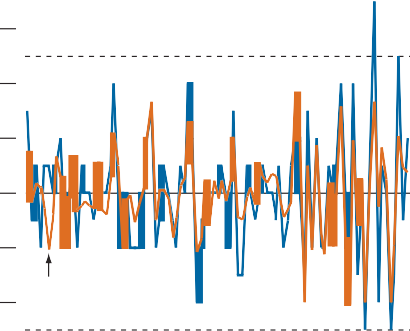
This can be seen from the slightly larger amplitude of the monthly changes in the annual inflation rate in 2001/02. There was also a slight rise in the rolling standard deviation. In the past year the annual inflation rate has changed by

0.5 percentage points or more (from month to month) four times. The previous time this occurred was in 1991, but changes then were related to changes in VAT and the council tax.

Most of the recent volatility in RPIX inflation can be attributed to a few components, notably seasonal food and petrol.

Indeed, the contribution of these two components alone can explain most of the volatility in RPIX inflation, particularly over the past year (see Chart 4.15). Seasonal food and petrol





Monthly change in annual inflation rate

Contribution of seasonal food and petrol



1995 96 97 98 99 2000 01 02

Chart 4.16

0.8

0.6

0.4

0.2

+

\_0.0

0.2

0.4

0.6

prices have not been particularly volatile on their own, when

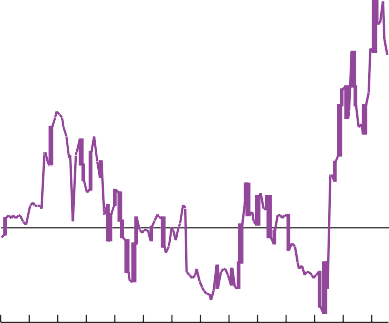
compared with past history. In general, the two series are unlikely to move together because they are influenced by quite different factors: seasonal food prices are typically affected by weather conditions, whereas the oil price is determined by the interaction of global demand for and supply of oil. But in the recent past, seasonal food and petrol prices have moved somewhat unusually together for a prolonged period of time (see Chart 4.16), giving rise to the volatility in annual RPIX inflation.

In September, annual retail services price inflation rose to 4.8% and goods price inflation rose to -0.9% (see Chart 4.17), maintaining the gap between goods and services price inflation at 5.7 percentage points. The widening in the

Comovement of seasonal foods and petrol(a)

Percentage points

15

10

5

differential between goods and services price inflation seen

during the past four years has not been confined to the United Kingdom; though less pronounced, it has been a feature of the United States also (see Chart 4.18). One explanation for the fall in goods prices is weak manufacturing input prices (see page 40), magnified by intense global competition in the market for tradable goods.





1989 91

93 95 97 99

+

0

\_

5

2001

The rise in retail services price inflation since the start of 2001 was mainly due to the increased contribution of leisure and household services. A large part of the pick-up in leisure services inflation reflected unusually strong increases in cable/satellite TV subscription charges and package holidays

(a) Measured as the covariance of the monthly changes in annual petrol price inflation and the monthly changes in annual seasonal food price inflation, over a twelve-month period.

abroad. After 11 September 2001, holiday companies were concerned that people would be less willing to fly and so they

Chart 4.17 RPIX inflation

Percentage changes on a year earlier 6

5

Services

4

3

RPIX

2

Goods

1

+

\_0

1

cut back supply. The subsequent price rise suggests that demand may not have fallen back by as much as they had expected. Household services inflation has risen sharply mainly because telephone charges (both for mobile phones and land lines) have not fallen at the rates they had done in previous years.

2

1995 97 99 2001

Chart 4.18

**The gap between annual retail service inflation and retail goods inflation**(a)

Percentage points 8

6



United Kingdom (b)

United States (c)

4

2

+

0

–

2

Looking ahead, the MPC expects that annual RPIX inflation will move above the target by the end of the year. This projected increase is mostly accounted for by two components: petrol prices and housing depreciation. The strength of oil prices now compared with the oil price in 2001 Q4 implies that the contribution from petrol prices to annual inflation is expected to rise in 2002 Q4. The housing depreciation component measures the costs that owner-occupiers face to maintain the quality of their home. It is meant to capture large infrequent renovations, like replacing a roof. As housing depreciation is not directly measured, it is proxied by a weighted average of lagged house prices, as measured by the Office of the Deputy Prime Minister (ODPM) house price index. This method of calculation means that the current strength in house price inflation will continue to have a further upward impact on RPIX inflation in the coming months. The MPC expects RPIX inflation to remain somewhat above the target of 2.5% for much of 2003. Then inflation may drop below 2.5%, before gradually approaching the target by the end of the forecast horizon. The projection is described in greater detail in Section 6.

4

1988 90 92 94 96 98 2000 02

Sources: ONS and US Bureau of Labor Statistics.

1. Defined as retail services inflation minus retail goods inflation.
2. RPIX inflation.
3. CPI inflation.

Monetary policy since the August *Report* 5

*This section summarises the economic developments and monetary policy decisions taken by the MPC since the August* Report.(1) *The Bank’s repo rate was maintained at 4% in September, October and November.*

The MPC’s central projection in the August *Report* was for RPIX inflation to run a little below the 2.5% target through most of the forecast period, before edging up to around target towards the two-year horizon. Four-quarter GDP growth was expected to return gradually to around-trend rates. The MPC judged that the risks relative to the central projection were weighted marginally on the downside for growth and slightly on the upside for inflation.

At its meeting on 4–5 September, the Committee first discussed the world economy. Equity markets had stabilised during August, above the low points reached in July, but had recorded further sharp falls in the days leading up to the Committee’s meeting. However, equity markets remained volatile and little significance could be attached to short-term movements. Long-term forward interest rates had fallen in the major economies, reversing increases earlier in the year. The fall seemed largely to represent lower real rates. It was possible that it reflected market doubts about the speed of recovery, or that the volatility in equity markets had increased the attractiveness of government bonds. But it was not obviously related to any particular economic news.

Recent data from the United States were broadly consistent with the Committee’s August projections. Economic news from the euro area continued to be weaker than expected and it was still unclear whether sustained recovery in Japan was under way, although the rest of Asia seemed to be growing quite strongly. A number of Latin American countries continued to face severe economic problems although there was more positive news on the month from Brazil and Argentina.

UK monetary data had shown signs of slowing. The corporate sector, including financial companies, had accounted for the

* 1. The minutes of the August, September and October meetings are reproduced under a separate cover, published alongside this *Report*.

easing. Household borrowing had remained strong and mortgage equity withdrawal as a percentage of personal disposable income was close to the rates seen in the late 1980s. While monetary and some housing indicators suggested that consumption still had considerable momentum, retail sales growth had eased in July and survey evidence pointed to further weakening in August. The latest data suggested that labour demand might be a little weaker than expected. RPIX inflation had picked up sharply in July and had been stronger than expected.

In discussing the immediate policy decision, the Committee noted that the world economy was a little weaker than it had appeared to be a month earlier. UK consumption growth and house price inflation were showing tentative signs of slowing and the key issue was how much weight should be put on these signals. A slowing in consumption growth would be unwelcome if it were too abrupt or too early, particularly if the recovery in world activity were to be less strong. Against this background, the Committee considered whether pre-emptive action to delay the slowing in consumption growth might be warranted. However, the Committee agreed that it was premature to conclude that further stimulus was necessary.

Once allowance had been made for the effects of Jubilee holidays on the pattern of output, there was little evidence that the UK recovery was faltering, and the evidence of consumption growth slowing prematurely was not clear cut. Reducing interest rates at this stage could encourage households to accumulate yet more debt and renew the upward pressure on house prices.

The Committee noted that a decision to maintain the repo rate at 4% did not represent a lack of policy response to the

slower-than-expected recovery in world activity and falls in equity prices. For much of this year the prospects had been that inflation would be moving sharply above target at the

two-year horizon, and it had been widely expected that official interest rates would by now need to be on an upward path.

That the repo rate had still not increased in itself represented a response to the changed prospect for inflation. This was reflected in lower market interest rates, maintaining monetary conditions which continued to support the growth of domestic demand.

The Committee voted unanimously to maintain the Bank’s repo rate at 4%.

At its meeting on 9–10 October, the Committee began by considering the world economy. The main development since their previous meeting had once again been the substantial fall in most leading equity market indices.

*Monetary policy since the August* Report

The US economy still seemed to be evolving broadly as envisaged in the August *Report*, while economic news from the euro area had been a little weaker than the Committee had expected. But the export-led recovery in Japan appeared to be continuing, while domestic demand in several other Asian economies was now growing robustly. For the world economy as a whole, the latest indicators and the falls in equity prices, if sustained, suggested that prospects for activity might be a little weaker than envisaged at the time of the August *Report*.

In the UK economy, equity prices had fallen by less than in most other major markets over the month and the sterling exchange rate had risen to 11/2% above the level assumed for the third quarter at the time of the August *Report*. Since the August *Report*, government bond rates had fallen by less than in the United States and the euro area, while investment-grade corporate bond spreads had risen by less. This was consistent with a relative improvement in UK growth prospects. House prices had continued to rise sharply, although there were some tentative indications that activity in the housing market might be slowing. The greater-than-expected rise in house prices would tend to offset the influence of falling equity prices on consumption, and might lead to stronger near-term prospects for consumption than envisaged in the August *Report*.

Consumption had grown slightly faster in Q2 than predicted in the Committee’s forecast, but was expected to grow more slowly in Q3 as the timings of the Jubilee and Easter holidays had affected the profile of retail sales. There had also been a very sharp decline in car sales. But there were also signs of continuing strength. Retail sales had risen by 0.6% in August. And the GfK survey had shown households’ confidence in their own economic position over the next twelve months to be at a record high.

Business investment was broadly unchanged in Q2. Although a further fall had been anticipated, revisions to back data meant that the level of business investment in Q2 was broadly in line with the August *Inflation Report*. Manufacturing output and industrial production had been weaker than expected. Current indicators were consistent with a very modest easing in the labour market. There was little sign of any overall change in pay pressures, and private sector settlements were lower than this time last year. RPIX inflation was 1.9% in the year to August, but was expected to rise towards, and possibly above, the 2.5% target by the end of the year.

While discussing the immediate policy decision, the Committee noted that the news over the month suggested that the prospects for the world economy were slightly weaker than envisaged in the August *Report*, largely reflecting

developments in the euro area. Downside risks to the world economy also appeared greater and the recent falls in equity prices, if sustained, posed a further risk to the outlook. The Committee agreed that the key issue was whether, in the face of continuing slow growth in external demand, monetary policy should provide a further stimulus to domestic demand.

The Committee identified a number of possible reasons for reducing the repo rate. First, the outlook for the global economy was a little weaker. Second, equity prices had fallen further and the rise in sterling had not proved temporary.

Third, the downside risks to the outlook had increased.

Finally, the profile of inflation had already been expected to be below target for most of the next two years at the time of the August *Inflation Report*, and an interest rate reduction had been under consideration for some time, so on this view the recent news would justify a reduction in rates without waiting for the next quarterly forecast.

The Committee also identified possible arguments for leaving the repo rate unchanged: the continued resilience of domestic demand; a rising profile for inflation at the end of the forecast horizon in the August *Report*; and the difficulty in precisely quantifying the net effect on inflation of changes to equity and house prices, the exchange rate and other news. It was not clear either that the world outlook would be significantly softer than in the August *Report*.

The Committee agreed that the decision remained finely balanced. Most members, weighing the arguments, preferred to leave the repo rate unchanged. Others regarded news in the past month, together with other news since August, as sufficient to warrant an immediate reduction to official interest rates.

The Committee voted by 6 to 3 to maintain the repo rate at 4%.

At its meeting on 6–7 November, the Committee voted to maintain the Bank’s repo rate at 4%.

Prospects for inflation 6

*The Committee’s current projections for output growth and inflation are described below. Based on the assumption that official interest rates are maintained at 4%, the central projection is that four-quarter growth in UK GDP is likely to settle around trend over the next two years, as the gradual improvement in global demand, continued strong growth in public spending, and a moderate recovery in business investment counterbalance some easing in consumer spending growth. RPIX inflation is likely to rise above target in the coming months, reflecting the pattern of oil price movements and the effects of high house price inflation on housing depreciation. As these unusual influences unwind, RPIX inflation may run slightly below the 2.5% target in the second year of the projection, but pick up very gradually to around target by the two-year horizon. The medium-term outlook for inflation is marginally weaker than in August. There remain a number of major risks and uncertainties around the central projection, principally stemming from international prospects and the outlook for UK consumer spending. If they were to crystallise, these risks could have a material impact on UK inflation prospects.*

##### The inflation projection assumptions

Supported by macroeconomic policy, the gradual strengthening in world activity has continued in recent months. But the recovery remains patchy and uneven, and there continues to be considerable uncertainty surrounding the pace and solidity of the global upswing.

Business and consumer confidence indicators show no clear pattern at the global level: although some measures point to a gradual improvement in activity, others signal some loss of impetus. Financial markets remain unsettled. Following the steep decline in June and July, global equity prices fell further in the late summer. Although prices have recovered ground in recent weeks, equities remain well down on levels earlier in the year. Market volatility remains high by historical standards.

Short-term market interest rates and long-term bond yields have declined again, consistent with some weakening in the near-term demand outlook, although lower interest rates should also help to promote a stronger recovery in activity subsequently. The Federal Reserve lowered interest rates by

0.5 percentage points to 1.25% on 6 November to provide a further stimulus to the recovery in the United States.

The resilience of the upturn in the United States remains hard to gauge. GDP rose by 0.8% in 2002 Q3, much higher than expected three months ago. But the strength can be largely traced to the impact of special incentives on automobile sales which provided a temporary boost to consumer spending.

High levels of secured borrowing are also supporting household demand, although consumer confidence has fallen markedly in recent months. The sharp decline in equity wealth over the past year, weak labour market trends, and relatively subdued growth in household income may be weighing on confidence and spending plans. The near-term outlook is for slower growth in consumer spending. Moreover, any recovery in business investment is likely to be relatively sluggish, given little pressure on capacity and high levels of uncertainty which encourage companies to delay capital expenditure. The Committee judges that US GDP growth will ease in the fourth quarter with a slowdown in consumer spending. Thereafter, growth should strengthen gradually, underpinned by continued improvements in productivity and the low level of interest rates. Taking the further easing of policy into account, the outlook is broadly similar to the August central projection.

Output growth in the euro area remains sluggish, with little or no increase in domestic demand over the past year. Consumer spending has risen only marginally over this period. The recent pattern of household spending in the euro area is much weaker than in the United States or the United Kingdom, perhaps reflecting a combination of factors such as: slower growth in real disposable income; higher levels of unemployment, which may have depressed consumer confidence; and a less buoyant housing market in the larger economies which has consequently provided less additional collateral to support a rise in household credit. Moreover, the low level of construction investment in Germany following the post-reunification boom has exacerbated the contraction from the recent decline in the global demand for plant and machinery, and thus has amplified the investment cycle in the euro area. The Committee continues to expect a modest recovery in euro-area GDP growth over the forecast period.

But, reflecting the weaker-than-expected domestic demand outturns for this year, the prospective pick-up may be a little more muted than thought likely three months ago.

There is little change to the outlook in the rest of the world. The most likely outcome in Japan is for a weak cyclical recovery; prospects remain highly uncertain given the continuing challenge of non-performing loans. Growth elsewhere in Asia held up relatively well during the global downswing, bolstered by robust domestic demand. External demand nonetheless remains an important spur, and growth in the region is likely to strengthen further in line with the recovery in the major industrial economies.

Drawing together the picture from different regions, the Committee continues to assume that there will be a gradual strengthening in UK-weighted world demand and trade over

the forecast period, fostered by the stimulative stance of policy. Annual global GDP growth is likely to return to around trend rates in the second year of the projection. Taking into account the lower level of market interest rates, the global prospects are broadly similar to those in the August *Report*.

The upswing in the world economy is not yet durably entrenched, however, and there are downside risks to the global outlook. Confidence in global equity markets remains fragile. Moreover, in the United States, the high level of private sector debt and low rate of household saving continue to be sources of particular vulnerability. Indeed, the drop in US consumer confidence in recent months could foreshadow a weaker outlook for household spending than currently envisaged, and that in turn could check the upward momentum in overall activity. And, in the euro area, given only limited recovery in output growth to date and the absence of any sustained pick-up in domestic demand, there are risks of a renewed downturn in private sector confidence, which could prompt companies and households to rein back spending plans and thus prolong the period of below-trend growth.

The most likely prospect for international prices has changed relatively little since August. Oil prices rose during August and September, given heightened uncertainty regarding military conflict in Iraq and a possible disruption to supplies. But prices fell back in October as market concerns eased. Oil futures prices, which are used to guide the Committee’s central projection, edge down over the next two years to around the levels expected three months ago. The projection for non-oil commodity prices is little altered: a stronger outlook for food prices is largely counterbalanced by a weaker picture for industrial commodities. More broadly, global inflationary pressures are likely to remain subdued over the forecast period, given the prospect of only a moderate recovery in world output growth. The outlook for the price of internationally traded goods and services is close to the August projection.

UK import prices also depend on the outlook for sterling exchange rates. The sterling effective exchange rate index (ERI) has changed little over the past three months. In the 15 working days to 6 November, the sterling ERI averaged 106.3. That rate has been used as the starting point in the current projection. It is consistent with bilateral rates of

$1.55 and 63 pence against the euro, and is less than 1% above the level assumed in the August *Report*. The sterling ERI is assumed to depreciate gently over the forecast period to 104.5 in 2004 Q4.

UK equity prices have continued to track international developments closely. Prices fell sharply in September, but

subsequently recaptured much of this additional loss as global markets have rallied in recent weeks. In the 15 working days to 6 November, the FTSE All-Share index averaged 1955, some 4% below the level for 2002 Q4 incorporated in the August projection. Maintaining the conventional approach, equity wealth is assumed to rise in line with nominal GDP over the forecast period.

House prices have again risen more quickly than expected in recent months, with both the Halifax and Nationwide reporting increases in the 25%–30% region over the past year. The market remains very buoyant, although there are some tentative signs of moderation looking forward. In particular, data on new housing reservations and loan approvals are running below levels earlier in the year. This may herald some easing in activity, as recent price increases have increasingly stretched the affordability of houses in terms of average disposable income. In the Committee’s central projection, house price inflation slows markedly, with prices broadly stable in two years’ time. But there are major risks around the assumed path.

The MPC’s projections continue to be based on the Government’s nominal public spending plans, which imply further robust growth in government expenditure over the forecast period. In recent months, tax revenues have fallen short of expectations in the Budget. In large part that appears to reflect the influence of weaker-than-expected economic growth and the impact of the slowdown on revenues linked to the financial services sector. Based on recent outturns, the Committee has lowered the estimates of future tax revenue.

##### The output and inflation projections

Output growth in the United Kingdom has continued to recover from the cyclical trough around the turn of the year. According to the preliminary ONS estimate, GDP rose by 0.7% in 2002 Q3, slightly above the revised estimate of growth in the second quarter. However, recent monthly and quarterly data for production and demand have been affected by the timing of Easter and by the Jubilee holidays, which have clouded the assessment of trends. Taken together, the Q2 and Q3 GDP estimates are consistent with a gradual rebound in output growth to around long-term trend rates. Nevertheless, the pick-up in activity over the spring and summer appears somewhat weaker than assumed three months ago.

Strong growth in consumer spending has provided the main support to GDP growth in the United Kingdom in recent years. Robust spending has underpinned domestic demand and cushioned the impact of the recent global downturn.

However, the resulting divergence between domestic and

external demand has been reflected in uneven pressures on industrial sectors. It has also been associated with a build-up of household debt to historically high levels in relation to income, which increases the risks of a sharp slowdown in household spending at some point. Against this background, the outlook for consumer spending remains central to the overall assessment of future aggregate demand conditions.

There are some signs of easing in consumer spending growth this year from the pace in 2001, adjusting for the impact of the timing of Easter and the Jubilee Bank Holidays which have affected the monthly and quarterly pattern of expenditure.

But to date, the slowdown appears to be moderate and underlying spending growth remains quite strong. Several factors point to near-term resilience in spending. Real interest rates are low, and the sharp increase in house prices in recent years has enabled homeowners to borrow more cheaply and to withdraw substantial housing equity against the value of their additional collateral. Unsecured borrowing is also growing very rapidly. Unemployment has been maintained at historically low levels over the past year, and consumer confidence remains relatively high. However, other influences continue to point to a slowdown in spending. In particular, growth in real post-tax labour income has fallen from the rapid rates in recent years, and the sharp fall in equity prices this year has reduced household financial wealth considerably.

The Committee continues to expect a further slackening in the growth of consumer spending over the forecast period. The recent strength of the housing market is likely to sustain growth in credit and spending for a while, with consumption decelerating more sharply as house price inflation slows.

Moreover, real household income growth is likely to remain relatively subdued for some time, as employment growth falters, and as the increase in National Insurance Contributions in April 2003 reduces take-home pay. And, although the links between equity prices and consumer spending are uncertain, the sharp drop in financial wealth over the past two years should encourage households to make additional savings over the forecast period in order to rebuild their balance sheet positions. The central projection is that quarterly consumer spending growth will be relatively robust around the turn of the year, following a weak third quarter, but will then moderate through 2003 to a little below long-run trend rates. Largely echoing changes to the assumed profile of house price inflation, consumer spending growth may be a little stronger in the first year of the projection than assumed in August, and a little weaker in the second year.

Business investment remains depressed. Investment has fallen in each of the past six quarters, and in 2002 Q2 capital spending was almost 11% down on levels a year earlier.

Cutbacks have been equally sharp across the manufacturing and service sectors.

There is little likelihood of an imminent turnaround in investment spending. There are few signs of emerging strains on plant capacity: although there are significant differences across sectors, capacity utilisation, on average, is marginally below normal levels. And, although aggregate profits have edged up in recent quarters, capital gearing at market values has increased given the recent sharp fall in equity prices, which has added to pressure on corporate balance sheets.

Internal funds for investment may also be lowered by additional payments to finance pension fund shortfalls brought about by falling equity values. Moreover, uncertainty about the global recovery continues to provide companies with an incentive to postpone investment. Reflecting these factors, investment intentions surveys have generally weakened over the past quarter. The Committee’s central projection is that business investment will dip a little further in the second half of 2002, and will then pick up gradually thereafter.

Although business investment may rise a little faster than GDP over the forecast period, the recovery in investment is likely to be restrained: in particular, the level of business investment by the end of 2004 is expected to remain below the level at the end of 2000. The trend in whole-economy investment is likely to continue to be a little stronger than that for business investment, primarily reflecting the vigorous growth in public sector investment incorporated in spending plans.

Lower inventory investment subtracted significantly from aggregate demand in 2002 Q2. Surveys of manufacturing firms, in particular, reported that companies were seeking to cut stock levels to lower financing costs and improve cash flow. In some cases, the shutdown in production in the Jubilee Bank Holiday week may have provided an opportunity for companies to meet final demand by reducing inventories. The latest CBI Industrial Trends Survey suggests that the correction of manufacturing inventories may be drawing to an end, thus providing a one-off boost to total demand and output. Combined with reports from the CBI Distributive Trades Survey suggesting that distribution firms added to stock levels, whole-economy inventory investment is likely to have supported GDP growth in 2002 Q3. There is little sign from surveys or reports to the Bank’s Agents of any major imbalance in aggregate inventory holdings. The Committee has consequently maintained the assumption that stock levels rise broadly in line with output over the forecast period.

The monthly and quarterly pattern of trade flows has also been volatile this year. Following a sharp bounceback in 2002 Q2, monthly data point to a fall in export volumes in the third quarter, suggesting that the Q2 outturn exaggerated the

strength of the underlying recovery in international demand for UK goods. Indeed, recent monthly outturns have been surprisingly low in relation to estimates of global demand and the relative prices of UK exports. Although some of the unexplained weakness is likely to be erratic, the Committee judges that the low outturn may also signify a more depressed underlying position. The Committee continues to expect a steady recovery in exports over the next two years, predicated on the assumption of a gradual strengthening in external markets. Nevertheless, export prospects are less bright than assumed in the August *Report*, reflecting the combination of a weaker-than-expected starting level, and a slightly stronger profile for the sterling effective exchange rate.

Chart 6.1

**Current GDP projection based on constant nominal interest rates at 4%**

Percentage increase in output on a year earlier 6

5

4

3

2

1

+

0

–

1

Import volumes have also been relatively weak in recent months and have fallen short of the level expected in the August *Report*. Looking back over the past year, it appears that the lower-than-expected level of imports in relation to UK aggregate demand can largely be explained by the compositional changes within spending: in particular, given the high proportion of capital goods that are imported, the steep fall in business investment is likely to have had a major counterpart in reduced imports. Drawing on disaggregated information on the outlook for the main components of aggregate demand, import growth is likely to rise over the forecast period. Moreover, import growth may rebound more quickly than export growth. In consequence, following the erratic substantial positive contribution of net trade to GDP growth in 2002 Q2, net trade is likely to remain a brake on output growth over the next two years, although the restraint may fade by the end of the period as the global upswing gathers strength.

The Committee’s current projection for the four-quarter growth in GDP is shown in Chart 6.1.(1) It is based on the assumption that official interest rates are maintained at 4%.(2) Four-quarter growth in GDP recovered to 1.7% in 2002 Q3 from the low point of 1.0% in 2002 Q1. On the central

1998 99 2000 01 02 03 04

The fan chart depicts the probability of various outcomes for GDP growth in the future. The darkest band includes the central (single most likely) projection and covers 10% of the probability. Each successive pair of bands is drawn to cover a further 10% of probability, until 90% of the probability distribution is covered. The bands widen as the time horizon is extended, indicating increasing uncertainty about outcomes. See the box on

pages 48–49 of the May 2002 *Inflation Report* for a fuller description of the fan chart and what it represents.

projection, four-quarter GDP growth is expected to pick up further to a little above long-run trend rates by early 2003, before settling around trend thereafter. Robust household and public spending are likely to provide the main impetus to GDP growth over the next six months. As consumer spending growth is then likely to slow, the steady upturn in global demand and the moderate recovery in business investment are expected to support the continued strong expansion in public spending, maintaining overall GDP growth around trend. The central projection is broadly similar to the August projection, with growth a little stronger in the short run, and slightly

1. Also shown as Chart 1 in the Overview.
2. An alternative projection based on market interest rate expectations is shown in Chart 6.5 below.

weaker in the medium term. The change in the profile for consumer spending largely accounts for the small difference.

As expected, RPIX inflation has bounced back from the low point of 1.5% in June. Indeed, RPIX inflation averaged 2.0% in 2002 Q3, slightly higher than in Q2, and a little above the August central projection. RPIX inflation has remained volatile and the underlying trend hard to determine, as the twelve-month rate has been buffeted by the emergence and subsequent unwinding of a number of temporary influences on the price of relatively erratic components such as seasonal food and petrol. The rapid increase in house price inflation over the past year has also had a pronounced direct impact on the housing depreciation component. The marked divergence between services and goods price inflation has persisted, related to differences in demand conditions as well as in productivity growth.

The prospects for inflation depend on the pressures exerted by demand in relation to the sustainable supply capacity of the economy. Previous *Reports* have spelled out the challenges and uncertainties involved in forming estimates of sustainable supply capacity. Given little new information, the Committee has maintained the same assumption on the near-term growth in potential supply capacity as in the August *Report*.

Overall pay pressures remain subdued. Whole-economy earnings growth per employee continues to run a little below 4% per annum, even though bonuses no longer appear to be falling and the downward impact on earnings growth from this source has come to an end. Moreover, average pay settlements over the past year remain around 3%. Underlying earnings growth may, however, be slightly higher than measured, as the delayed settlement for local government workers is not yet captured in the data. Furthermore, average hours worked per head have fallen significantly over the past year, pressing down on total earnings: pay per hour is consequently rising more quickly than pay per employee.

Inflation expectations appear relatively well-anchored to the inflation target and seem unlikely to be a source of particular pressure on nominal earnings.

The outlook for real earnings growth depends on employers’ demand for labour in relation to the available supply, as well as on the growth of labour productivity. There may have been a weakening in aggregate labour demand in recent months, as total hours worked have fallen, although the downward trend is likely to be exaggerated by the Jubilee holiday distortions. In addition, LFS employment is rising less quickly. Moreover, some surveys and reports from the Bank’s regional Agents indicate a marginal easing in recruitment difficulties, although

the pattern is far from uniform, and any such slackening appears very small. Indeed, unemployment remains stable at historically low levels. Overall labour market conditions remain tight.

Productivity growth per person has been exceptionally weak over the past 18 months or so, as LFS employment growth remained relatively resilient despite the slowdown in GDP growth. Output per hour has held up better, as average hours worked have fallen, perhaps in part temporarily as firms have lowered overtime to reduce costs, but also perhaps reflecting a desire from some employees to work shorter hours and to seek part-time rather than full-time work. In aggregate, employers have sought to retain labour and in some cases to expand their headcount, presumably on the assumption that the downturn would be relatively shallow and short-lived, and recognising that the costs of shedding labour and subsequently recruiting and retraining could be substantial in a tight market. In addition, public sector recruitment has also increased over this period, helping to underpin demand. Looking forward, projected growth in output at around trend rates would typically be associated with a steady increase in labour demand. However, in the initial phase of recovery, companies are likely to be able to supply the extra output by working off any ‘hoarding’ of labour during the downswing, and by taking the opportunity to rebuild productivity to more normal levels. As a result, although public sector demand is likely to continue to rise given the planned expansion of public services, total numbers employed could be relatively little changed over the next year or so. Given steady growth in the working-age population, labour market conditions could consequently ease slightly for a time.

Drawing together the various influences on pay, nominal earnings growth is likely to edge up a little in the near term. A number of factors are likely to provide some upward pressure: the payment of the delayed local authority settlement; the current tightness of the labour market; and the prospective rise in inflation outturns. But the upward trend in earnings is unlikely to be sustained beyond 2003, as the projected slight easing in labour market conditions should help to contain any increase in pay pressure. Unit wage costs may rise a little less quickly over the forecast period than over the past year, as the cyclical recovery in productivity growth is likely to exceed the pick-up in earnings growth. But the benign implications for unit labour costs, which include employers’ social contributions and other non-wage employment costs in addition to wages, will be tempered by the increase in National Insurance contributions next year. Moreover, in terms of the impact on prices, companies may well pay more attention to a smoothed or trend measure of unit labour costs which attaches less weight to cyclical fluctuations.

Chart 6.2

**Current RPIX inflation projection based on constant nominal interest rates at 4%**

Percentage increase in prices on a year earlier5

Chart 6.3

**RPIX inflation projection in August based on constant nominal interest rates at 4%**

Percentage increase in prices on a year earlier 5

4 4

3 3

2.5 2.5

2 2

1 1

0

1998 99 2000 01 02 03 04

0

1998 99 2000 01 02 03 04

The fan chart depicts the probability of various outcomes for RPIX inflation in the future. The darkest band includes the central (single most likely) projection and covers 10% of the probability. Each successive pair of bands is drawn to cover a further 10% of probability, until 90% of the probability distribution is covered. The bands widen as the time horizon is extended, indicating increasing uncertainty about outcomes. See the box on pages 48–49 of the May 2002 *Inflation Report* for a fuller description of the fan chart and what it represents.

The Committee’s latest projection for the twelve-month RPIX inflation rate is presented in Chart 6.2.(1) The projection is based on the assumption that official interest rates are maintained at 4% over the forecast period.(2) It is shown alongside the August projection, which was also conditioned on interest rates remaining at 4% (see Chart 6.3).

The central projection is that RPIX inflation is likely to move somewhat above target by the end of the year and may remain a little above target through much of 2003. Inflation is then expected to edge down slightly and to run a little below the target, although inching up very gradually to around the target level by the two-year forecast horizon. Two factors account for the near-term pick-up in RPIX inflation. First, global oil prices in late 2002 are much higher than in late 2001, when prices dipped sharply in the aftermath of the 11 September terrorist attacks. Second, the sharp increase in UK house price inflation continues to boost the housing depreciation component of RPIX. Both influences are likely to be transitory. The twelve-month change in oil and petrol prices is likely to decline during 2003, and indeed may well reverse sign by the end of the year. It is highly unlikely that house price inflation can persist for long at the current unsustainable pace. So the projected near-term increase in RPIX inflation may exaggerate the strength of underlying inflationary pressure somewhat.

Abstracting from these temporary influences, RPIX inflation appears likely to be broadly flat over the forecast period around the 2.5% target level. Reflecting the prospect of UK GDP in broad balance with supply capacity, underlying

1. Also shown as Chart 2 in the Overview.
2. An alternative projection based on the assumption that interest rates follow market expectations is illustrated below in Chart 6.4.

Chart 6.4

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

Percentage increase in prices on a year earlier

5

Chart 6.5

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

Percentage increase in output on a year earlier

6

5

4



+

4

3

3

2.5

2 2

1

0

1998 99 2000 01 02 03 04

1

0

–

1

1998 99 2000 01 02 03 04

domestic inflationary pressures are expected to be relatively stable. External influences on prices may be a little stronger than in the recent past, but are also expected to show no clear trend over the forecast period.

Compared with the August projection, RPIX inflation is likely to be noticeably higher over the next year or so, principally reflecting the recent spike in oil prices and the direct effect, via the housing depreciation component, of the persistence of high house price inflation. But inflation is expected to be marginally lower in the second year of the projection than in August, principally reflecting slightly softer external pressures on inflation.

Table 6.A

**Market expectations of the Bank’s official interest rate**(a)

Per cent

2002 2003 2004

Financial market participants have again lowered their expectations of the likely level of official interest rates in the United Kingdom over the next two years. Employing the same approach as in previous *Reports*, and based on a

15 working-day average to 6 November, market expectations were consistent with the possibility of a slight reduction in official interest rates in the coming months, with the prospect

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Q4 Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | of a reversal by the end of 2003 and a slight increase |
| 4.0 3.8 | 3.7 | 3.8 | 4.0 | 4.2 | 4.4 | 4.5 | 4.6 | thereafter to around 41/2% by the end of 2004 (see Table 6.A). |

(a) Based on the interest rate available on gilt-edged securities, including those used as collateral in short-term repo contracts, plus a small upward adjustment to allow for the average difference between this rate and the Bank’s official interest rate. The data are 15-day averages to 6 November 2002.

The Committee’s latest projections based on this interest rate trajectory are shown in Charts 6.4 and 6.5. The differences from the constant interest rate projections are negligible.

There remains considerable uncertainty surrounding the prospects for output growth and inflation. The Committee has continued to calibrate the variance of the fan chart drawing on the experience of previous forecast errors. There are a

number of risks to the outlook that could have a major bearing on inflation prospects. Judgments about these risks consequently form a key consideration in gauging the appropriate level of interest rates.

First, as outlined above, there is a risk that the world recovery could still falter. A much weaker international outlook would have a substantial impact on the prospects for UK GDP growth and inflation.

Second, there is considerable uncertainty surrounding the outlook for consumer spending in the United Kingdom, which is closely linked to the prospects for the housing market.

House price increases at current rates are clearly unsustainable. The central projection incorporates a sharp slowdown in house price inflation, with prices broadly stable in two years’ time. But there are large risks to this view. Given current high levels of consumer confidence and low unemployment, there is a possibility that continued rapid house price inflation could persist for a time, fuelling a further expansion of household debt and supporting stronger consumer spending than in the central projection. But the longer house prices rise at an unsustainable pace, and the larger the build-up of household debt, the greater the risk of a sharp correction at some point. There are consequently both major upside and downside risks to the outlook for consumer spending and inflation arising from the potential instability in current housing market trends.

Chart 6.6

**The MPC’s expectations for RPIX inflation based on constant nominal interest rates at 4%**(a)

**Chart 6.7**

**The MPC’s expectations for GDP growth based on constant nominal interest rates at 4%**(a)

2002 Q4

2003 Q4

2004 Q4

Probability, per cent

70

2002 Q4

2003 Q4

2004 Q4

Probability, per cent 90

60 80

70

50

60

40 50

30 40

<1.5 1.5–2.0 2.0–2.5

2.5–3.0

3.0–3.5 >3.5

20

10

0

<1.0 1.0–2.0

2.0–3.0

30

20

10

0

>3.0

Source: Bank of England.

RPIX inflation

Source: Bank of England.

GDP growth

(a) These figures are derived from the same distribution as Chart 6.2. They represent the probabilities which the MPC assigns to RPIX inflation lying within a particular range at a specified time in the future. Because of the difficulties in precisely quantifying

low-probability events, probabilities of less than 5% are not shown in this chart.

(a) These figures are derived from the same distribution as Chart 6.1. They represent the probabilities which the MPC assigns to

GDP growth lying within a particular range at a specified time in the future. Because of the difficulties in precisely quantifying

low-probability events, probabilities of less than 5% are not shown in this chart.

Chart 6.8

**Current projection for the percentage increase in RPIX in the year to 2004 Q4**(a)

Probability, per cent (b)

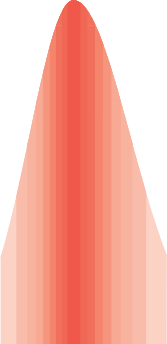
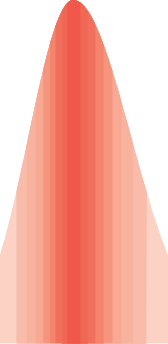
6

Chart 6.9

**August projection for the percentage increase in RPIX in the year to 2004 Q3**(a)

Probability, per cent (b) 6

5 5



4 4

3 3

2 2

1 1

0

-1.0 0.0 1.0 2.0 3.0 4.0 5.0 6.0

Inflation

0

-1.0 0.0 1.0 2.0 3.0 4.0 5.0 6.0

Inflation

Source: Bank of England.

1. These charts represent a cross section of the fan chart at the end of the respective forecast horizons. As with the fan charts themselves, the shaded areas represent 90% of the distribution of possible outcomes for RPIX inflation in the future. The darkest band includes the central (single most likely) projection and covers 10% of the probability. Each successive pair of bands covers a further 10%. There is judged to be a 10% chance that the outturn will lie outside the shaded range. For further details on how the fan charts are constructed see the box on pages 48–49 in the May 2002 *Inflation Report*.
2. Probability of inflation being within 0.05 percentage points of any given inflation rate, specified to one decimal place. For example, the probability of inflation being

2.5% (between 2.45% and 2.55%) in the current projection is around 5%.

Third, the Committee has maintained the view from previous *Reports*, that there is a risk that the pass-through into wages and prices of the increase in National Insurance contributions next year could be higher than in the central projection.

There is a small upside risk to the central projection for inflation and a slight downside risk to the outlook for GDP growth from this source.

The risks to the outlook are therefore substantial. A material change in the prospects for the world economy or for the UK housing market could have a profound impact on UK inflation prospects. But given the large and uncertain risks in both directions, the best collective judgment of the Committee is that the risks around the central projection from these factors are broadly balanced over the forecast period. Reflecting the possible impact of the rise in National Insurance contributions, the Committee judges that, relative to the central projection, the overall risks to growth are weighted marginally to the downside, with those to inflation slightly on the upside. The probabilities of various outcomes for RPIX inflation and GDP growth are presented in Charts 6.6 and 6.7.

The overall balance of risks to the inflation outlook at the two-year horizon is illustrated in Chart 6.8, together with the corresponding balance in the August *Report* (see Chart 6.9). Bearing in mind the major uncertainties, individual Committee members hold a range of views on the overall balance of risks, although the range of opinion is relatively narrow.

The Committee reviewed the latest economic news, alongside the current projections and the risks to the outlook, at the policy meeting on 6–7 November. Given that the central projection of inflation was close to target, and that the large and uncertain risks appeared at present to be in broad balance, the Committee voted to maintain the Bank’s repo rate at 4%.

##### Other forecasters’ expectations of RPIX inflation and GDP growth

In October, the Bank asked a sample of external forecasters for their latest projections of inflation and output. The average forecast for the twelve-month rate of RPIX inflation in 2002 Q4, based on the results of this survey, was 2.3% (with a range of 1.9% to 2.6%) rising to 2.4% in 2004 Q4 (with a range of 1.7% to 3.7%). Compared with the survey results in the August *Report*, the average forecast for inflation at the two-year horizon was slightly lower. The distribution of the forecasters’ central projections has the greatest number of respondents expecting inflation to be between 2.1% and 2.4% (see Chart A). In August, the most popular range was between 2.4% and 2.7%. On average the external forecasters see a 64% probability of inflation being at or below 2.5% in 2004 Q4 (see the table below).

The forecasters’ average projection for four-quarter GDP growth in 2002 Q4 was 2.1% (with a range of 1.6% to 2.5%), which was somewhat lower than the average forecast reported in August. The average projection for GDP growth in 2004 Q4 was 2.6% (with a range of 2.2% to 3.5%).

The average forecast for the official interest rate in 2002 Q4 was 4.0% (ranging from 3.8% to 4.5%), rising to 5.2% by 2004 Q4 (with a range of 4.5% to 5.9%). The forecast for 2002 Q4 was slightly lower than the average forecast in August, but the forecast at the two-year horizon was unchanged. On average, forecasters expect that the sterling ERI will be 105.4 in 2002 Q4 (ranging from 101.0 to 110.6), falling to

101.4 by 2004 Q4 (ranging from 95.0 to 110.7).

Chart A

**Distribution of RPIX inflation forecasts for 2004 Q4**

Number of forecasts

12

Chart B

**Distribution of repo rate forecasts for 2004 Q4**

Number of forecasts

10

10

8

8

6

6

4

4

2 2

0

1.2 1.5 1.8 2.1 2.4 2.7 3.0 3.3 3.6 3.9 4.2

Range of forecasts

0

4.3 4.6 4.9 5.2 5.5 5.8 6.1 6.4 6.7 7.0 7.3

Range of forecasts

Source: Forecasts of 21 outside forecasters as of 31 October 2002. Source: Forecasts of 21 outside forecasters as of 31 October 2002.

Other forecasters’ expectations of RPIX inflation and GDP growth

RPIX inflation (a)

Probability, per cent Range:

Less 1.5% 2.0% 2.5% 3.0% More

than to to to to than 1.5% 2.0% 2.5% 3.0% 3.5% 3.5%

2002 Q4 5 21 48 24 5 5

2003 Q4 8 20 35 22 12 5

2004 Q4 (b) 9 19 36 20 8 8

GDP growth (c)

Probability, per cent Range:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Less  than |  | 1%  to |  | 2%  to |  | More  than |
| 1% |  | 2% |  | 3% |  | 3% |
| 2002 Q4 | 6 |  | 41 |  | 45 |  | 7 |
| 2003 Q4 | 10 |  | 24 |  | 44 |  | 23 |
| 2004 Q4 (d) | 13 |  | 20 |  | 42 |  | 25 |

Chart C

**Distribution of sterling ERI forecasts for 2004 Q4**

Number of forecasts

7

6

5

4

3

2

1. 22 other forecasters provided the Bank with their assessment of the likelihood, at three time horizons, of expected twelve-month RPIX inflation and four-quarter output growth falling in the ranges shown above. This table represents the means of the responses for each range. For example, on average, forecasters assign a probability of 9% to inflation turning out to be less than 1.5% in 2004 Q4. Figures may not sum to 100 due to rounding.

88 90 92

94 96

1

0

98 100 102 104 106 108 110 112 114

Range of forecasts

1. 21 forecasters.
2. 22 forecasters.
3. 21 forecasters.

Source: Forecasts of 20 outside forecasters as of 31 October 2002.

### Bank of England

# Agents’ summary of business conditions

**November 2002**

*This publication is a summary of monthly reports compiled by the Bank of England’s Agents, following discussions with around 2,000 businesses in the period between mid-July and mid-October. It provides information on the state of business conditions, from firms across all sectors of the economy. The report does not represent the Bank’s own views, nor does it represent the views of any particular firm or region. The Bank’s Monetary Policy Committee uses the intelligence provided by the Agents,*

*in conjunction with information from other sources, to assist its understanding and assessment of current economic conditions.*

* Agricultural output increased further. Arable yields were substantially above 2001 levels, contributing to continued weakness in cereals prices.
* The recovery in manufacturing output remained slow and uneven. Sub sectors such as civilian aerospace and telecommunications were still depressed, whereas companies producing goods for the public sector, construction or consumers reported increases in output.
* Growth in construction output began to moderate and the balance of orders continued to shift away from commercial buildings to public sector projects. Strong demand for new houses continued. Though there was some easing in the secondary market for higher priced houses, there was no indication of slower demand for other types of property.
* The picture for business services was mixed, with growth in many sectors contrasting with weakness in financial and related services in the London area. Demand for consumer services continued to grow, although overcapacity was becoming evident for some leisure facilities.
* Growth in consumer spending moderated slightly over the period and the outlook was more uncertain. Sales of new cars were lower than expected in September stimulating manufacturers’ promotions the following month. Discounting of flights and hotel rooms had boosted demand for short breaks.
* Growth in demand from some smaller export markets did not fully compensate for continued weakness in demand from Germany and the United States. Import penetration continued to increase.
* Low profitability, volatility in world equity markets and weaker confidence resulting from the threat of war with Iraq had led to renewed caution about investment among manufacturing and business services contacts.
* Prices of some raw materials rose during the period, although weak global demand allowed buyers to limit the impact of increases through more efficient purchasing. Some cost increases, such as insurance premia, were less easy to resist. Manufacturing output prices and some professional fees were subject to downward pressure due to plentiful supply.
* Retail goods price inflation remained muted and prices of new and used cars continued to fall. Prices of most consumer services, except rates for flights and hotel rooms, continued to rise.
* The labour market eased slightly as autumn brought more redundancies. But increased public sector employment contributed to continuing labour shortages in some localities. Pay pressures remained subdued but total costs rose more substantially for employers who needed to increase pension fund contributions.

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

**OUTPUT**

###### Primary production

Agricultural output continued to increase. Substantially higher yields from the domestic cereals harvest than in 2001, and increasing competition from imports, contributed to prices remaining at long-term lows.

Prices for potatoes and other root vegetables were also depressed, in some cases significantly below production costs. Agencies reported that, as a result, many farmers would cease to grow potatoes. Restocking of beef and lamb following the end of foot-and-mouth disease (FMD) continued, generally to numbers slightly below pre-FMD levels. Exports of livestock have not yet recovered to

pre-2001 levels.

###### Manufacturing

The gradual and patchy recovery in manufacturing output continued. Companies producing for the public sector, for construction, or goods for the consumer were generally seeing some growth in output.

Demand for household goods and for processed, chilled and frozen foods continued to increase. And manufacturers of luxury goods increased their output. Manufacturers of specialist safety equipment benefited from health and safety legislation and insurers’ requirements. However, increasing import penetration limited the gains from extra demand. Contacts also reported increasing pressure from customers for stock to be held by suppliers, as deferral of delivery of orders

by customers became more common. UK manufacturing capacity continued to contract as multinational companies rationalised their production sites, increasingly moving factories to China, eastern

Europe, or consolidating production into fewer European plants.

Overcapacity in printing continued. Expected recoveries in production of chemicals and plastics failed to materialise. Orders for machine tools and capital goods generally remained weak, and the civilian aerospace and telecommunications sectors showed little sign of recovery.

###### Construction and housing

Prospects for construction output have softened since the previous *Agents’ Summary*. Current activity remained high, but orders were weaker. Little work on new commercial buildings was started, unless fully

pre-let, even though investor demand for office and industrial property continued to rise. Demand for new distribution sheds and development and refurbishment

of retail and leisure property remained strong. However, the balance of activity was shifting more to public sector work on schools, hospitals, social housing, flood protection and transport infrastructure. Some Private Finance Initiative projects continued to experience long gestation periods.

Growth in house building continued to be constrained by shortages of suitable land and labour. Strong demand was maintained, with many properties selling before they were built. In the secondary housing market, some easing in demand for the highest priced properties was apparent, but in most regions there was no indication of slower demand for mid-market properties, or from

first-time buyers.

###### Services

Growth in output of business services remained positive overall, but performance was dependent on the nature of the customer. Outsourcing of work, such as recruitment and legal services by the public sector,

was underpinning strong growth for some companies. Those providing services to manufacturing were facing reduced orders, particularly for functions such as maintenance of plant, as production moved overseas and companies deferred inessential spending.

Warehousing demand at ports was in some cases at record levels, reflecting buoyant imports, especially from the Far East.

Weak private sector demand was reported in sectors such as IT services and marketing. Investment banking and related financial services were particularly subdued in London. Accountants reported a modest increase

in demand for insolvency and personal bankruptcy work.

Corporate expenditure on conference facilities, contract catering, taxis, car-hire and international courier services remained depressed. Business travellers also appeared to be cutting costs by lowering spending on corporate credit cards and increasing use of discount airlines and budget hotels.

Demand for consumer services continued to grow but there were signs of overcapacity in some regions in leisure facilities, such as restaurants and fitness clubs. Bookings of long-haul holidays remained below last year’s levels, although travel services as a whole saw some growth. Housing-related services, such as estate agencies, mortgage providers and solicitors, reported continued buoyant year-on-year growth in volume and value of business.

*Agents’ summary of business conditions*

**DEMAND**

###### Consumption

The rate of growth in consumer spending appeared to have eased somewhat, albeit from strong figures earlier in the year. Spending on home entertainment electrical goods and garden centre products remained buoyant.

Although early spending on Christmas merchandise was higher than a year ago, retail contacts were nervous that consumer confidence and spending would weaken rapidly if war broke out in the Middle East.

Total sales of new cars in the September new registration month were lower than a year earlier, although manufacturers’ promotions succeeded in boosting sales in October. Over the period, only prestige marques recorded significant growth in sales. Contacts suggested that a significant proportion of car purchases was financed through mortgage equity withdrawal.

The pattern of spending on leisure services was difficult to read. Demand for short breaks, both in the United Kingdom and European cities, grew strongly but was probably influenced by discounting of flights and rooms. Growth in membership of fitness clubs appeared to be slowing, and some restaurants reported lower average spending per meal in recent weeks. However, there was little evidence of declining spending in pubs, and spending at tourist attractions was boosted by good weather in September.

###### Exports and imports

There was some growth in exports to the Far East, notably China, Taiwan and South Korea; and eastern Europe.

Demand from the Middle East and Australia also increased. However, this was insufficient to compensate for a depressed German export market, only a slight upturn from the United States, and business lost to competitors from low-wage economies. The weaker dollar also lowered margins on US sales. Optimism about exports in 2003 rose, although an outbreak of hostilities with Iraq would dampen prospects.

Import penetration increased further. German manufacturers targeted the UK market to compensate for weak demand domestically. And some UK-based companies switched from manufacturing products themselves to sourcing from China or eastern Europe.

###### Investment

The climate for investment has deteriorated since the previous *Agents’ Summary*. Cash conservation has

increasingly been prioritised, following falls in world equity markets and low profitability. Weakening confidence resulting from geopolitical uncertainty also led many firms to postpone investment. In some cases funds earmarked for investment projects were diverted to top up company pension schemes.

Investment in extra capacity by larger manufacturing companies was often directed overseas, to economies with lower labour costs. Within the United Kingdom, capital expenditure failed to keep pace with depreciation in many cases and some businesses were restricting investment to what was necessary to comply with health and safety legislation. Projects with substantial and quick paybacks were proceeding, often involving increased automation to reduce labour costs.

Agencies reported that many business services companies were deferring capital expenditure due to uncertainty about future levels of demand from their manufacturing customers. Consumer services companies, however, continued to invest in refurbishment and upgrading of premises in order to retain or improve market share.

**COSTS AND PRICES**

###### Input prices

Contacts continued to report that prices of a variety of raw materials rose during 2002, mitigated in part by changed purchasing practices as weak global demand increased buyers’ negotiating power.

Contacts were increasingly concerned about rising overhead costs. The most significant increases were in public, product and employers’ liability insurance premia, with the prospect of further substantial rises in the coming year. Security costs also continued to rise due to insurer requirements or contacts’ own perception of a need for greater protection.

###### Output prices

Plentiful supply, increased competition through expanding use of on-line auctions, and customers’ demands for discounts continued to exert downward pressure on manufacturing output prices. Some manufacturers of niche or luxury products, or those with a dominant market share, were able to raise prices on renewal of contracts, or increase margins on new lines. Most manufacturers, however, were subject to increased competition, including from imports, and had to concede small annual price reductions. Retailers expected manufacturers to fund an increasing

proportion of multibuy promotions, and fashion suppliers were under pressure to concede discounts, because autumn stock had not been selling well in the shops.

Service sector output prices continued to rise overall, although there was less upward pressure on some professional fee rates, for example as competition increased among providers of standard accountancy services. However, consultancy and legal fees continued to increase, by around 5% annually in most cases.

Cleaning and security contractors were increasing their prices to reflect an increase in the National Minimum Wage (NMW) to £4.20 in October.

###### Retail prices

Consumer goods price inflation remained muted with prices of electrical goods continuing to fall. Weak sales of clothing due to unseasonably warm weather in September resulted in deeper discounting and earlier starts to some mid-season sales. Contacts reported intensified competitive pressure between supermarkets and the re-emergence of loss leaders. Use of two-for-one offers increased in health and beauty products, as well as food.

Agencies reported that new car prices were lower year-on-year. This had a knock-on effect on prices of

used cars, which were already falling as a result of high stock levels.

Price inflation for consumer services continued to reflect increased labour costs. Price increases of more than 3%, compared with a year earlier, were reported for pub and restaurant meals, theatre tickets, hairdressing, and car leasing and servicing. Hotel room rates in parts of the United Kingdom had been discounted to boost occupancy rates. Air fares also fell year-on-year as a result of increased competition.

###### Pay

Settlements remained subdued, except in areas of significant skills shortages. Pay awards in manufacturing

were mostly around 2% to 3%, and slightly higher in services, between 2.5% to 4%. Higher settlements were made where retention of scarce skills was an issue. Some graduate starting salaries, in areas such as IT, were lower than in Autumn 2001. There were continued reports of pay freezes and deferral of settlements in both manufacturing and services companies.

Other factors caused total employment costs to rise. Falls in investment values led many employers to review their pension funds, with reports of increases of between 3% and 5% in employer contributions. Some employers also faced pressure to restore pay differentials following the increase in the NMW. Firms adjusting pay to meet the increased NMW were mainly outside the South East and included those in cleaning, security, retail, leisure and care.

**EMPLOYMENT**

Another wave of job cuts in manufacturing and professional services companies took effect during the autumn. This was particularly the case for professional services in London and the South East as the anticipated upturn in mergers and acquisitions work failed to materialise. Non-replacement of staff choosing to leave or retiring has become a standard policy for contacts in a growing number of areas. More generally, job creation in the private sector slowed because of uncertainty about future demand. Evidence of easing in the market included lower voluntary turnover rates among staff and a significantly higher number of applications per advertised vacancy.

However, increased public sector employment, notably in administration, education and health, contributed to continued labour shortages in some localities.

Employment in leisure services, retail and call centres also continued to increase, partly as a result of longer opening hours. But contacts reported that it remained difficult to recruit for jobs that require working in the evenings and/or weekends. In some regions of continued labour market tightness, contacts were recruiting from abroad, to acquire specialist skills or simply to ensure adequate levels of low-skilled labour.

**Text of Bank of England press notice of 5 September 2002 Bank of England maintains interest rates at 4.0%**

The Bank of England’s Monetary Policy Committee today voted to maintain the Bank’s repo rate at 4.0%.

The minutes of the meeting will be published at 9.30 am on Wednesday 18 September.

#### Text of Bank of England press notice of 10 October 2002 Bank of England maintains interest rates at 4.0%

The Bank of England’s Monetary Policy Committee today voted to maintain the Bank’s repo rate at 4.0%.

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

#### Text of Bank of England press notice of 7 November 2002 Bank of England maintains interest rates at 4.0%

The Bank of England’s Monetary Policy Committee today voted to maintain the Bank’s repo rate at 4.0%.

The Committee’s latest inflation and output projections will appear in the *Inflation Report* to be published on Wednesday 13 November.

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

##### Glossary and other information

###### Glossary of selected data

AEI: Average Earnings Index.

BHPS: British Household Panel Survey. CPI: consumer price index.

CSPI: corporate services price index. ERI: exchange rate index.

GDP: gross domestic product.

HICP: harmonised index of consumer prices. Io S: Index of Services.

LFS: Labour Force Survey.

M 0 : notes and coin in circulation outside the Bank of England and bankers’ operational deposits at the Bank.

M 4 : UK non-bank, non building society private sector’s holdings of notes and coin, plus all sterling deposits (including certificates of deposit) held at UK banks and building societies by the non-bank, non building society private sector.

M4 lending: sterling lending by UK banks and building societies to the UK non-bank, non building society private sector. M4 lending includes loans and advances as well as investments, acceptances and reverse repo transactions.

MEW: mortgage equity withdrawal.

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.

###### Abbreviations

ATM: Automated Teller Machine.

BCC: British Chambers of Commerce.

BIS: Bank for International Settlements. CBI: Confederation of British Industry.

CIPS: Chartered Institute of Purchasing and Supply.

DETR: Department for the Environment, Transport and the Regions.

ECB: European Central Bank.

EEF: Engineering Employers’ Federation. ESA: European System of Accounts.

FMD: foot-and-mouth disease.

FTSE: Financial Times Stock Exchange.

GAD: Government Actuary’s Department.

Gf K: Gesellschaft für Konsum, Great Britain Ltd. HBF: House Builders Federation.

ICT: information, communications and technology.

ILO: International Labour Organisation. IMF: International Monetary Fund.

ISA: Individual Savings Account. IT: information technology.

MPC: Monetary Policy Committee.

NBER: National Bureau of Economic Research. NMW: National Minimum Wage.

ODPM: Office of the Deputy Prime Minister. OFCs: other financial corporations.

ONS: Office for National Statistics.

OPEC: Organisation of Petroleum Exporting Countries.

PNFCs: private non-financial corporations. S& P: Standard and Poor’s.

TESSA: Tax Exempt Special Savings Account. VAT: Value Added Tax.

###### Symbols and conventions

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

n.a. = not available.

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

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