

# Public attitudes to inflation and interest rates

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Since 2001, the Bank of England has published an annual article discussing the results from the survey of public attitudes to inflation carried out by GfK NOP on behalf of the Bank. This article analyses the results of surveys up to February 2007. Given the relevance of inflation expectations to the current inflation outlook, this year's article focuses on the pickup in the general public's inflation expectations between 2005 and 2006, and the factors that may have contributed to that rise. It also considers the interactions with the public's attitudes to interest rates. Responses to other questions in the survey are discussed in the annex.

## Introduction

In May 1997, the Government gave the Bank of England operational responsibility for setting interest rates to meet its inflation target. The Government's current remit requires the Bank to target an annual inflation rate of 2%, based on the consumer prices index (CPI). The level of interest rates deemed appropriate to meet this target is decided on a monthly basis by the Monetary Policy Committee (MPC).

Monetary policy is likely to be most effective if people understand and support the goal of price stability, as well as the use of interest rates to achieve it. The Bank uses a variety of methods to raise public awareness and to explain the decisions of the MPC. These include: the publication of minutes of the MPC's meetings, the *Inflation Report* and *Quarterly Bulletin*; appearances by MPC members before parliamentary committees; speeches, media interviews and regional visits by MPC members; the work of the Bank's regional Agents; and a range of educational material for schools.

To assess the degree of public awareness, GfK NOP carries out a quarterly survey on behalf of the Bank. This survey includes, among others, questions on the general public's perceptions of inflation over the past year, their expectations for inflation over the next year, and their views on interest rates. This survey provides valuable information that helps the MPC assess the prospects for inflation. The box on page 209 discusses the structure of the survey, the calculation of a measure of inflation expectations and the sampling methodology in more detail.

Over the past year, MPC members have discussed the implications of an apparent pickup in inflation expectations between 2005 and 2006. In particular, they have considered the extent to which the rise reflected increases in observed inflation or whether it reflected other factors, such as the observed rates of nominal demand growth or money and asset prices. In their discussions, MPC members have considered a range of measures of inflation expectations — these are discussed further on pages 36–37 of the May 2007 *Inflation Report*. This article examines the behaviour of inflation expectations in the Bank/GfK NOP survey and some of the factors that may influence them, drawing on survey results up to February 2007.<sup>(1)</sup> It also considers the interaction between inflation expectations and the general public's views on interest rates. Responses to other questions in the survey are discussed in the annex.

## Why do inflation expectations matter?

In the United Kingdom, the 1970s and, to a lesser extent, the 1980s were characterised by periods of high inflation. In 1981, Geoffrey Howe, then Chancellor of the Exchequer, observed that 'squeezing inflation out from an economy which has become accustomed to higher rates over a period of years cannot be an easy or painless task... the inflation mentality must be eradicated'. So why does this 'inflation mentality' (and inflation expectations in particular) play such an important role?

In bargaining over their nominal pay, employees will be concerned with the purchasing power of their post-tax

(1) Results for the May 2007 survey were published on 14 June.

## Assessing inflation expectations using the Bank/GfK NOP survey

Inflation expectations are not directly observed. To fill that information gap, in 1999 the Bank commissioned GfK NOP to conduct a regular survey of attitudes to inflation on its behalf. GfK NOP conducts the survey each February, May, August and November. Each survey covers around 2,000 individuals, with an additional 2,000 taking part in a more comprehensive exercise each February. Respondents are asked how they think prices of goods and services in the shops have changed over the past twelve months, and how they expect those prices to change over the next twelve months. Inflation expectations may vary across different people (as well as over time); for example, people will buy different goods and services and so will experience different movements in prices. For that reason, interviewers also collect information about the respondents, such as their age and income.<sup>(1)</sup>

Given uncertainties about future inflation, respondents' expectations will usually take the form of a range. In order to capture this, respondents are shown a series of showcards, each of which describes a range of price changes, and are asked to select which one best summarises their expectations.<sup>(2)</sup>

earnings; that is, the amount of goods and services that they can buy. For a given nominal wage, higher prices reduce real spending power. Wages tend to be set on an infrequent basis, increasing the onus on wage-setters to form a view on future inflation. If inflation is expected to be persistently higher, employees may seek higher nominal wages, which could in turn lead to upward pressure on companies' output prices and, hence, higher consumer prices.

Inflation expectations also affect inflation directly by influencing companies' pricing behaviour. If companies expect general inflation to be higher in the future, they may believe that they can increase their prices without suffering a drop in demand for their output.

Finally, inflation expectations also influence consumption and investment decisions. For a given path of nominal market interest rates, higher expected inflation by households and companies implies lower expected real interest rates. That would tend to make spending more attractive relative to saving. But if nominal market interest rates rise in response to expectations that the MPC will raise Bank Rate to curtail any inflationary pressure, real rates might not actually decline.

Overall, it is essential for the effectiveness of monetary policy that inflation expectations remain anchored to the target. Good estimates of inflation expectations, and understanding what influences them, are therefore important for successful monetary policy.

To assess the macroeconomic implications of the survey results, it helps to create a summary measure. This requires an assumption about how individuals' specific expectations are distributed within these ranges. To obtain a specific estimate, individual expectations are assumed to be evenly distributed within each range. However the highest and lowest ranges are open-ended, so the distribution of individuals' specific expectations in these extreme ranges cannot be uniquely defined. This creates difficulty with calculating mean measures of expectations. Instead GfK NOP reports the median outcome, which is unlikely to fall within the extreme ranges.

As with all surveys, the Bank/GfK NOP survey is subject to sampling error.<sup>(3)</sup> The sample is designed and weighted to ensure it is representative of known population data on age, gender, social class and region.

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- (1) See Lombardelli and Saleheen (2003) for a discussion of the relationship between inflation expectations and demographic factors.  
 (2) The showcards used are: 'Go down', 'Not change', 'Up by 1% or less', 'Up by 1% but less than 2%', 'Up by 2% but less than 3%', 'Up by 3% but less than 4%', 'Up by 4% but less than 5%', 'Up by 5% or more', 'No idea'.  
 (3) For more information see the 'Survey methodology and notes' available at [www.bankofengland.co.uk/statistics/nop/index.htm](http://www.bankofengland.co.uk/statistics/nop/index.htm).

## How are inflation expectations formed?

Economists usually assume that individuals form their expectations based on all the relevant information (including about the structure of the economy). In other words, they assume that people have 'rational expectations'. But in reality, it is unlikely that expectations are formed quite in this way. Rational expectations 'impute much more knowledge to the agents... than is possessed by an econometrician, who faces estimation and inference problems that the agents... have somehow solved' (Sargent (1993)).

In practice, different households may form their inflation expectations in different ways. Some households may form their expectations based on a structural relationship, such as the trade-off between inflation and unemployment or demand. Others may use an entirely empirical approach. For example, people may adapt their expectations based on their recent memories of inflation data.<sup>(1)</sup> Or they may use other information that they observe to be closely correlated with their experience of inflation. In addition, people may be totally forward looking, totally backward looking or some combination of the two. Some individuals may employ simple rules of thumb when forming their expectations. Others may simply assume that inflation will be equal to the inflation

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(1) For example, see Orphanides and Williams (2003).

target set by the Chancellor.<sup>(1)</sup> And the method people use to form their expectations can change over time and over monetary policy regimes.<sup>(2)</sup>

In forming inflation expectations, people's behaviour will be influenced by the opportunity cost of gathering the information needed to make inflation forecasts. People should collect and process information until the cost of an additional piece of information outweighs the benefits of an improved forecast. Expectations are then said to be 'economically rational' (Feige and Pearce (1976)). If the costs of collecting information are high, expectations are more likely to deviate from the full information (rational expectations) benchmark.

Some data are difficult to collect. For example, people may find it costly to obtain information about the structure of the economy (about which there is considerable uncertainty, even among the economics profession). By contrast, other data are relatively easy to collect. For example, most macroeconomic data are readily available from the internet. And dissemination of information by the media can also play a part in reducing the costs associated with gathering information.

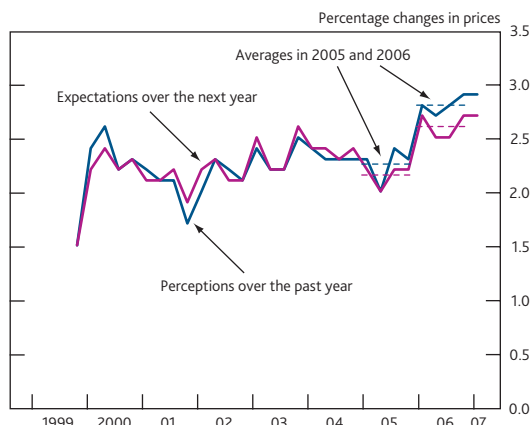
The next section uses some of these concepts to look at recent trends in public attitudes to inflation and, in particular, what might help to explain the pickup in inflation expectations between 2005 and 2006.

## Recent trends in public attitudes to inflation

The Bank/GfK NOP survey asks respondents how they expect 'prices in the shops to change over the next twelve months'. This is designed to reflect a concept of inflation the general public are likely to be familiar with, rather than any specific measure of inflation (such as the CPI inflation rate). Although necessary to gather meaningful information, this can lead to complications when making comparisons with official measures. There may also be significant variation in the way different respondents interpret the question. It is worth noting that, given the question, references to inflation expectations in this article are to the one year ahead horizon, unless otherwise specified.

The Bank typically uses the survey median to summarise the distribution of responses to the questions on public attitudes to inflation (see the box on page 209). **Chart 1** shows that median inflation expectations have been fairly stable over much of the history of the survey. However median expectations picked up at the start of 2006 and have remained elevated since then: expectations were on average 0.5 percentage points higher in 2006 than in 2005, and the February 2007 survey showed that median expectations were unchanged at 2.7%, a series high. So what could have driven the pickup between 2005 and 2006?

**Chart 1** Bank/GfK NOP inflation perceptions and expectations<sup>(a)</sup>



Source: Bank/GfK NOP survey.

(a) Median responses.

As discussed above, one potential explanation is that respondents' expectations of inflation over the next year are closely linked to their perceptions of current inflation. The survey asks respondents how they think the prices of 'goods and services' have changed over the past twelve months. According to the Bank/GfK NOP survey, inflation expectations over the next twelve months have typically followed perceptions of current inflation closely: the correlation between the two since the survey began in 1999 is 0.92.

This correlation is based on the aggregate series and may mask differences at a disaggregated level. Using the February 2007 survey results, **Chart 2** plots each respondent's perception of inflation over the past year against their expectation of inflation over the next year. The width of each bubble corresponds to the proportion of respondents holding that view. So if all respondents report that their perceptions and expectations are the same, then all the bubbles would lie on the 45° line. The chart shows that the largest bubbles do indeed lie on this line: for just over half of the respondents who expressed an opinion on both questions, inflation over the next twelve months was expected to be in the same range as their perception of past inflation. This confirms that, even at a disaggregated level, the majority of households tend to report similar perceptions and expectations of inflation.

The Bank has explored the relationship between inflation expectations and perceptions in previous publications.<sup>(3)</sup> The

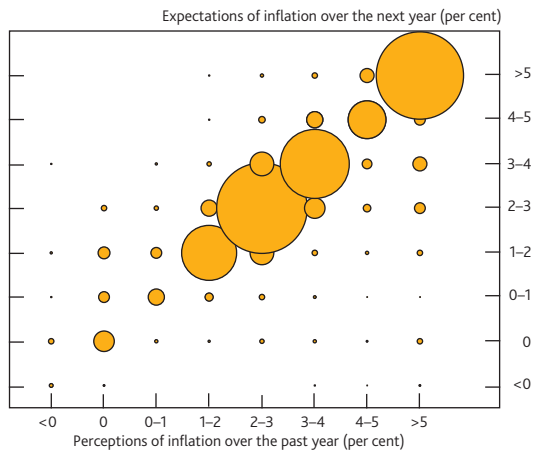
(1) For example, Brazier *et al* (2006) present a model in which agents use 'heuristics' to determine their inflation expectations. In some periods agents use an 'inflation target' heuristic, where they expect inflation to be equal to the target. In other periods, they use a 'lagged inflation' heuristic, where their expectation is a function of previous inflation outturns.

(2) Erceg and Levin (2003) show that US surveys suggest that people change their inflation expectations in response to monetary policy shifts. Farmer, Waggoner and Zha (2007) show that not only does the current monetary policy regime matter for expectations — the probability that this policy may change in the future is also important.

(3) See, for example, Ellis (2006) or pages 24–26 of the November 2005 *Inflation Report*.

next section discusses why the two may be related in more detail.

**Chart 2** Individual views of inflation perceptions and expectations<sup>(a)</sup>



Sources: Bank/GfK NOP survey and Bank calculations.

(a) Respondents who answered either question 'No idea' are excluded. As respondents are asked to select from inflation ranges that typically cover one percentage point, some bubbles may be partly obscured.

## Potential links between inflation expectations and inflation perceptions

Following an inflationary shock, inflation may take time to adjust back to the target. The speed of this adjustment will depend upon a number of factors. These include: the persistence of any inflationary shock; the response of monetary policy; and the way in which inflation expectations are formed. Consequently, close correlations between people's perceptions and expectations of inflation, such as seen in the data, are subject to a number of different interpretations.

For example, a one-off increase in the price *level* should only lead to a temporary rise in the *inflation rate*. In this instance, inflation perceptions may pick up by more than inflation expectations, such that a wedge opens up between the two. But if the shock is deemed to be more persistent, perhaps reflecting underlying inflationary pressures in the economy, inflation expectations may also increase, and any wedge with perceptions would be smaller.

In addition, any monetary policy response deemed necessary will take time to have its full effect on inflation. Since the Bank/GfK NOP survey measures inflation expectations over the next twelve months, it may therefore be entirely rational for respondents to expect any perceived deviation of inflation from target to persist over that period.<sup>(1)</sup> In this case, any wedge between people's perceptions and expectations would also be smaller.

And the relationship will also be affected by the time households take to adjust their own expectations towards target. For example, inflation expectations might take time to return to target if it is costly for households to gather the necessary information. But the speed of adjustment will also be influenced by respondents' attitudes to interest rates, including their understanding of the monetary policy framework and the transmission mechanism. The public's attitudes to interest rates are discussed later in the article.

## Influences on inflation perceptions

If people's expectations are related to their perceptions of current inflation, what factors affect these perceptions? One key driver is likely to be the official data. Another may be the inflation rates of 'high-visibility' items. Finally, discussions in the media could exert an influence on households' attitudes to inflation. This section considers these hypotheses in turn.

### Correlations with official inflation data

As mentioned previously, the Bank/GfK NOP survey does not ask about people's views on a specific measure of inflation. So **Chart 3** shows the survey median inflation perception alongside a selection of headline inflation rates.<sup>(2)</sup> CPI inflation — the measure targeted by the MPC — increased from 1.8% in March 2006 to 3.1% in March 2007 before falling back to 2.8% in April.<sup>(3)</sup> As discussed in the *May 2007 Inflation Report*, increases in food and energy prices accounted for around half of that rise. But the inflation rates of goods and services besides food and energy have also picked up over the past year. In part that may reflect developments relating to specific components, but it is also consistent with a broader pass-through of higher costs and the strength of demand.<sup>(4)</sup>

The upper panel in **Table A** presents simple correlations between the survey-based measure of inflation perceptions and the data shown in **Chart 3**. Simple correlations say nothing about causal relationships and, given that the survey asks about prices of 'goods and services' rather than the inflation rate as measured by any specific index, it is not clear which measure of inflation should be best correlated with the responses. In addition, these correlations are sensitive to the period over which they are calculated. So any conclusions should be treated with caution. Overall, however, inflation perceptions do appear to have some correlation with the current inflation data.

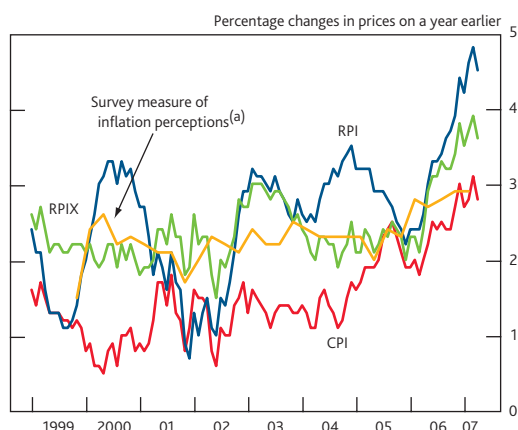
(1) It should be noted that measures of longer-term inflation expectations (such as those derived from financial markets) have also picked up a little since the middle of 2005. But interpreting movements in market-based breakeven inflation rates is not straightforward. For example, they contain an inflation risk premium and are linked to RPI rather than CPI inflation.

(2) This analysis uses the consumer prices index (CPI), the retail prices index (RPI) and the retail prices index excluding mortgage interest payments (RPIX). For further discussion on the differences between these measures, see Office for National Statistics (2004).

(3) At the time this *Bulletin* went to press, the May 2007 CPI data had not been published.

(4) See the box on page 28 of the *May 2007 Inflation Report*.

**Chart 3** Bank/GfK NOP survey inflation perceptions and measures of current inflation



Sources: Bank/GfK NOP survey and ONS.

(a) Median responses.

**Table A** Correlations between current inflation and inflation perceptions<sup>(a)</sup>

	CPI	RPI	RPIX
1999–2007	0.53	0.55	0.49
2004–07	0.63	0.26	0.71
2005–07	0.59	0.20	0.66

Correlations between current inflation and inflation expectations<sup>(a)</sup>

	CPI	RPI	RPIX
1999–2007	0.44	0.51	0.50
2004–07	0.36	0.17	0.58
2005–07	0.54	0.17	0.61

Sources: Bank/GfK NOP survey and ONS.

(a) Correlations between the median Bank/GfK NOP inflation perceptions/expectations and the average annual inflation rates in the three months prior to the survey month.

As discussed previously, the general public may use information on the official inflation target measure to help form their inflation perceptions. Until December 2003, the target was specified in terms of RPIX inflation but then subsequently changed to CPI inflation. So the correlation between perceptions and CPI inflation might be expected to have increased in recent years. Indeed, this correlation has increased slightly since the inflation target was changed. But perceptions remain most closely correlated with RPIX inflation and this correlation has also increased towards the end of the sample period. So it could be that inflation perceptions have been influenced more in recent years by specific movements in inflation that are common to both CPI and RPIX inflation measures. The correlation of RPI inflation with perceptions of inflation has declined in recent years.

Given the close relationship between inflation expectations and perceptions, it is unsurprising that similar results hold when examining correlations between expectations and

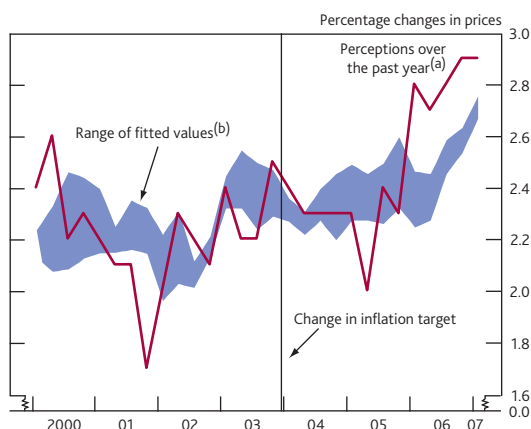
current inflation data (see the lower panel in **Table A**). The correlations are slightly lower compared with those based on inflation perceptions; this may reflect the additional degree of uncertainty when forming expectations about future inflation. It may also reflect people's beliefs about the extent to which any movements in actual inflation are expected to persist.

So both inflation perceptions and expectations appear to have a reasonably close relationship with actual inflation data. A key question is whether perceptions and expectations have increased by more or less than would have been expected on the basis of past correlations, given the movements in actual inflation. One way to answer this question is by using simple regression techniques to estimate the relationship between the survey measures of inflation perceptions and expectations and actual inflation. These regressions take the form:

$$\pi_{j,t} = \alpha + \beta\pi_{i,t} + \varepsilon_t \quad (1)$$

where  $\pi_{j,t}$  represents either the Bank/GfK NOP median perception of inflation over the past year or expectation of inflation in the following year,  $\alpha$  is a constant,  $\pi_{i,t}$  is a measure of current inflation, and  $\varepsilon_t$  is an error term. The regressions were run three times each, using the inflation rates of CPI, RPI and RPIX as the explanatory variables.<sup>(1)</sup> The results are shown in **Charts 4** and **5**, where the swathes show the range of fitted values from the regressions.

**Chart 4** Explaining Bank/GfK NOP perceptions with measures of current inflation



Sources: Bank/GfK NOP survey, ONS and Bank calculations.

(a) Median responses.

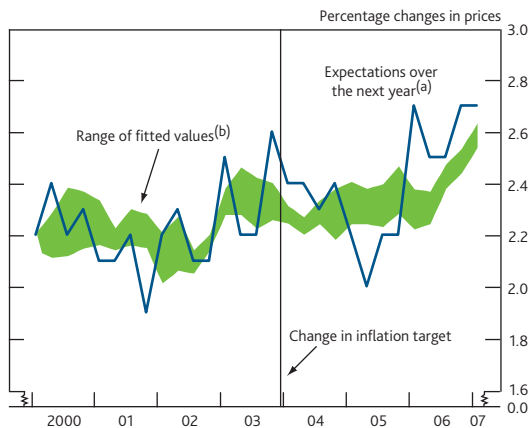
(b) The range of fitted values shows the difference between the maximum and minimum fitted values from the three regressions (CPI, RPI and RPIX) at each point in time.

The results suggest that, towards the end of the sample period, both perceptions and expectations were higher than would

(1) Measures of 'current inflation' are based on the average annual inflation rates in the three months prior to the survey month. The results are fairly robust to using alternative measures of 'current inflation', such as the inflation rate in the same month as the survey is conducted.

have been expected simply by extrapolating from past correlations on the basis of current inflation alone. It is noteworthy that the level of expectations was lower during 2005 than would have been suggested by the average relationship over the past. So the pickup in inflation expectations since then is also larger than can be explained by this simple metric.

**Chart 5** Explaining Bank/GfK NOP expectations with measures of current inflation



Sources: Bank/GfK NOP survey, ONS and Bank calculations.

- (a) Median responses.
- (b) The range of fitted values shows the difference between the maximum and minimum fitted values from the three regressions (CPI, RPI and RPIX) at each point in time.

Given that the rise in both inflation perceptions and expectations was greater than the past relationship with inflation would suggest, it is likely that other factors have influenced households' responses. One possibility is that medium-term inflation expectations have risen, perhaps reflecting the observed growth rates of nominal demand or money and asset prices. An alternative explanation is that households' perceptions and expectations have been influenced by movements in the prices of a subset of 'high-visibility' purchases or by discussions of inflation in the media. The next section explores these last two explanations in greater detail.

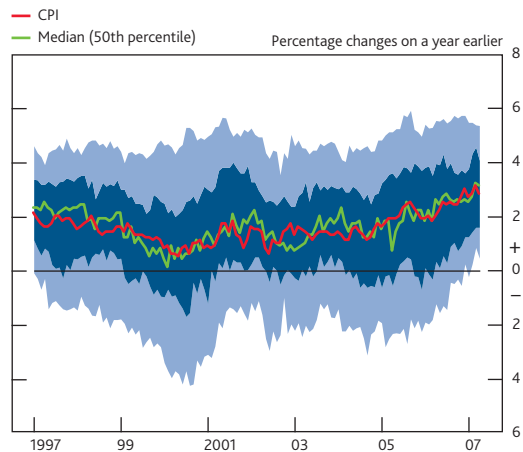
**Relationship with inflation visibility**

The headline rate of CPI inflation can mask a wide dispersion of price changes across different items. Prices of some goods may be falling, while prices of others may be rising more quickly (Chart 6). In addition there is likely to be significant variation in the amount and frequency of different households' expenditure on the various goods and services that make up the CPI basket. It may be difficult for consumers to keep track of all these different prices and, hence, accurately judge the current rate of overall inflation.

Given the wide variation in price changes across items, households' perceptions of inflation may be influenced more by movements in the prices of certain 'high-visibility' items. One way of measuring an item's visibility is how important the

item is to the consumer. For example, consumers require basic sustenance and heating/lighting for their homes. Consequently, they may be particularly aware of swings in food and gas and electricity prices. When these prices are rising rapidly, households' perceptions of inflation may increase by more than aggregate inflation, which may in turn feed through into higher inflation expectations.

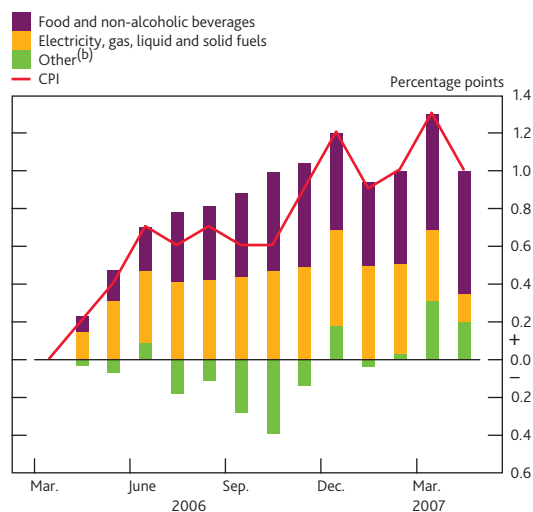
**Chart 6** Distribution<sup>(a)</sup> of price changes of subcomponents of the CPI



- (a) The limits of the dark band in the chart are the 35th and 65th percentiles of that distribution. The pair of lighter bands include a further 30% of the items in the basket, so that the entire coloured region includes 60% of the items in the basket.

Food and gas and electricity prices have risen sharply since March 2006, and account for a significant part of the pickup in CPI inflation since then (Chart 7).<sup>(1)</sup> And it does appear that inflation expectations have been more highly correlated with food and gas and electricity price inflation than with aggregate CPI inflation over the past couple of years (Table B).

**Chart 7** Contributions to the increase in annual CPI inflation since March 2006<sup>(a)</sup>



- (a) Contributions to the cumulative increase in annual CPI inflation.
- (b) Includes vehicle fuels and lubricants.

(1) See the box on page 28 of the May 2007 Inflation Report.

**Table B** Correlations with inflation perceptions<sup>(a)</sup>

	Food and non-alcoholic beverages inflation	Electricity, gas, liquid and solid fuels inflation	CPI inflation
1999–2007	0.12	0.68	0.53
2004–07	0.58	0.75	0.63
2005–07	0.58	0.75	0.59

Correlations with inflation expectations<sup>(a)</sup>

	Food and non-alcoholic beverages inflation	Electricity, gas, liquid and solid fuels inflation	CPI inflation
1999–2007	0.25	0.54	0.44
2004–07	0.52	0.53	0.36
2005–07	0.58	0.69	0.54

Sources: Bank/GfK NOP survey and ONS.

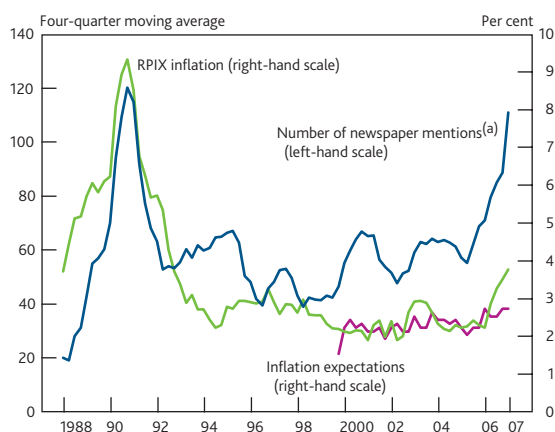
(a) Correlations between the median Bank/GfK NOP inflation perceptions/expectations and the average annual inflation rates in the three months prior to the survey month.

An alternative way of thinking about visibility is the degree to which members of the general public can observe discussions of inflationary pressure in the press and media. For example, more frequent discussions of inflation may increase awareness of inflation among members of the general public. It may also prompt them to reassess their views on a more regular basis, or may increase or improve the information they have available when forming their expectations. Unfortunately, the Bank/GfK NOP survey only goes back to 1999, which is a relatively short time period in which to examine the relationship with media coverage. However, since people's perceptions and expectations of inflation are well correlated with RPIX inflation, this can be used as a proxy for inflation expectations further back.

**Chart 8** shows the relationship between the frequency with which inflation is discussed in a range of UK newspapers, RPIX inflation and median Bank/GfK NOP inflation expectations. The correlation between media coverage and actual RPIX inflation is 0.48 over the period 1988–2007. But the correlation is much better over recent years — it rises to 0.70 over the period 1999–2007, and 0.80 over the period 2003–07. The number of stories about inflation has picked up sharply over the past year, and is only slightly below its 1990 peak. The fact that the timing of the recent increase in media discussions coincides with the pickup in the Bank/GfK NOP measure of expectations suggests that media discussions may have played some role in pushing up households' expectations of future inflation.

However the relationship between media coverage of inflation and inflation expectations is likely to be significantly more complicated than this analysis suggests. For example, greater newspaper coverage increases the amount of information easily available to households, meaning that their inflation expectations may lie closer to a rational expectations

benchmark (Carroll (2001)). To the extent that monetary policy is credible, this benchmark should place greater weight on the inflation target, so it is not clear that expectations should automatically rise when media coverage increases.

**Chart 8** RPIX inflation, Bank/GfK NOP inflation expectations and frequency of media inflation discussions

Sources: © 2007 Factiva, Inc. All rights reserved, Bank/GfK NOP survey and ONS.

(a) Based on Factiva data. Newspapers included in the search are the *Daily Express*, the *Daily Mail*, the *Daily Mirror*, the *Daily Star*, the *Daily Telegraph*, the *Financial Times*, the *Guardian*, the *Independent*, the *Independent on Sunday*, the *Mail on Sunday*, the *News of the World*, the *Observer*, the *People*, the *Sun*, the *Sunday Mirror*, the *Sunday Telegraph*, the *Sunday Times* and *The Times*. The search has been designed to count the number of headlines containing the word 'inflation'. It has been refined to attempt to exclude headlines referring to non-UK inflation.

In addition, the analysis presented here does not distinguish between articles referring to more or less inflationary pressure. Articles that argue that inflation will remain high are likely to have different implications for inflation expectations than those which argue that inflation is likely to fall sharply. So, while the content and nature of the discussion in the media is likely to be important, more detailed work is required to assess the relationship between media coverage and inflation expectations.

## Conclusions on inflation expectations

Based on the recent Bank/GfK NOP surveys, inflation expectations remain elevated. The analysis presented so far has discussed how the rise in inflation expectations coincided with increases in people's perceptions of current inflation, which in turn may have been influenced by increases in observed inflation, or the inflation rates of highly visible subcomponents, such as food and gas and electricity prices. In addition, discussions of inflation in the media could have played a role in shaping people's perceptions of current inflation and expectations of future inflation. The MPC has also discussed how expectations may have been influenced by strong observed growth rates of nominal demand, money and asset prices.

Understanding the likely future path of inflation expectations is essential for successful monetary policy. This path will depend on the persistence of the factors that people perceive to be driving inflation and on the monetary policy response. The wedge that has opened up recently between perceptions and expectations of inflation could be consistent with at least some of the pickup in inflation being perceived as temporary. If this is the case, people’s expectations should begin to fall back. But if expectations have been pushed up by other, more persistent, factors, they may take longer to adjust.

In the May 2007 *Inflation Report*, the MPC projected inflation to fall back towards the target as the effect of lower domestic energy price inflation feeds through. But the Committee also placed some weight on the possibility that inflation expectations adjust more slowly, based on underlying strength in growth rates of nominal demand and money. The speed of adjustment will depend in part on the expected and actual monetary policy responses. The remainder of this article examines the interaction between inflation expectations and interest rate expectations.

### Attitudes to interest rates

The evolution of inflation expectations is likely to depend in part on any expected response of monetary policy. As discussed earlier, the Bank/GfK NOP survey asks about people’s inflation expectations over the next twelve months. If people expect monetary policy to respond in a way that will affect inflation over this horizon, then a wedge may open up between people’s inflation perceptions and expectations, as has been observed since the end of 2005.

The Bank/GfK NOP survey asks several questions that assess people’s views on interest rates and their understanding of the transmission mechanism of monetary policy. The next section discusses: (a) the degree to which people’s perceptions and expectations of interest rates track actual movements in retail rates; and (b) the speed with which people expect interest rates to affect inflation. The responses to these questions may provide some insights into the complex relationship between expectations of interest rates and inflation.

#### Interest rate perceptions, expectations and movements in retail rates

*Question 5* of the Bank/GfK NOP survey asks respondents ‘how would you say interest rates on things such as mortgages, bank loans and savings have changed over the past twelve months?’. Since the start of August 2006, Bank Rate has increased by 1 percentage point. Changes in Bank Rate affect the cost of finance for high street banks, and so affect the prices of their loan and savings products. It is still too early to assess the impact of the 25 basis point increase in Bank Rate in May on retail effective interest rates.<sup>(1)</sup> But as might be expected, most of the 75 basis point rise that occurred

between August 2006 and April 2007 was passed through to variable-rate products. But the average overall effective mortgage rate only increased by about half the change in Bank Rate over the same period (**Table C**).<sup>(2)</sup> This partly reflected the increasing prevalence of fixed-rate mortgages over the past few years.

**Table C** Bank Rate and effective household interest rates

Per cent	July 2006	April 2007	Change (basis points)
<b>Bank Rate</b>	4.50	5.25	75
<b>Borrowing rates</b>			
Mortgages	5.29	5.65	36
<i>of which:</i>			
Variable	5.46	6.12	66
Fixed	5.06	5.13	7
Unsecured borrowing	9.43	9.82	39
<i>of which:</i>			
Variable <sup>(a)</sup>	9.69	10.44	75
Fixed	9.06	8.94	-12
<b>Deposit rates</b>			
Sight	2.71	3.11	40
Time	4.07	4.81	74

(a) Includes credit card borrowing, overdrafts and variable-rate personal loans.

Consistent with movements in retail rates, the net balance of respondents who perceived that interest rates had increased over the past year rose to +70 in the February 2007 survey (**Chart 9**). This was driven by a significant increase in the number of respondents who thought interest rates had risen a lot — this proportion rose to 26%, from an average of 12% over 2005 and 2006.

*Question 6* asks ‘how would you expect interest rates to change over the next twelve months?’. The net balance of respondents expecting interest rates to rise has picked up sharply since the trough in the middle of 2005, but has remained relatively steady over the past few quarters (**Chart 9**).

Over the past couple of years, the perceptions and expectations balances have come together. One possible explanation for this convergence may be that interest rate expectations are increasingly based on people’s perceptions of recent movements in interest rates. Indeed the individual data show that, in February 2007, 63% of respondents who expressed an opinion on both questions reported the same interest rate perceptions and expectations. This compares to an average of 44% over the eight surveys between February 2003 and November 2004. But this increased

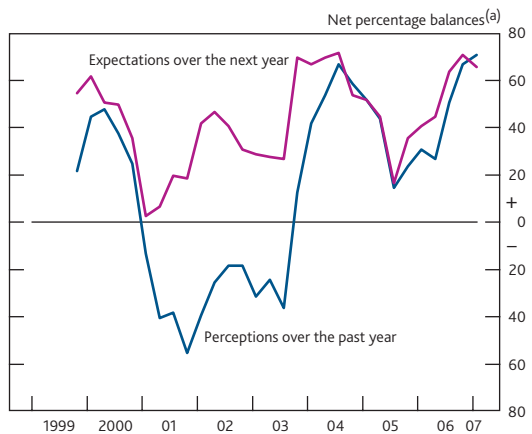
(1) Effective interest rates measure the average rate paid on the total stock of outstanding balances.

(2) See pages 14–15 of the May 2007 *Inflation Report*.



percentage is also consistent with people believing that recent trends in interest rates will continue.

**Chart 9** Bank/GfK NOP interest rate perceptions and expectations

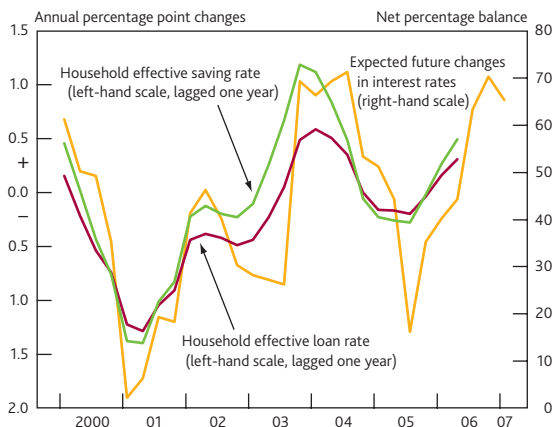


Source: Bank/GfK NOP survey.

(a) The net percentage balances are constructed by subtracting the percentage who thought rates had gone/would go down from the percentage who thought they had gone/would go up.

**Chart 9** also shows that, since the inception of the survey in 1999, members of the public have never said, on balance, that they expected interest rates to fall over the following twelve-month period, even during periods of persistent cuts in Bank Rate. But respondents do appear to be good at judging the momentum in interest rate cycles. **Chart 10** shows the net balance of respondents expecting retail interest rates to increase over the next year, alongside the actual percentage point change in effective household borrowing and saving rates over the same period. The correlation between the public's expectations and these measures is high

**Chart 10** Bank/GfK NOP interest rate expectations(a) and changes in effective household interest rates(b)



Sources: Bank/GfK NOP survey and Bank of England.

(a) The net percentage balance is constructed by subtracting the percentage who thought rates would go down over the next twelve months from the percentage who thought they would go up.

(b) The annual percentage point changes in effective household interest rates are calculated using averages of the annual changes in the three months before the survey. The series are lagged by four quarters to ensure comparability with the survey measure.

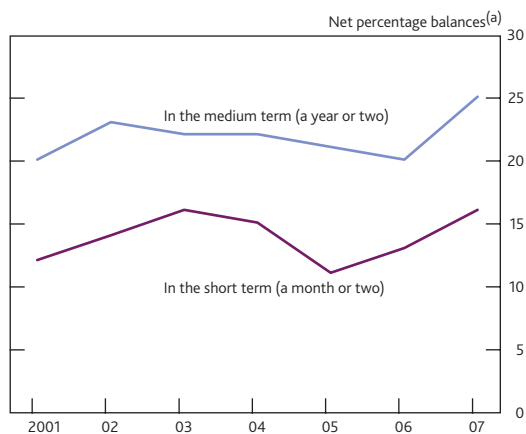
(around 0.80). This suggests that on balance, respondents have a reasonably good understanding of the MPC's reaction function and the relationship between Bank Rate and retail rates.

**The relationship between interest rates and inflation**

An important question for analysing the links between interest rate expectations and inflation expectations is the speed with which people believe changes in interest rates can affect inflation. Typical estimates suggest that the maximum effect on inflation from changes in monetary policy occurs after around 18–24 months (see, for example, Harrison *et al* (2005)). But there is considerable uncertainty around this, and some respondents might believe that interest rates affect inflation much more rapidly or more slowly. Alternatively, if people believe that interest rates have no effect on inflation over the next year, then the survey measures of interest rate and inflation expectations should be independent.

**Question 9** asks respondents to indicate how strongly they agree with the statements: (a) 'a rise in interest rates would make prices in the high street rise more slowly in the short term — say a month or two'; and (b) 'a rise in interest rates would make prices in the high street rise more slowly in the medium term — say a year or two'. On balance, more people thought that higher interest rates will make prices rise more slowly in the medium term than in the short term. In the February 2007 survey, there was an increase in both net balances (**Chart 11**).

**Chart 11** Higher interest rates will make prices rise more slowly...



Source: Bank/GfK NOP survey.

(a) The net percentage balances are constructed by subtracting the percentage of respondents who disagreed with the statement from the percentage who agreed with it.

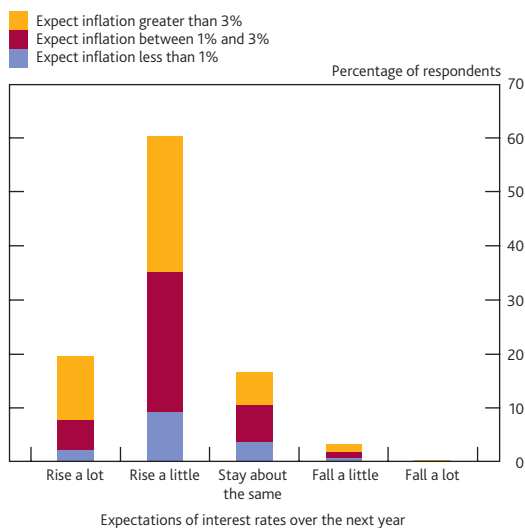
**The link between interest rate expectations and inflation expectations**

In an inflation-targeting environment with a credible central bank, interest rate expectations and inflation expectations should be closely linked. However this link is likely to be complex and hard to identify.

One hypothesis is that if people expect interest rates to be higher, they might have lower inflation expectations. Alternatively, if people have higher inflation expectations, they may expect interest rates to go up. This highlights the interdependencies between people’s inflation expectations and interest rate expectations.

**Chart 12**, which uses the individual-level data to decompose the distribution of people’s interest rate expectations by their inflation expectations, shows that there is a higher concentration of people who expect inflation to be higher among those who expect interest rates to rise. This result may support the latter hypothesis. But this could equally be consistent with the first hypothesis: reported inflation expectations may have been even higher had people not factored in a policy response.

**Chart 12** Comparing inflation expectations across groups with different interest rate expectations<sup>(a)</sup>



Sources: Bank/GfK NOP survey and Bank calculations.

(a) Based on the February 2007 survey. Respondents who answered either question 'No idea' are excluded.

In summary, over the past year the net percentage balance of respondents expecting interest rates to increase over the next twelve months has picked up sharply, although that proportion fell back slightly in the February 2007 survey. Members of the public have always, on balance, expected interest rates to rise. However, respondents are good at judging momentum in interest rate cycles. A higher proportion of people think that higher interest rates will make prices rise more slowly in both the short term and the medium term.

The interaction of interest rate expectations and the speed with which changes in interest rates are expected to affect inflation are likely to play a role in influencing inflation expectations. The results in February 2007 show that people with higher interest rate expectations also have higher inflation expectations. But interpreting this empirical finding is difficult, given the interdependencies between the two.

## Conclusions

Overall, it is essential for the effectiveness of monetary policy that inflation expectations remain anchored to the target. The Bank/GfK NOP survey suggests that the general public’s inflation expectations have picked up somewhat since 2005. A key issue for policy is how long households expect that higher inflation to persist, and the extent to which those expectations are built into wages and prices.

In the May 2007 *Inflation Report* the central projection assumes that inflation expectations return to the target over time. But assessing how rapidly this happens under alternative monetary policy settings is complicated by the fact that different households may form their inflation expectations in different ways. This article has investigated some factors that could have contributed to the rise in inflation expectations in the Bank/GfK NOP survey since 2005 in order to understand better how inflation expectations are formed.

One possibility is that expectations are formed mainly on the basis of people’s perceptions of current inflation. These in turn may have been influenced by the increases in observed headline inflation, or the inflation rates of highly visible subcomponents, such as food and gas and electricity. In addition, discussion of inflation in the media could also have played a role in shaping people’s expectations. As discussed in the May 2007 *Inflation Report*, the MPC expects CPI inflation to fall back during the remainder of 2007. So if expectations are formed mainly on the basis of these factors, they might fall back as energy price pressures ease. But if expectations are more heavily influenced by observed rates of nominal demand growth, money and asset prices, or remain focused on the recent high inflation outturns, they may move back more slowly. In the May 2007 *Inflation Report* the MPC placed some weight on this latter possibility. But there remain significant uncertainties in this area.

## Annex

### Other economic conditions and attitudes to monetary policy

This annex discusses the responses to the other questions in the survey based on information up to February 2007.

The responses to *Questions 3* and *10* help gauge public support for maintaining low and stable inflation. *Question 3* asks whether Britain's economy would be stronger or weaker as a result of higher inflation. Over time the proportion of people who think that higher inflation would weaken the British economy has been steadily rising: at 56%, the February 2007 reading is the highest in the series. The proportion who thinks higher inflation would make little difference to the economy has declined, while the proportion who thinks the economy would be stronger has remained broadly unchanged since the survey's inception.

*Question 10* asks 'If a choice had to be made, either to raise interest rates to try to keep inflation down; or keep interest rates down and allow prices in the shops to rise faster; which would you prefer?'. In February 2007, 56% of respondents preferred interest rates to be higher compared with only 21% who said they would prefer higher inflation. Those proportions have been broadly unchanged over the past four years. The responses to *Questions 3* and *10* suggest that there is general support for low inflation among the general public.

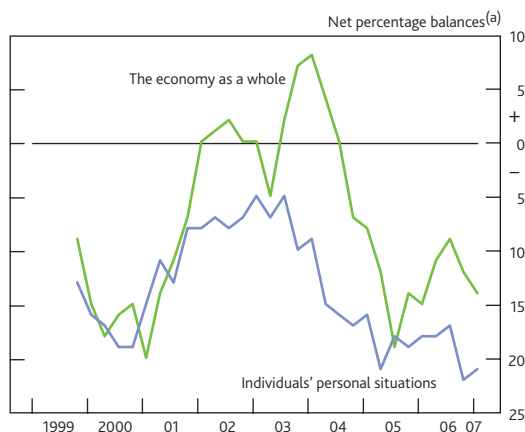
*Question 4* asks whether people think that the inflation target is too low or too high. In February 2007, 53% of respondents thought that the target was 'about right'. That is down a little from a peak of 62% in May 2005.

*Questions 7* and *8* ask respondents about their views on what would be best for interest rates. The net balances show that more people think that it would be best for both the economy as a whole, and for them personally, if interest rates were lower (**Chart A1**). Around 40% of respondents in February 2007 reported that it would be best for them personally if interest rates went down, while around 20% reported that they would benefit if rates rose.

The belief that it would be best for people individually if interest rates were lower is possibly associated with the high degree of mortgage-financed owner occupation in the United Kingdom. Around 40% of respondents in February 2007 were mortgagors, and indeed 58% of these people reported it would be best for them if interest rates were lower. A further 18% of mortgagors reported that it would be best for them if rates stayed where they were, and 13% of them said it would make no difference. By contrast those people who own their homes outright may be more likely to

have more financial assets than liabilities. In February 2007, 27% of respondents reported that they owned their homes outright, and within that subsample, around 40% reported that it would be best for them if interest rates rose.

**Chart A1** Respondents' views on what would be best for interest rates



Source: Bank/GfK NOP survey.

(a) The net percentage balances are constructed by subtracting the percentage who thought it would be best for rates to go down from the percentage who thought it would be best for them to go up.

*Questions 11* and *12* assess whether people are aware of the way monetary policy works in the United Kingdom. *Question 11* asks whether people know which group of people meets to set the level of interest rates. The interviewer does not present respondents with a series of options in this question. The proportion of respondents who offer an answer has been rising slightly in recent years, although around half the respondents still say they do not know. In the February 2007 survey, 36% of respondents answered 'Bank of England', and a further 5% answered 'the MPC'. These two proportions have been almost unchanged throughout the history of the survey.

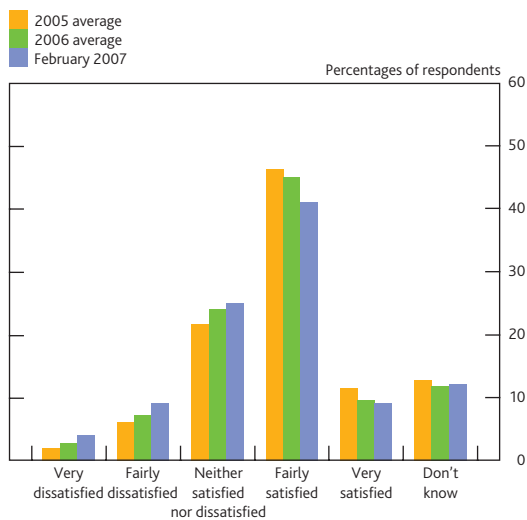
*Question 12* also asks the general public to identify which group sets interest rates, but in this case the respondents are asked to choose from a series of possible responses. In February 2007, 70% of respondents correctly thought that the Bank of England sets interest rates. But 12% thought rates were set by government ministers, and 11% had no idea. These proportions are also little changed since 2003.

*Question 13* asks 'In fact, the decisions are taken by the Monetary Policy Committee of the Bank of England. Which of these do you think best describes the Monetary Policy Committee?'. In the February 2007 survey, 34% of respondents thought that the MPC is an independent body, partly appointed by the government. The proportion of respondents who thought that the MPC is part of the government fell slightly to 15% while 24% of respondents thought that the MPC is a completely independent body. But

8% still think that the MPC is a government-appointed quango and 21% of respondents have no idea.

Question 14 asks whether participants are satisfied with the way the Bank of England is doing its job of setting interest rates to control inflation. Over the past few years, the majority of respondents have been satisfied with the Bank, although this majority has fallen a little since the start of 2006 (Chart A2). In February 2007, 50% reported they were very satisfied or fairly satisfied, while 13% reported they were fairly dissatisfied or very dissatisfied. The proportion who were neither satisfied nor dissatisfied remained unchanged at 25%. The net balance of respondents who are satisfied with how the Bank is doing its job fell by 6 percentage points in February 2007 to +37, its lowest since May 2000.

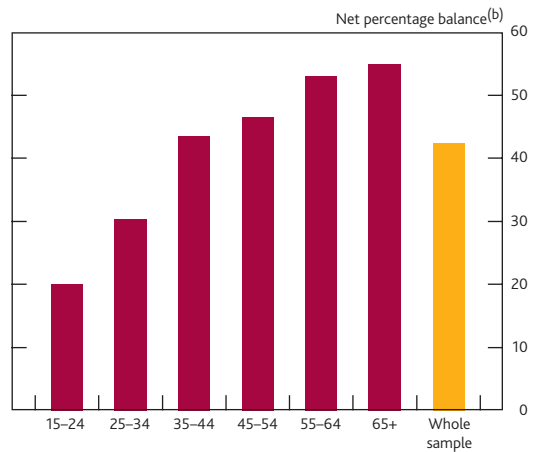
Chart A2 Public satisfaction with the Bank of England



Source: Bank/GfK NOP survey.

Chart A3 shows the distribution of responses to this question by age. Respondents who said 'no idea' are excluded from this analysis to account for the possibility that some groups are more likely to express an opinion than others. The results show that it is the youngest age groups that are most dissatisfied with the Bank. This could in part reflect their lifetime inflation experiences: the older age groups will have had greater experience of the problems associated with high inflationary episodes in the past. It is also possible that the younger age groups have more debt (both secured and unsecured) relative to their older counterparts, such that they have been more directly affected by the interest rate increases of 2006 and 2007.

Chart A3 Public satisfaction with the Bank of England by age group in February 2007<sup>(a)</sup>



Source: Bank/GfK NOP survey.

- (a) Respondents who answered 'No idea' are excluded.
- (b) The net percentage balance is calculated by subtracting the percentage of people who were fairly or very dissatisfied from the percentage who were fairly or very satisfied.

## Public attitudes to inflation

Per cent

	2003				2004				2005				2006				2007
	Feb.	May	Aug.	Nov.	Feb.	May	Aug.	Nov.	Feb.	May	Aug.	Nov.	Feb.	May	Aug.	Nov.	Feb.
<b>Q.1 Which of these options best describes how prices of goods and services have changed over the past twelve months?</b>																	
Gone down	6	5	8	4	3	3	3	4	5	5	4	5	3	3	3	3	2
Not changed	11	14	13	12	10	11	11	13	12	14	11	14	9	10	9	8	7
Up by 1% or less	6	7	7	6	7	7	6	6	6	7	6	7	5	5	6	5	5
Up by 1% but less than 2%	12	13	10	10	14	15	16	13	14	17	13	12	10	12	12	11	11
Up by 2% but less than 3%	20	20	19	20	19	21	20	20	20	19	21	19	20	19	20	19	19
Up by 3% but less than 4%	13	11	13	13	13	13	12	12	12	9	13	13	14	13	13	14	16
Up by 4% but less than 5%	7	7	5	6	7	6	8	7	7	7	6	7	9	9	7	9	10
Up by 5% or more	10	9	11	12	11	10	9	11	9	8	9	10	16	16	18	19	17
No idea	14	14	13	18	15	15	15	13	15	15	18	14	14	13	13	13	11
Median	2.4	2.2	2.2	2.5	2.4	2.3	2.3	2.3	2.3	2.0	2.4	2.3	2.8	2.7	2.8	2.9	2.9
<b>Q.2 How much would you expect prices in the shops generally to change over the next twelve months?</b>																	
Go down	3	3	4	2	2	2	2	2	3	3	5	4	2	2	2	2	2
Not change	7	10	11	5	7	6	8	8	8	9	8	9	7	7	6	6	6
Up by 1% or less	7	8	9	8	8	9	9	9	9	12	9	9	6	8	9	8	6
Up by 1% but less than 2%	15	18	15	16	17	17	18	18	17	20	18	18	13	15	15	14	14
Up by 2% but less than 3%	20	21	20	20	22	21	23	22	20	20	20	21	21	22	21	21	20
Up by 3% but less than 4%	12	11	11	15	11	12	12	10	12	9	12	10	14	13	13	13	16
Up by 4% but less than 5%	8	6	6	7	7	6	7	7	6	6	6	7	8	7	8	9	9
Up by 5% or more	13	8	9	11	11	12	8	11	8	7	8	10	16	14	14	16	14
No idea	15	15	14	17	14	14	12	14	16	13	15	12	13	13	12	11	12
Median	2.5	2.2	2.2	2.6	2.4	2.4	2.3	2.4	2.2	2.0	2.2	2.2	2.7	2.5	2.5	2.7	2.7
<b>Q.3 If prices started to rise faster than they do now, do you think Britain's economy would...</b>																	
end up stronger	7	7	7	8	10	8	9	7	8	8	9	8	8	7	8	9	8
or make little difference	22	26	24	24	22	28	27	27	27	27	24	25	23	23	24	21	21
or weaker	53	47	48	48	49	45	47	49	48	49	49	53	54	55	53	55	56
don't know	18	19	21	20	19	19	16	17	18	15	18	14	15	15	15	14	16
<b>Q.4 The Government has set an inflation target of 2% (2.5% until November 2003). Do you think this target...</b>																	
is too high	21	21	22	23	19	20	23	18	18	17	19	20	21	20	23	22	21
or too low	10	8	9	8	8	10	10	10	9	9	9	10	11	10	11	13	12
or about right	54	55	52	51	57	56	55	57	58	62	56	57	56	57	55	54	53
no idea	15	15	17	18	16	14	13	16	15	13	16	13	12	13	11	12	13
<b>Q.5 How would you say interest rates on things such as mortgages, bank loans and savings have changed over the past twelve months?</b>																	
Risen a lot	5	6	4	7	8	13	25	19	15	12	10	10	12	10	12	18	26
Risen a little	12	12	11	28	46	47	45	45	43	39	27	29	29	26	43	50	46
Stayed about the same	14	20	13	23	16	14	9	11	16	23	21	26	29	33	21	13	9
Fallen a little	34	31	35	18	10	5	3	5	6	6	21	15	10	9	4	2	2
Fallen a lot	15	12	17	5	3	2	1	1	1	2	2	1	1	1	1	*	*
No idea	19	19	20	18	17	19	16	19	19	19	21	19	19	22	19	16	16
All saying 'risen'	17	18	15	35	54	60	70	64	58	51	37	39	41	36	55	68	72
All saying 'fallen'	49	43	52	23	13	7	4	6	7	8	23	16	11	10	5	2	2
Net risen	-32	-25	-37	12	41	53	66	58	51	43	14	23	30	26	50	66	70
<b>Q.6 How would you expect interest rates to change over the next twelve months?</b>																	
Rise a lot	8	5	4	15	12	17	19	10	9	8	5	7	9	7	12	16	17
Rise a little	33	33	32	56	57	54	54	47	47	44	29	39	38	41	53	56	51
Stay about the same	28	33	33	11	12	11	11	20	23	24	28	27	28	28	17	13	14
Fall a little	11	10	9	2	3	2	2	4	5	8	17	10	7	4	2	2	3
Fall a lot	2	1	1	*	*	*	*	*	*	*	1	1	*	*	*	*	*
No idea	18	18	20	16	16	16	13	17	17	16	19	17	17	18	15	13	14
All saying 'rise'	41	38	36	71	69	71	73	57	56	52	34	46	47	48	65	72	68
All saying 'fall'	13	11	10	2	3	2	2	4	5	8	18	11	7	4	2	2	3
Net rise	28	27	26	69	66	69	71	53	51	44	16	35	40	44	63	70	65

## Per cent

	2003				2004				2005				2006				2007
	Feb.	May	Aug.	Nov.	Feb.	May	Aug.	Nov.	Feb.	May	Aug.	Nov.	Feb.	May	Aug.	Nov.	Feb.
<b>Q.7 What do you think would be best for the British economy — for interest rates to go up over the next few months, or to go down, or to stay where they are now, or would it make no difference either way?</b>																	
Go up	17	14	17	22	23	21	20	14	13	11	10	12	11	11	15	14	13
Go down	17	19	15	15	15	17	20	21	21	23	29	26	26	22	24	26	27
Stay where they are	36	40	38	37	36	36	38	39	41	42	34	39	38	41	37	36	36
Make no difference	11	8	10	8	8	9	8	9	8	9	9	9	10	10	10	11	9
No idea	19	19	20	19	18	17	13	16	17	14	19	15	15	16	14	13	15
<b>Q.8 And which would be best for you personally, for interest rates to...</b>																	
go up	24	22	23	20	22	19	21	18	19	18	19	19	18	18	19	19	18
go down	29	29	28	30	31	34	37	35	35	39	37	38	36	36	36	41	39
stay where they are	20	22	20	21	20	20	19	18	20	19	17	20	20	21	19	16	17
make no difference	18	19	18	19	19	19	16	21	17	17	19	17	18	18	20	19	19
no idea	10	9	10	10	9	8	7	8	10	7	9	6	8	7	6	5	7
<b>Q.9 How strongly do you agree with the following statements?(a)</b>																	
<b>(a) A rise in interest rates would make prices in the high street rise more slowly in the short term — say a month or two</b>																	
Agree strongly	2				1				3				3				4
Agree	35				35				33				34				35
Neither	18				19				17				17				17
Disagree	19				20				22				22				20
Disagree strongly	2				1				3				2				3
Don't know	24				23				21				22				22
All agree	37				36				36				37				39
All disagree	21				21				25				24				23
Net agree	16				15				11				13				16
<b>(b) A rise in interest rates would make prices in the high street rise more slowly in the medium term — say a year or two</b>																	
Agree strongly	1				2				3				2				3
Agree	38				37				37				38				39
Neither	18				19				17				17				17
Disagree	16				16				17				18				15
Disagree strongly	1				1				2				2				2
Don't know	25				25				24				24				24
All agree	39				39				40				40				42
All disagree	17				17				19				20				17
Net agree	22				22				21				20				25
<b>Q.10 If a choice had to be made, either to raise interest rates to try to keep inflation down; or keep interest rates down and allow prices in the shops to rise faster, which would you prefer:(a)</b>																	
Interest rates to rise	62				57				55				57				56
Prices to rise faster	16				19				20				19				21
No idea	23				24				25				24				23
<b>Q.11 Each month, a group of people meets to set Britain's basic interest rate level. Do you know what this group is?(a)</b>																	
Monetary Policy Committee	4				4				4				4				5
Bank of England	35				36				38				36				36
The Government	3				4				3				4				4
The Treasury	1				1				2				1				2
Parliament	*				*				*				*				*
Other	1				2				2				2				2
Don't know	56				54				50				53				50
<b>Q.12 Which of these groups do you think sets the interest rates?(a)</b>																	
Government ministers	12				13				12				14				12
Civil servants	*				1				2				1				1
Bank of England	69				69				70				68				70
High street banks	3				2				2				2				3
European Central Bank	2				3				3				3				2
No idea	13				12				12				12				11

## Per cent

	2003				2004				2005				2006				2007
	Feb.	May	Aug.	Nov.	Feb.	May	Aug.	Nov.	Feb.	May	Aug.	Nov.	Feb.	May	Aug.	Nov.	Feb.
<b>Q.13 In fact, the decisions are taken by the Monetary Policy Committee of the Bank of England. Which of these do you think best describes the Monetary Policy Committee?<sup>(a)</sup></b>																	
Part of the Government	13				13				13				18				15
A quango, wholly appointed by the Government	7				8				7				6				8
An independent body, partly appointed by the Government	36				38				36				37				34
A completely independent body	24				23				25				22				24
No idea	19				18				18				17				21
<b>Q.14 Overall, how satisfied or dissatisfied are you with the way the Bank of England is doing its job to set interest rates in order to control inflation?</b>																	
Very satisfied	8	9	12	10	8	9	8	8	11	13	11	11	10	10	9	9	9
Fairly satisfied	47	46	40	45	46	43	43	44	45	46	45	49	47	44	44	45	41
Neither satisfied nor dissatisfied	24	22	22	22	24	23	24	21	23	21	22	21	23	23	25	25	25
Fairly dissatisfied	7	7	6	6	7	9	10	7	7	6	6	5	6	7	8	8	9
Very dissatisfied	3	2	2	2	3	2	3	3	2	2	2	2	2	3	3	3	4
No idea	11	14	17	15	12	14	12	17	12	12	15	12	12	13	11	11	12
Total satisfied	55	55	52	55	54	52	51	52	56	59	56	60	57	55	53	54	50
Total dissatisfied	10	9	8	8	10	11	13	10	9	8	8	7	8	10	11	11	13
Net satisfied	45	46	44	47	44	41	38	42	47	51	48	53	49	45	42	43	37

Note: \* indicates less than 0.5%. Figures may not add to 100 due to rounding. Sampling error depends on the percentage response and the sample size. For example, given the sample of 3,967 in the February 2007 survey, the sampling error on a 20% response is 0.64.

(a) These questions are only asked in the February survey.

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## References

- Brazier, A, Harrison, R, King, M and Yates, T (2006), 'The danger of inflating expectations of macroeconomic stability: heuristic switching in an overlapping generations monetary model', *Bank of England Working Paper no. 303*.
- Carroll, C (2001), 'The epidemiology of macroeconomic expectations', *NBER Working Paper no. 8695*.
- Ellis, C (2006), 'Public attitudes to inflation', *Bank of England Quarterly Bulletin*, Summer, pages 181–89.
- Erceg, C and Levin, A (2003), 'Imperfect credibility and inflation persistence', *Journal of Monetary Economics*, Vol. 50, pages 915–44.
- Farmer, R, Waggoner, D and Zha, T (2007), 'Understanding the New Keynesian model when monetary policy switches regimes', *NBER Working Paper no. 12965*.
- Feige, E and Pearce, D (1976), 'Economically rational expectations: are innovations in the rate of inflation independent of innovations in monetary and fiscal policy?', *Journal of Political Economy*, Vol. 84, No. 3, pages 499–522.
- Harrison, R, Nikolov, K, Quinn, M, Ramsay, G, Scott, A and Thomas, R (2005), *The Bank of England Quarterly Model*, Bank of England.
- Howe, G (1981), 'The fight against inflation', Mais Lecture.
- Lombardelli, C and Saleheen, J (2003), 'Public expectations of UK inflation', *Bank of England Quarterly Bulletin*, Autumn, pages 281–90.
- Office for National Statistics (2004), 'The new inflation target: the statistical perspective', *Economic Trends*, No. 602, pages 24–46.
- Orphanides, A and Williams, J (2003), 'Imperfect knowledge, inflation expectations and monetary policy', *NBER Working Paper no. 9884*.
- Sargent, T (1993), *Bounded rationality in macroeconomics*, Clarendon Press.