

# Public attitudes to inflation and monetary policy

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According to the Bank/GfK NOP survey, near-term inflation expectations have fallen markedly over the past year from elevated levels. In part, that may have reflected a reduction in households' perceptions of current inflation. But it is also likely to have reflected weaker demand prospects. Longer-term measures of inflation expectations were a little higher in May than in February. Households' perceptions of the current level of interest rates have fallen, as both borrowing and saving rates have declined. Households report that they expect interest rates to rise over the year ahead. The net balance of respondents satisfied with the performance of the Bank has fallen over the past year. That may reflect concerns about the economic outlook and the financial crisis.

## Introduction

The Bank of England is charged with maintaining price stability in the United Kingdom. Stable prices are defined by the Government's inflation target — currently 2%, as measured by the annual change in the consumer prices index (CPI). Subject to delivering price stability, the Bank is also tasked with supporting the Government's economic objectives, including those for growth and employment. To achieve these objectives, the Monetary Policy Committee (MPC) sets the level of both Bank Rate and, since March 2009, asset purchases financed by the issuance of central bank reserves.

Monetary policy is likely to be most effective if its objectives, and the tools available to policymakers to achieve those objectives, are well understood by the general public. To that end, an article on pages 90–100 of this *Quarterly Bulletin* discusses how the programme of asset purchases financed by the issuance of central bank reserves, sometimes referred to as 'quantitative easing', will help ensure that inflation remains close to the target in the medium term.

The general public's inflation expectations provide an important signal about confidence in the inflation-targeting regime. And there are a number of channels through which inflation expectations can themselves influence inflation. First, companies' expectations of overall inflation, and so their expectations for competitors' prices, will influence the prices that they set for their own goods and services. Second, if households expect higher inflation, they may be more likely to bid for higher wages, pushing up on companies' costs. Third, the prices that households and companies expect in the future will affect their spending and investment decisions today.

To provide information about inflation expectations and to gauge public understanding of the policy framework, the Bank has, since 1999, commissioned GfK NOP to conduct a survey of households' attitudes to inflation and interest rates. This article is the latest in an annual series that analyses the survey results, and includes data up until May 2009. The box on page 102 of this article describes the survey in more detail.

Households' perceptions of current inflation have fallen back over the past year, and official estimates of inflation are also lower than a year ago. The first part of this article discusses whether these movements in official measures of inflation, as well as other factors, can explain the fall in households' perceptions of inflation.

Over the past year, the MPC has consistently expected inflation to ease over the following twelve months. Like the MPC, households have also, on average, expected inflation to fall back below their perception of current inflation over the year ahead. The next part of the article discusses what this divergence between perceptions and expectations reveals about how households form their inflation expectations, both for the near term and further ahead.

In response to the deterioration in the economic outlook over the past year, the MPC has cut Bank Rate to 0.5%, the lowest level of official interest rates since the Bank of England was established in 1694. But the average interest rates paid on retail deposits and charged on loans have not fallen by as much. The final part of this article discusses developments in

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## The Bank/GfK NOP survey

In 1999, the Bank commissioned GfK NOP to conduct a regular survey of attitudes to inflation on its behalf. The survey aims to provide information on inflation expectations and to gauge public understanding of the monetary policy framework. GfK NOP conducts the survey each quarter, in February, May, August and November. Each survey covers around 2,000 individuals, with an additional 2,000 taking part in an extended survey each February.

Respondents are asked how they think prices of goods and services have changed over the past twelve months, and how they expect them to change over the year ahead. They are not asked about a specific inflation measure, for example CPI or the retail prices index (RPI). Individuals are also asked a range of questions to assess how well they understand both the Bank's inflation target, and how that target can be achieved.

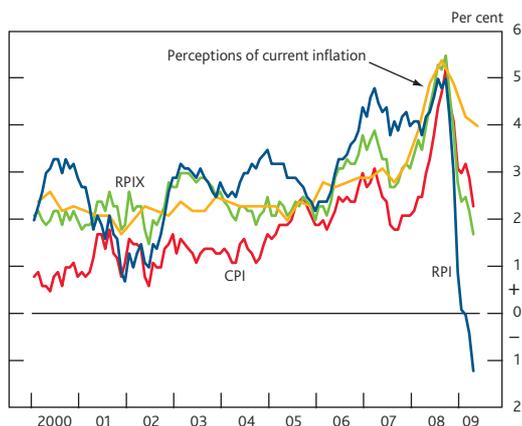
Since February 2009, the survey has included additional questions about households' longer-term inflation expectations. After asking about how respondents expected prices to change in the next twelve months, interviewers

households' interest rate perceptions and expectations, and their awareness of quantitative easing. It also discusses changes in the degree of public satisfaction with the Bank.

## Perceptions of inflation

The Bank/GfK NOP survey asks households how they think that prices of goods and services have changed over the past year. After drifting upwards since mid-2005, the median estimate of households' perceptions of current inflation (inflation perceptions) peaked in August 2008, and has since fallen back (Chart 1). Although median inflation perceptions have fallen back over the past year, around a third of respondents thought that inflation was in excess of 5% in the

**Chart 1** Median perceptions of current inflation and annual CPI, RPI and RPIX inflation rates



Sources: Bank/GfK NOP survey and ONS.

asked: 'And how about the twelve months after that?' and 'And how about the longer term, say in five years' time? How much would you expect prices in the shops generally to change over a year then?'

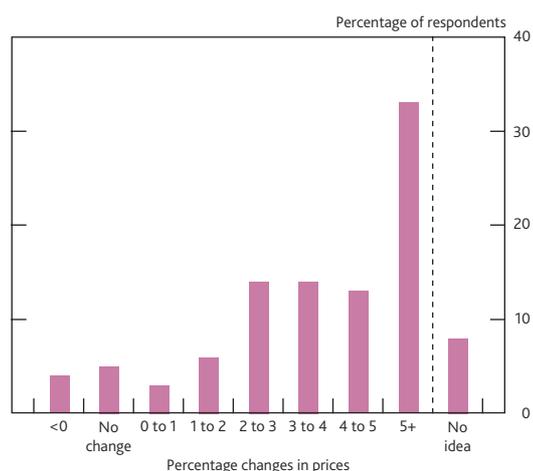
The May 2009 survey included the following additional questions in order to assess public awareness of quantitative easing, and the public's confidence that this policy would help ensure that inflation remains close to the target in the medium term:

'In addition to setting Bank Rate, the MPC of the Bank of England recently announced that it would start to inject money directly into the economy in order to meet the inflation target. How much had you heard about this policy of 'quantitative easing' before today?' and 'Do you think this policy of 'quantitative easing' will help the MPC to meet its inflation target?'

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

May survey (Chart 2). By contrast, around a fifth thought that inflation was below 2%. This section discusses potential factors influencing these movements, beginning with how movements in inflation perceptions compare with official estimates of inflation, and continuing with the possible influence of media reports on inflation perceptions.

**Chart 2** Distribution of inflation perceptions<sup>(a)</sup>



Source: Bank/GfK NOP survey.

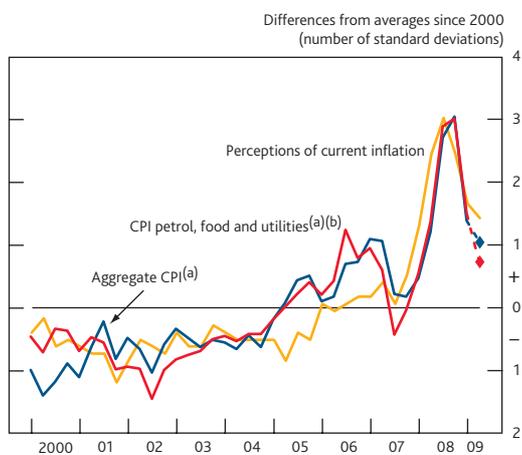
(a) Data are for the May 2009 survey.

## Correlation with official inflation rates

Individuals' inflation perceptions are likely to move with official measures of inflation. The reduction in inflation perceptions has coincided with a sharper decrease in official measures of inflation (Chart 1). But on average over the past,

inflation perceptions have been a little less volatile than CPI inflation. Taking that lower average volatility into account, the fall back in perceptions has been only a little less than the reduction in CPI inflation (Chart 3). The falls in RPI and RPIX inflation — on a similarly adjusted basis — have, however, been greater than the fall in inflation perceptions, particularly the drop in RPI inflation. That suggests that the large fall in estimated mortgage interest payments — which accounts for the fall in the RPI relative to RPIX — has not made a significant contribution to households' perceptions of current inflation.

**Chart 3** Inflation perceptions and official estimates of annual CPI inflation



Sources: Bank/GfK NOP survey and ONS.

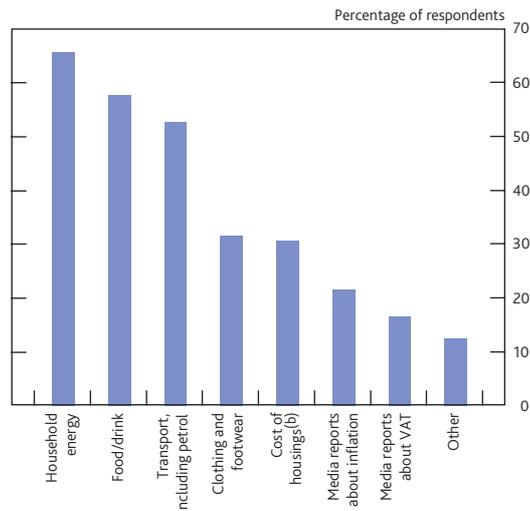
- (a) Averages of monthly inflation rates in the three months up to and including the Bank/GfK NOP survey dates. Inflation rates are calculated as percentage changes compared with a year earlier. The diamonds show data in the three months to April 2009.
- (b) CPI inflation rates for petrol and other fuels, food and non-alcoholic beverages, and electricity and gas, weighted together according to their weights in the CPI.

According to the survey responses, households focus on particular types of goods and services when thinking about inflation. In the February 2009 Bank/GfK NOP survey, the last time this question was asked, the prices of household energy, food and drink, and transport-related purchases were reported to be very important influences on inflation perceptions by most people (Chart 4). That may be because those items form a large proportion of households' regular purchases, or because the inflation rates of these items have had a particularly significant impact on overall inflation over the past year or so. The relative fall in petrol, food and utilities inflation, however, has been a little larger than the decline in both CPI inflation and inflation perceptions (Chart 3).

**Impact of media reports**

Some households' perceptions of inflation are also affected by media reports about price trends (Chart 4). Although media reports might simply corroborate households' own experience of changes in prices, Carroll (2003)<sup>(1)</sup> shows that people may get additional information about inflation from the media. In part, that is because it helps them to acquire information about the economy at a relatively low cost.

**Chart 4** Factors cited as 'very important' in forming households' perceptions of current inflation<sup>(a)</sup>

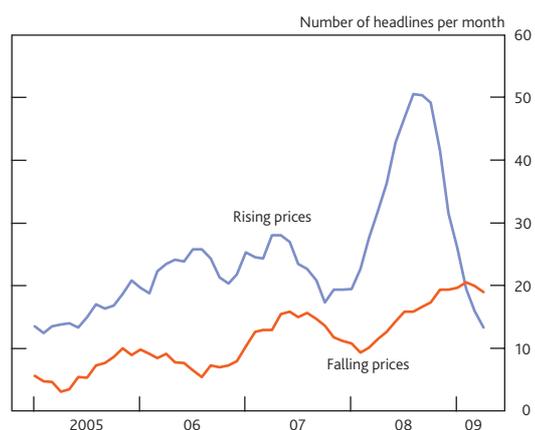


Source: Bank/GfK NOP survey.

- (a) Respondents could select more than one option. This question is asked only in the extended February survey.
- (b) For example, mortgage payments or rents.

Media reports may have played a role in the recent decline in inflation perceptions. Over the past year, the number of headlines that mention rising prices has declined sharply, while the number that mention falling prices has picked up (Chart 5). But, given inflation of most goods and services has remained positive, stories about falling prices may be more likely to refer to expected falls in prices, rather than realised falls, and so may have affected expectations more than perceptions of inflation.

**Chart 5** Media discussions of rising and falling prices<sup>(a)</sup>



Source: © 2007 Factiva, Inc. All rights reserved.

- (a) Six-month moving average. Based on searches designed to count the number of headlines referring to inflation, wages, food and energy prices, but where possible excluding headlines referring to non-UK inflation and house prices. Newspapers included in the search are the Daily Express, the Daily Mail, the Daily Mirror, the Daily Star, The Daily Telegraph, 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.

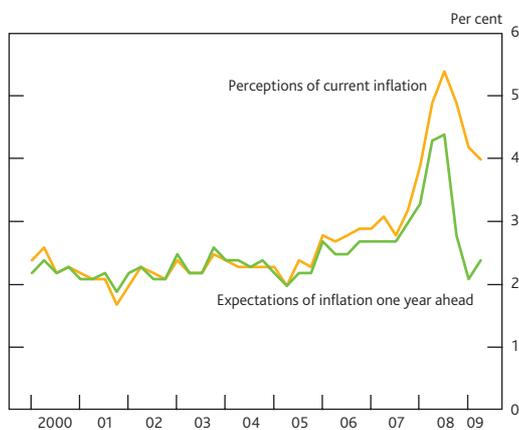
(1) See Carroll, C D (2003), 'Macroeconomic expectations of households and professional forecasters', *The Quarterly Journal of Economics*, Vol. 118, No. 1, pages 269–98.

To conclude, on average, households perceive that inflation has fallen back from a peak in mid-2008. The decline in inflation perceptions was a little less than the drop in CPI inflation. In part, the reduction in median inflation perceptions may reflect fewer media reports about rising prices.

### Near-term inflation expectations

Near-term inflation expectations picked up along with perceptions of current inflation between 2005 and mid-2008, reaching their highest recorded level in the Bank/GfK NOP survey in August 2008 (Chart 6). But since then, inflation expectations have fallen back more markedly than either inflation perceptions or CPI inflation.

Chart 6 Median inflation perceptions and expectations



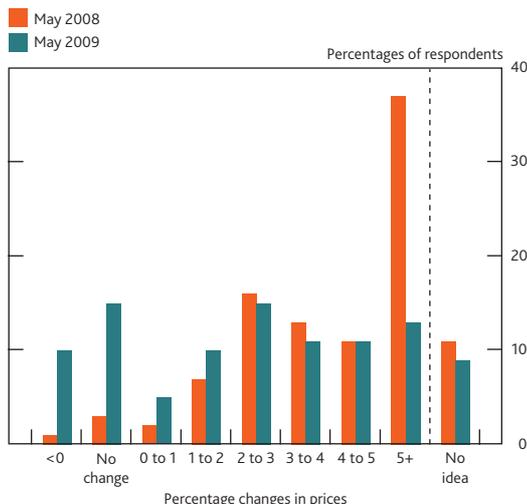
Source: Bank/GfK NOP survey.

The distribution of inflation expectations has widened over the past year. In May 2008, a significant proportion of respondents expected inflation in excess of 5% (Chart 7). But in the May 2009 survey, there was no clear modal expectation, and responses were fairly evenly distributed. For example, the proportion of respondents expecting flat or falling prices in the year ahead rose to around a quarter in May 2009 compared with less than 5% a year earlier. And in May 2009, over 10% of respondents expected inflation to be in excess of 5% one year ahead.

The reduction in the median household's inflation expectations over the past year has coincided with a fall in the inflation expectations of other groups. For example, median Consensus forecasts of inflation (which are based on a survey of professional economists) have also fallen back, albeit to a lesser extent. And the MPC has also revised down its projections for near-term inflation over the past year.

The relatively large movements in inflation expectations over the past year provide an opportunity to improve understanding of how households form those expectations. There are a number of ways in which individuals could form their inflation

Chart 7 Distribution of households' inflation expectations one year ahead



Source: Bank/GfK NOP survey.

expectations. Some people may invest time in developing a detailed understanding of how the economy evolves over time, and form their expectations of inflation accordingly. Others may form their expectations with the help of simple rules of thumb. For example: they may assume inflation returns to the inflation target in the next period; they may assume inflation will be the same in the next period as in the previous period; or they may extrapolate recent trends in inflation.

The way in which individuals form their expectations matters for monetary policy. For example, if on seeing high inflation households always expect it to be persistently high, they are more likely to try to negotiate large enough wage increases to offset the expected rise in their cost of living. In turn, companies may be more willing to pay such rises, since they would have greater confidence that they could pass through cost increases to final prices without losing market share. By contrast, if households always expect inflation to return to target, they would be less likely to bid for large wage increases. In the former case, relatively high inflation would be likely to have more persistence, and hence would ultimately require a greater policy response. The remainder of this subsection discusses how movements in inflation expectations over the past year can help explain how people form their expectations, and the relationship between inflation expectations and pay settlements.

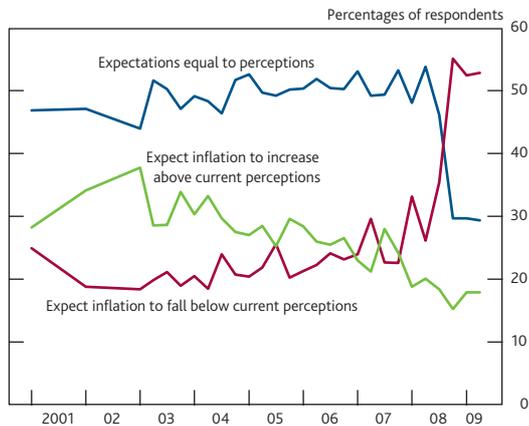
### What have we learned about how expectations are formed?

One observation from the behaviour of inflation expectations over the past few years is that individuals do not always expect inflation to be close to target in the year ahead.

In addition, recent trends in inflation are likely to be an important influence on inflation expectations, but perhaps they are less influential than had previously appeared to be the

case. Up until mid-2008, around half of survey respondents expected inflation to be the same as their perception of current inflation. These individuals could have been using a simple rule of thumb based on past inflation, or they could have been taking other factors into account while still expecting future inflation to be similar to current inflation. When the majority of individuals' inflation expectations were similar to their perceptions, it was not possible to distinguish between these hypotheses. But the proportion of respondents in this group fell sharply in November 2008, to around a third (Chart 8). That is consistent with households taking a broader range of factors into account than simply past price trends. When asked what factors influenced their expectations of inflation, however, many households continued to cite recent trends in inflation (Chart 9).

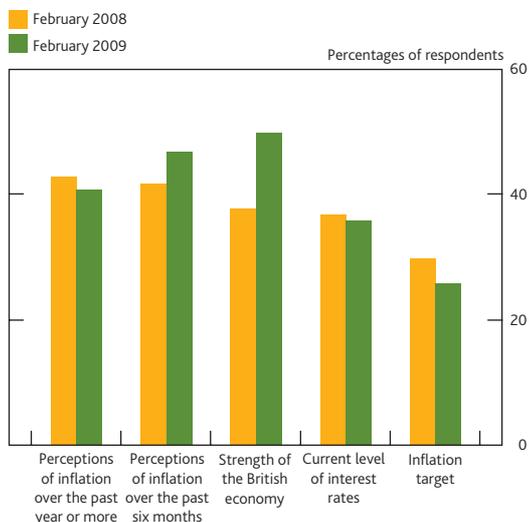
**Chart 8** Households' inflation perceptions and expectations<sup>(a)</sup>



Sources: Bank/GfK NOP survey and Bank calculations.

(a) Data based on the responses to the Bank/GfK survey in February 2001, 2002 and every quarter since February 2003.

**Chart 9** Factors cited as 'very important' in forming households' expectations of inflation<sup>(a)</sup>

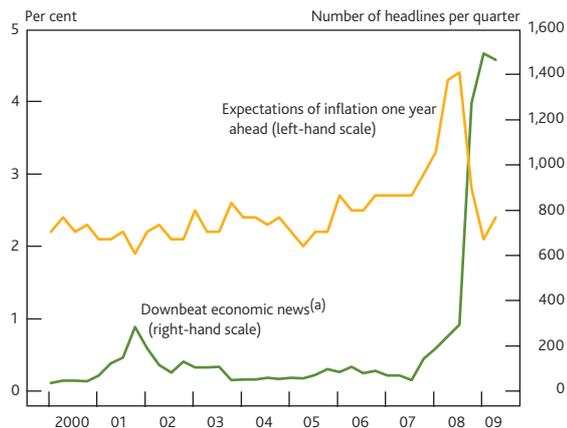


Source: Bank/GfK NOP survey.

(a) Respondents could select more than one option. This question is asked only in the extended February survey.

Given the divergence between inflation perceptions and expectations, it is likely that some households have taken a broader range of economic factors into account in forming their expectations than simply past price trends. One possibility is that households expected inflation to return to target following the temporary increase in oil and commodity price inflation. But it is likely that developments in demand have also been influential in driving expectations below perceptions of inflation. Slowing activity tends to put downward pressure on prices, so the contraction in demand since mid-2008 is likely to have pushed down on households' inflation expectations. Indeed, more people cited the strength of the economy as a very important factor affecting their expectations of inflation in the February 2009 Bank/GfK NOP survey than in the previous year (Chart 9). In part, that may be because of the media coverage generated by the downturn. Chart 10 suggests that the number of downbeat headlines has picked up sharply in recent months. But it is difficult to capture the full range of headlines about demand conditions that might affect inflation expectations.

**Chart 10** Inflation expectations and downbeat economic news



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

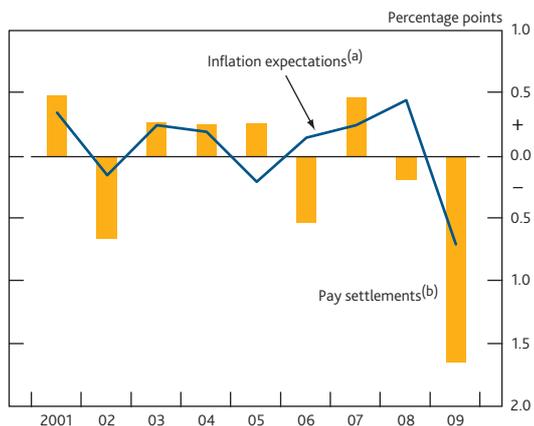
(a) Based on searches designed to count the number of headlines referring to either recession, financial crisis, labour market deterioration, insolvencies or deflation. Newspapers included in the search are as in Chart 5.

To conclude, when inflation perceptions and inflation expectations were close together and broadly stable, it was difficult to assess how households formed their inflation expectations. Movements in inflation expectations over the past year allow us to rule out the hypothesis that most households always expect inflation to return to target in the year ahead. That is not inconsistent with the monetary policy framework, which allows for deviations in inflation from target in the near term, while returning inflation to the target in the medium term. Recent movements in near-term inflation expectations, and, in particular, deviations between perceptions and expectations of inflation, suggest that some households take a wide range of economic factors into account when forming their expectations.

### Inflation expectations and pay settlements

One of the channels through which household inflation expectations may affect the economy is via wage bargaining. Inflation expectations are often cited in negotiations over pay settlements. And in the past, pay settlements appear to have moved with the Bank/GfK NOP survey measure of year-ahead inflation expectations (Chart 11). But over the past two years, settlements have appeared to be somewhat weaker than might have been expected given changes in near-term inflation expectations, suggesting that other factors are likely to have depressed pay settlements. In particular, increased labour market slack since early 2008 following the downturn in demand, and heightened concerns over job security, may have outweighed the impact of near-term inflation expectations on wage bargaining. Overall, however, it is difficult to determine the relative importance of these factors in driving wages.

**Chart 11** Changes in inflation expectations and in pay settlements



Sources: Bank of England, Bank/GfK NOP survey, Incomes Data Services, Industrial Relations Services, the Labour Research Department and ONS.

- (a) Inflation expectations over the next twelve months. Change on the previous year, based on the average of the November and February surveys.
- (b) Change on the previous year, based on one-month private sector settlements in the first four months of the year.

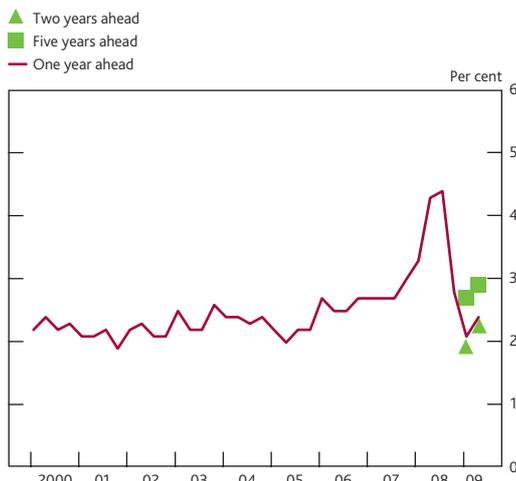
### Medium-term inflation expectations

Recent observations of inflation expectations highlight that households, like the MPC, do not always expect inflation to return to target over the year ahead. What is important for monetary policy is that inflation is expected to be around the inflation target in the medium term. So the period over which households expect inflation to return to the target is important in gauging the credibility of the monetary policy framework. It will also influence wage-setting behaviour. Indeed, longer-term measures of inflation expectations may be more important for price and wage-setting than shorter-term measures, as these will be affected by temporary factors, such as increases in commodity prices.

Additional questions have been added to the Bank/GfK NOP survey since February 2009 regarding households'

expectations for inflation in two and five years' time (see the box on page 102). Median expectations were for inflation to be similar in two years' time to that in the year ahead, but to be higher five years ahead (Chart 12). Outturns for both two and five years ahead were a little higher in the May survey than in February.

**Chart 12** Median inflation expectations one, two and five years ahead



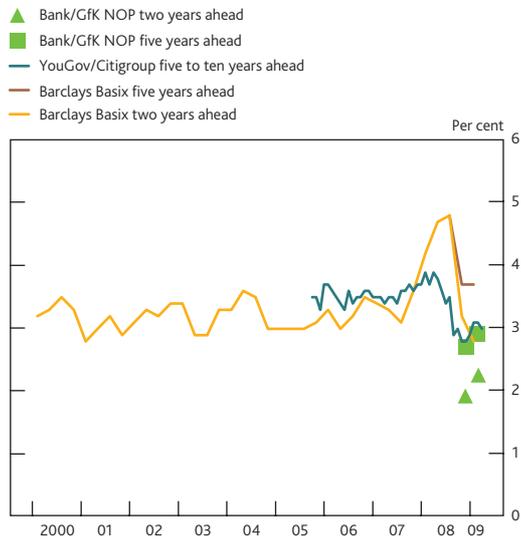
Source: Bank/GfK NOP survey.

Patterns in individuals' inflation expectations across different horizons may help explain how these longer-term inflation expectations are formed. In both the February and May surveys, the majority of respondents reported that they expected inflation to be similar in the year ahead compared with two years ahead. That could suggest that households do not distinguish much between prices one and two years ahead when thinking about inflation. By contrast, there was no clear relationship between individuals' one year ahead and five year ahead expectations. That could suggest that households think that other factors are important at the longer horizon. However, it could also be a product of greater uncertainty at longer horizons. Consistent with the latter explanation, around 35% of respondents answered 'don't know' when asked about their expectations in five years' time in the February and May surveys, compared with around 10% for expectations one year ahead.

Given that the survey has only included questions on longer-term inflation expectations since February 2009, it is not possible to compare these outturns with past observations over a period when inflation was around the target. But other survey measures with longer backruns are available. From mid-2007, the available longer-term measures of households' inflation expectations did pick up a little (Chart 13), albeit to a lesser extent than their corresponding short-term measures. These medium-term measures have subsequently fallen back to below their historical averages. But, as discussed above, there is considerable uncertainty surrounding expectations far

ahead, so it is still difficult to assess the significance of these divergences. Nonetheless, the MPC continue to monitor medium-term inflation expectations data closely.

**Chart 13** Longer-term median measures of inflation expectations



Sources: Bank/GfK NOP survey, Bank of England, Barclays Capital, Citigroup and YouGov.

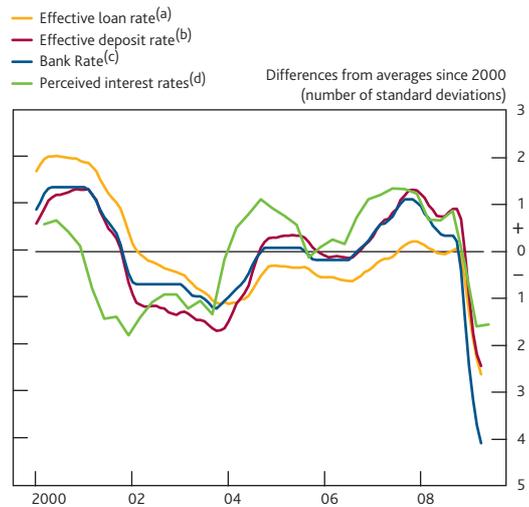
## Attitudes to monetary policy and satisfaction with the Bank

The evolution of inflation expectations, particularly for the longer term, should also depend on households' expectations of monetary policy. This subsection discusses two issues regarding expectations of monetary policy. First, how households' perceptions of interest rates have moved relative to changes in Bank Rate. Second, how the low level of Bank Rate, and the MPC's recent programme of asset purchases financed by the issuance of central bank reserves (sometimes referred to as 'quantitative easing'), have affected interest rate expectations and satisfaction with the Bank.

### Monetary policy

The MPC has cut Bank Rate significantly over the past year, from 5% in May 2008 to its current rate of 0.5%. But bank deposit and loan rates have not fallen by as much as Bank Rate, in part reflecting banks' funding constraints since the onset of the financial market crisis and also the increased riskiness of lending as a result of the deterioration in the macroeconomic outlook. Responses to the Bank/GfK NOP survey suggest that households perceive that interest rates — on mortgages, bank loans and deposits — have fallen. Those perceptions have fallen more in line with the average rates paid on the stock of outstanding debt and savings than with changes in Bank Rate (Chart 14).

**Chart 14** Interest rate perceptions and effective household interest rates

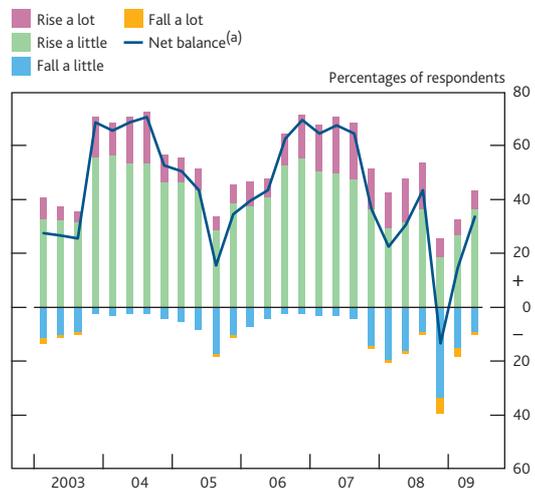


Sources: Bank of England and Bank/GfK NOP survey.

- (a) Three-month average of household secured and unsecured borrowing effective stock rates weighted by the outstanding balances.
- (b) Three-month average of household time and sight deposit effective stock rates weighted by the outstanding balances.
- (c) Three-month average.
- (d) Percentage of respondents who thought that rates had risen over the past year less the percentage who thought that rates had fallen. Data are quarterly observations.

The Bank/GfK NOP survey also asks individuals about their expectations of interest rates over the year ahead. One year ahead interest rate expectations fell sharply in November 2008 (Chart 15), with a net balance of respondents expecting interest rates to fall from their level at that time — the first such instance since the survey began in 1999. In both the February and May surveys, respondents, on balance, expected interest rates to rise. But, despite the low level of Bank Rate, some individuals still expected to see further cuts in interest rates, perhaps reflecting an expectation of further pass-through from previous cuts in Bank Rate.

**Chart 15** Interest rate expectations over the next twelve months



Source: Bank/GfK NOP survey.

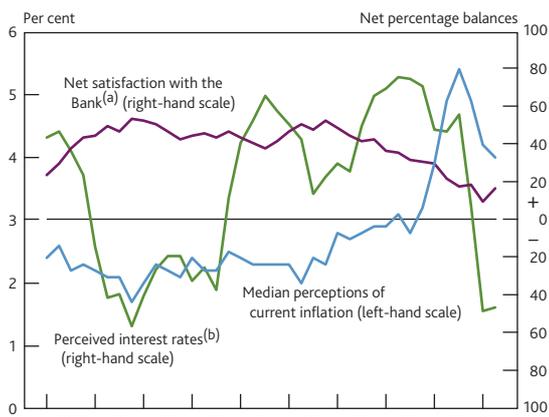
- (a) Percentage of respondents who thought that rates would rise less the percentage who thought that rates would fall.

The May 2009 survey included additional questions that aimed to assess the public’s awareness of quantitative easing, and their confidence that this policy will help the MPC to meet the inflation target. Around half of respondents said that they had heard about quantitative easing. That was higher than the proportion of respondents who knew that it was either the Bank or the MPC who sets ‘Britain’s basic interest rate level’, at around 40%. Around a third of respondents who had heard of quantitative easing said that they were confident that it would help the MPC to ensure that inflation is around the target — a little higher than the percentage who thought that it would not help.

### Satisfaction with the Bank

The Bank/GfK NOP survey asks respondents whether they are satisfied with the Bank of England. The survey data suggest that, on balance, the public have been satisfied with the performance of the Bank (Chart 16), although net satisfaction has fallen over much of the past year. The measure bounced back a little in the May survey.

**Chart 16** Satisfaction with the Bank, interest rate perceptions and inflation perceptions



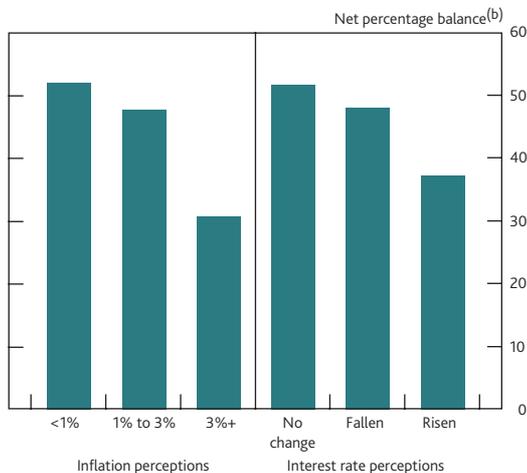
Source: Bank/GfK NOP survey.

- (a) The percentage of respondents who were fairly or very satisfied with the Bank less the percentage who were fairly or very dissatisfied.
- (b) The percentage of respondents who thought that rates had risen over the past year less the percentage who thought that rates had fallen.

Why has satisfaction with the Bank fallen over the past year? In the past, satisfaction with the Bank has tended to be higher among respondents whose inflation perceptions were relatively low and among those who thought that interest rates had not risen (Chart 17). Given that households, on average, have perceived a reduction in both interest rates and inflation over the past year (Chart 16), these factors are unlikely to account for the fall in satisfaction. Satisfaction was a little higher among respondents who thought that quantitative easing would help the MPC to meet the inflation target (Chart 18), so the MPC’s programme of asset purchases may have also supported satisfaction in the recent past. But offsetting these factors, it is likely that concerns about the severe dislocation in financial markets and the depth of the

recession have weighed down to some extent on the public’s satisfaction with the Bank over the past year.

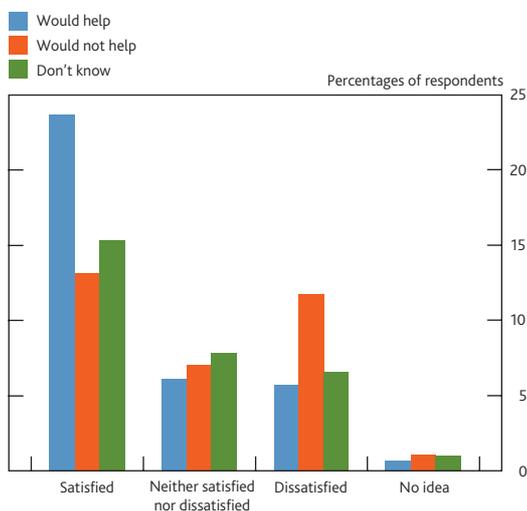
**Chart 17** Public satisfaction with the Bank by inflation and interest rate perceptions<sup>(a)</sup>



Sources: Bank/GfK NOP survey and Bank calculations.

- (a) Data based on the individual responses to the Bank/GfK NOP survey in February 2001, 2002 and every quarter since February 2003.
- (b) The percentage of respondents who were fairly or very satisfied with the Bank less the percentage who were fairly or very dissatisfied.

**Chart 18** Public satisfaction with the Bank and confidence about whether ‘quantitative easing’ would help<sup>(a)</sup>



Source: Bank/GfK NOP survey.

- (a) Percentage of respondents among those who reported that they had heard about ‘quantitative easing’ by whether they thought that it would help the MPC to meet the inflation target. This question was asked for the first time in the May 2009 survey.

## Conclusion

The Bank/GfK NOP survey data suggest that households’ perceptions of inflation have fallen back over the past year. Inflation perceptions have, however, fallen by less than CPI inflation.

Near-term inflation expectations have fallen markedly over the past year. In part, that may reflect a reduction in households' perceptions of current inflation. But expectations have fallen more sharply than perceptions. That divergence allows us to put more weight on the hypothesis that some households take a range of economic factors into account when forming their expectations, rather than using more simple rules of thumb. In particular, the marked fall in household expectations for inflation in the year ahead may, in part, reflect the deterioration in the macroeconomic outlook.

Since February 2009, the Bank/GfK NOP survey has included additional questions about households' longer-term inflation expectations. These measures suggested that households, on balance, expected inflation to be similar in two years' time to one year ahead, and to be a little higher in five years' time. Both measures picked up in the May survey compared with the February outturns.

Survey respondents have perceived that interest rates have fallen over the past year. Interest rate perceptions have fallen more in line with average rates paid on the stock of outstanding debt and savings than with the reductions in Bank Rate. In the May survey, on balance, respondents expected interest rates to rise over the next year. Around half of survey respondents said that they had heard about quantitative easing.

Survey respondents were satisfied, on balance, with the performance of the Bank in achieving the inflation target. Although satisfaction picked up in the May 2009 survey, satisfaction levels had fallen over the course of the year. That reduction in satisfaction may reflect concerns about the economic outlook and the financial crisis.