Public attitudes to inflation and monetary policy

By Alina Barnett, Clare Macallan and Silvia Pezzini of the Bank's Monetary Assessment and Strategy Division.[1]

Inflation has been volatile in the past three years. This article examines how that has affected households' attitudes to inflation and to monetary policy more generally. Some of the volatility in inflation has fed through to households' perceptions of inflation, as measured by the Bank/GfK NOP survey. But inflation expectations have responded less than changes in perceptions: households may have placed weight on the weak economic environment and the inflation target rather than simply extrapolating past trends in prices. Public satisfaction with the Bank, which deteriorated between 2007 and 2009, has improved in recent quarters.

Introduction

Inflation has been volatile in the past three years. Annual inflation, as measured by the consumer prices index (CPI), rose to 5.2% in September 2008, fell back sharply over the following twelve months to 1.1% and then rose again to 3.7% in April 2010. That volatility in part reflected the temporary effects from a number of factors, including movements in food and energy prices and the temporary reduction in the standard rate of VAT (between 1 December 2008 and 1 January 2010). But prices have also been affected by two more fundamental economic forces: sterling's depreciation since mid-2007 is likely to have pushed up inflation while the financial crisis and the associated deterioration in demand have acted in the opposite direction.[2]

The Bank of England's monetary policy objective is to maintain price stability. Stable prices are defined by the Government's inflation target, which is currently 2% as measured by the annual change in the CPI. Subject to that, the Bank is also tasked with supporting the Government's economic objectives, including those for growth and employment. The Monetary Policy Committee (MPC) seeks to achieve those objectives by setting the level of Bank Rate and, since March 2009, by purchasing assets financed through the issuance of central bank reserves, a programme sometimes referred to as quantitative easing.[3]

The Bank's success in meeting its monetary policy objectives depends in part on the credibility of the monetary policy framework itself: if people expect inflation to return to target in the medium term then they may behave in such a way that deviations of inflation from target are more short-lived. There are various channels through which inflation expectations can influence inflation. If households expect high inflation in the future, for example, they are likely to demand higher nominal wages and push up on companies' costs. And if companies expect to bear higher production costs, then they will raise their own prices for the goods and services they produce. The prices that households and businesses expect in the future will also affect their spending and investment decisions today.

Inflation expectations cannot be directly observed. But surveys of households, businesses and economists, together with measures derived from the prices of financial market instruments, can act as a guide. Since 1999, the Bank has commissioned a survey of households' attitudes to inflation and interest rates, conducted on its behalf by GfK NOP. The survey was extended in May 2009 to include questions relating to the MPC's policy of asset purchases, or 'quantitative easing'. The box on page 116 describes the Bank/GfK NOP survey in more detail.

This article examines whether the increase in the volatility of inflation in the past three years has affected households' attitudes to inflation and to monetary policy more generally. The first section examines how households' perceptions of inflation have changed relative to measured inflation in that period. The following section considers how households' expectations for inflation, both in the near term and in the longer term, have behaved. The final section examines how public attitudes to monetary policy more broadly have evolved in recent years.

(1) The authors would like to thank Philip Barrett, Sally Hills, Tom O'Grady and Bryony Willmott for their help in producing this article.
(2) For more detail on the recent path of inflation, see Section 4.1 of the May 2010 *Inflation Report*.
(3) For further discussion of the Bank's asset purchases, see Benford *et al* (2009).

The Bank/GfK NOP survey

Since 1999, the Bank has commissioned GfK NOP to survey the general public's attitudes to inflation and monetary policy. These surveys are conducted in February, May, August and November of each year. They cover around 2,000 individuals, with an additional 2,000 interviewed in an extended survey each February.

Rather than focusing on a specific measure of inflation, such as the consumer prices index or the retail prices index, the survey is phrased in terms of the prices of goods and services in general. Respondents are asked how they perceive prices to have changed over the past twelve months and how they expect them to change over the year ahead. Additional questions asking individuals about their expectations for inflation in two and in five years' time were introduced in February 2009.

In addition to the questions on prices, individuals are also asked a range of questions to assess how well they understand the Bank's monetary policy framework and the tools by which the inflation target can be achieved. In March 2009, the Monetary Policy Committee announced that, in addition to setting Bank Rate, in order to meet the inflation target it would start to inject money directly into the economy — a policy that has come to be known as 'quantitative easing'. Since May 2009, the survey has included additional questions designed to assess the public's awareness of quantitative easing and their beliefs about how this policy would help to ensure that inflation remains close to the target in the medium term.

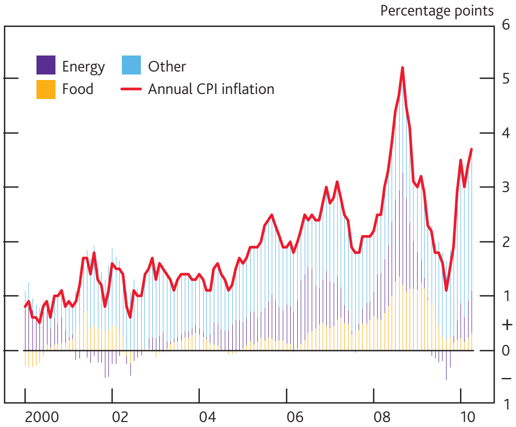
As with all surveys, the Bank/GfK NOP survey is subject to sampling error. The sample is designed and weighted to ensure that it is representative of known population data on age, gender, social class and region.

Perceptions of inflation

CPI inflation has been more volatile since 2007 compared with the previous ten years. Much of that volatility reflected short-term movements in food and energy prices (**Chart 1**) and the temporary reduction in the standard rate of VAT. But prices have also been affected by two more fundamental economic forces: the depreciation of sterling since mid-2007 is likely to have pushed up both import and consumer prices while the financial crisis and the associated deterioration in demand have acted in the opposite direction. In the past three years, inflation has deviated from target more than in the first ten years of the MPC's existence (**Table A**).

The increased volatility of inflation has, in part, been reflected in movements in households' perceptions of inflation (**Chart 2**). Perceptions rose in tandem with official estimates of inflation between late 2007 and early 2009. But they were slower to respond to the subsequent fall. This section considers what factors might influence households' perceptions of inflation.

Chart 1 Contributions to annual CPI inflation from food and energy[(a)]



Sources: ONS and Bank calculations.

(a) Food prices include non-alcoholic beverages. Energy comprises utilities (electricity, gas and other fuels) and fuels and lubricants.

Table A Volatility in annual inflation

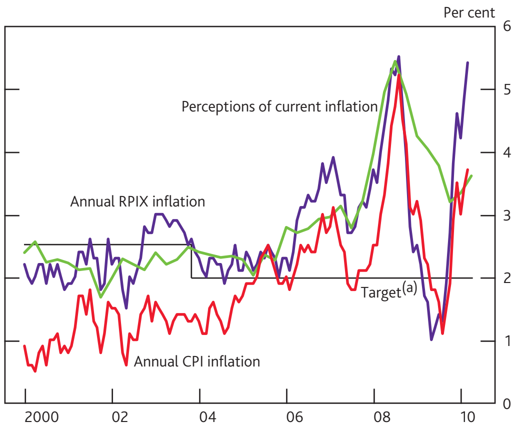
Percentage points

	Standard deviations			Mean deviations from target[(a)]		
	1997–2003	2004–07	2008–present	1997–2003	2004–07	2008–present
CPI	0.4	0.5	1.0	n.a.	0.0	1.0
RPIX	0.4	0.6	1.4	-0.1	n.a.	n.a.

Sources: ONS and Bank calculations.

(a) The inflation target was changed on 10 December 2003 to 2% as measured by the CPI from 2.5% as measured by the RPIX.

Chart 2 Inflation and inflation perceptions



Sources: Bank/GfK NOP survey and ONS.

(a) The inflation target was changed on 10 December 2003 to 2% as measured by the CPI from 2.5% as measured by the RPIX.

Three oft-cited influences on households' inflation perceptions are food and energy prices and media coverage of the economy.[1] Around 80% of respondents to the February 2010 Bank/GfK NOP survey cited at least one of household energy, transport and petrol, and food and drink as being 'very important' when forming their perceptions of inflation. And over half cited media reports about inflation as being either 'very important' or 'fairly important' when forming their perceptions (**Table B**).

Table B Percentages of respondents citing influences on inflation perceptions as either 'very' or 'fairly' important[a]

	Very important	Fairly important	Total[b]
Household energy	62	25	87
Transport and petrol	59	24	82
Food and drink	54	34	88
Cost of housing[c]	31	23	53
Clothing and footwear	29	36	65
Media reports about inflation	21	38	59
Media reports about VAT	18	39	58
Other	10	24	34

Source: Bank/GfK NOP survey.

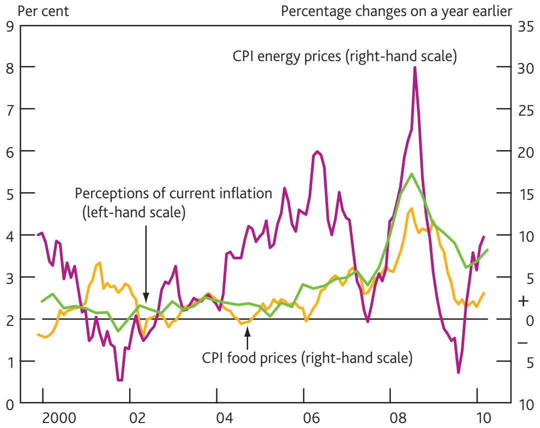
(a) Respondents could select more than one option. This question is asked only in the extended February survey.
(b) Components may not sum to totals due to rounding.
(c) For example, mortgage payments and rent.

Individuals' perceptions of inflation may be sensitive to movements in food and energy prices because it is relatively easy for them to assess how the prices of these items have changed. People tend to buy a broadly comparable basket of food from week to week, and have similar energy requirements each year. The prices of food and energy items also tend to be highly visible: the price of fuel, for example, can be observed easily at petrol stations and supermarkets.

Similarly, media reports provide a ready source of information on inflation that can be obtained without requiring much time or effort. More frequent mentions of inflation in the media may lead to an increase in the number of people who take notice of inflation. And it may cause people to update their views on inflation on a more regular basis (Carroll (2003)).

The rise in inflation perceptions in 2008 is consistent with the increase in food and energy price inflation and with the pickup in media coverage that occurred at that time. Annual food price inflation rose from 3% in August 2007 to 13% in August 2008 (**Chart 3**) — its highest rate in the period since 1997. Energy price inflation rose from around zero in August 2007 to 30% in September 2008, again its highest rate in the period since the Bank was granted operational independence for monetary policy. The 2007/08 rise in inflation also received greater coverage in the media than did previous rises in inflation (**Chart 4**). But food and energy price inflation fell back sharply in early 2009, as did media coverage of inflation. So it is less clear that these factors can explain why

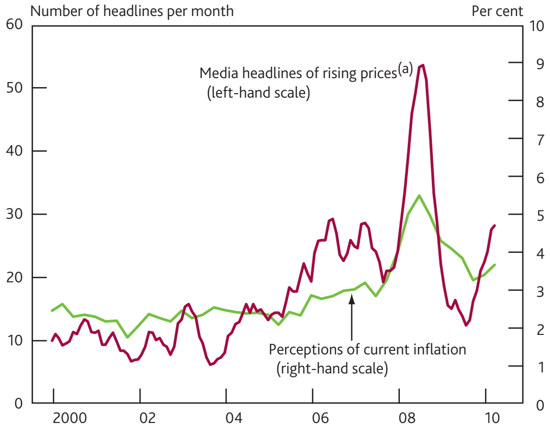
Chart 3 Inflation perceptions and food and energy price inflation[a]



Sources: Bank/GfK NOP survey and ONS.

(a) Food prices include non-alcoholic beverages. Energy comprises utilities (electricity, gas and other fuels) and fuels and lubricants.

Chart 4 Inflation perceptions and media discussions of rising prices



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

(a) Six-month moving average. Based on searches designed to count the number of headlines referring to increases in inflation, wages, and 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*.

perceptions were slow to respond to the subsequent fall in inflation.

In summary, the recent rise in the volatility of inflation appears to have been partially reflected in households' perceptions of inflation. Rising food and energy prices, along with greater media coverage, can help to explain why perceptions rose in tandem with measured inflation in early 2008. Those factors may also have contributed to the more recent rise in perceptions in 2010.

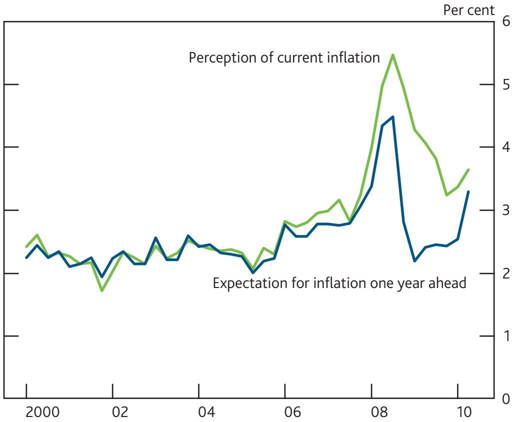
The next section considers changes in the behaviour of households' inflation expectations.

(1) For further discussion of how food/energy prices and media coverage influence inflation perceptions, see Barnett *et al* (2009) and Benford and Driver (2008).

Inflation expectations

Households' expectations for inflation in the year ahead have diverged from their perceptions of current inflation for much of the past three years (**Chart 5**). Prior to 2008, there tended to be a close relationship in the Bank/GfK NOP survey between the median household's inflation perception and the median near-term inflation expectation. But expectations rose by less than perceptions following the increase in inflation between August 2007 and September 2008 and fell more quickly than perceptions in the final months of 2008 and early 2009.(1)

Chart 5 Median inflation perception and expectation for inflation one year ahead



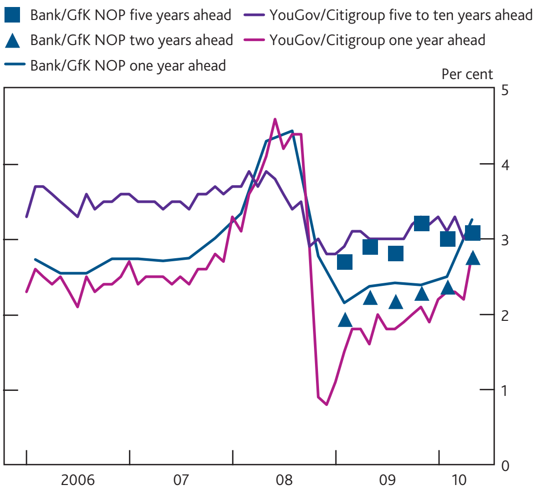
Source: Bank/GfK NOP survey.

More recently, in the May 2010 Bank/GfK NOP survey, households' expectations for inflation in the near term picked up sharply, rising back towards their perceptions of current inflation. Expectations for inflation in the next two years also rose, albeit to a lesser extent (**Chart 6**). In contrast, longer-term expectations were little changed.

Indeed, households' expectations for inflation in the longer term have generally been more stable than their near-term expectations during the recent period of inflation volatility. Since February 2009 (when questions on longer-term expectations were first asked in the Bank/GfK NOP survey), the five year ahead measure has picked up by less than the one year ahead measure. That relative stability of longer-term inflation expectations is also a feature of the YouGov/Citigroup survey. Having fallen back in 2008, expectations for inflation five to ten years ahead have drifted up a little since then. But they have been much less volatile than the corresponding one year ahead measure.

This section considers what factors might have driven households' near-term inflation expectations during the past two years. It then examines changes in longer-term expectations, exploring what factors might have accounted for their stability relative to shorter-term measures.

Chart 6 Median household's longer-term inflation expectations

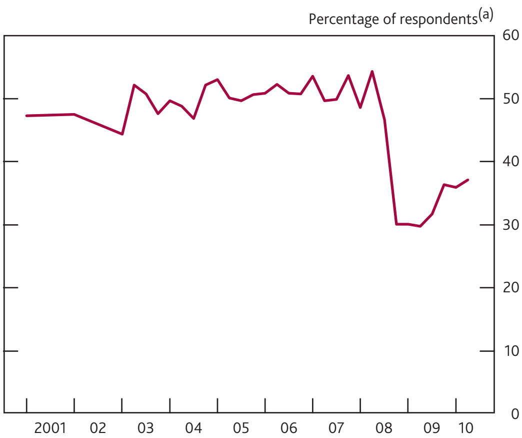


Sources: Bank/GfK NOP survey, Citigroup and YouGov.

Near-term inflation expectations

Households' perceptions of inflation are likely to be an important influence on their expectations for inflation in the year ahead. For example, some individuals may use a simple rule of thumb to forecast inflation, expecting inflation over the next year to be similar to that over the past year. Around eight in every ten respondents to the Bank/GfK NOP survey in February 2010 cited past changes in prices as being either 'very important' or 'fairly important' when forming their near-term inflation expectations, as in previous years. In past Bank/GfK NOP surveys, around half of the respondents reported that they expected inflation in the coming year to remain unchanged from its current perceived rate. That proportion fell back significantly in the second half of 2008 and has been around one third since then (**Chart 7**).

Chart 7 Households whose expectation for inflation in the year ahead equals their perception of current inflation



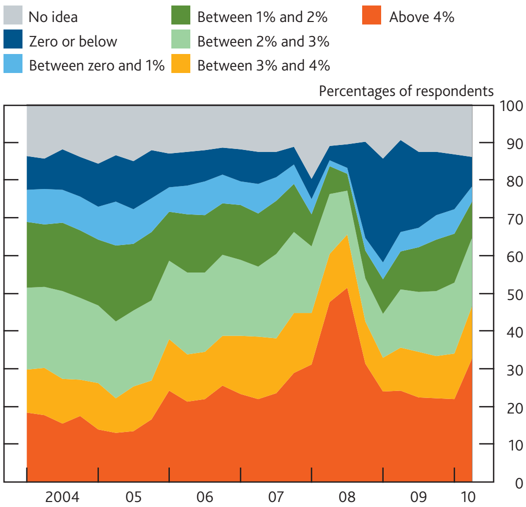
Source: Bank/GfK NOP survey.

(a) Ignores those who answer 'don't know' to either question.

(1) The box on page 37 of the May 2010 *Inflation Report* compares expectations in the Bank/GfK NOP survey with other available measures.

The increased volatility of inflation has also been accompanied by an increase in the dispersion of near-term expectations across individuals (**Chart 8**). For example, a greater proportion of respondents to the February 2010 Bank/GfK NOP survey thought that prices over the year ahead would either be unchanged or fall than did in mid-2006, when the median inflation expectation was at a similar level.

Chart 8 Distribution of households' inflation expectations one year ahead



Source: Bank/GfK NOP survey.

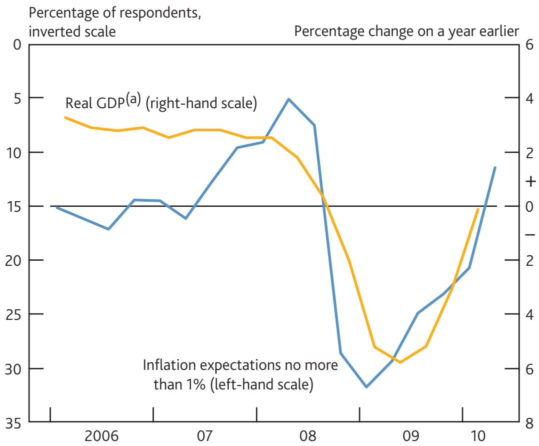
The following subsections consider two factors that could help to explain the pattern of expectations in the past two years. First, the financial crisis, and the associated decrease in demand, may have led some people to lower their near-term inflation expectations relative to their perceptions of inflation. Second, observation of past episodes of high inflation, after which inflation has typically reverted to target, may have led some individuals to place more weight on the 2% inflation target when forming their expectations.

Developments in demand

The fall in demand for UK goods and services over the past two years is likely to have put downward pressure on prices and thus on some individuals' near-term inflation expectations. Real final domestic demand was around 5% lower in 2009 Q2 than it was in 2008 Q2. Almost 80% of respondents to the February 2010 Bank/GfK NOP survey said that the state of the British economy was either a 'very' or 'fairly' important factor in forming their near-term inflation expectations. Consistent with that, the proportion of respondents who expected inflation in the next year to be no more than 1% rose in 2008, at the same time that GDP growth fell sharply (**Chart 9**).

For some people the effect of falling demand on their inflation expectations may have been balanced by the elevated level of inflation. Of those respondents who said that the state of the economy had an important bearing on their near-term inflation expectations, around 90% also said that their

Chart 9 Percentage of households who expected inflation in the year ahead to be no more than 1% and real GDP



Sources: Bank/GfK NOP survey and ONS.

(a) Chained-volume measure at market prices.

perception of current inflation was a very or a fairly important influence. In recent quarters, the level of real final domestic demand has recovered somewhat while perceptions of inflation have remained high. Some of the rise in near-term inflation expectations since February 2009 could therefore reflect a waning influence from demand.

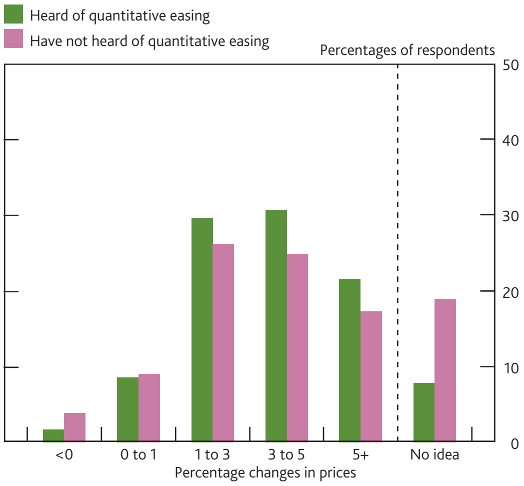
The role of the inflation target

Some households may use the inflation target as a guide to near-term inflation. Indeed, over half of the respondents to the Bank/GfK NOP survey in February 2010 reported that the inflation target was an important factor in forming their expectations for inflation in the year ahead. The proportion of respondents who expected inflation in the year ahead to be within 1 percentage point of the target has gradually risen to around one quarter in May 2010 from around one sixth in August 2008.

The greater weight being placed on the inflation target may reflect households learning from past observation that deviations of inflation from target tend to be short-lived. There have been three episodes in the history of the MPC in which inflation rose more than 1 percentage point above the target, starting in: March 2007, May 2008 and January 2010. In the first two instances, the deviation of inflation from target proved to be temporary and inflation subsequently fell below 2%. The MPC also expects inflation to return to target from its currently elevated level, as set out in the May 2010 *Inflation Report*. The experience of the previous episodes could have caused households to now place more weight on the inflation target when forming their expectations for near-term inflation.

Households with a greater awareness of the monetary policy framework appear to be more likely to have a view about the prospects for inflation. In the May 2010 Bank/GfK NOP survey, households who had heard of quantitative easing were less likely to answer 'don't know' when asked what they expected inflation would be in the year ahead than those who had not (**Chart 10**). But, aside from that difference, the distribution of inflation was broadly similar across the two groups.

Chart 10 The distribution of one year ahead inflation expectations for those who have and have not heard of quantitative easing



Source: Bank/GfK NOP survey.

The two hypotheses discussed here have different implications for monetary policy. The MPC's remit recognises that inflation will, on occasion, depart from the 2% target as a result of shocks and disturbances. The MPC would be concerned, however, if temporary increases in inflation led to a persistent increase in households' inflation expectations because that could make it harder to return inflation to target. If the stability of inflation expectations relative to perceptions reflected the fall in demand offsetting elevated perceptions, then there is a risk that near-term inflation expectations might increase if demand continued to recover. That could be consistent with the rise in near-term inflation expectations in the most recent Bank/GfK NOP survey. In contrast, if people placed more weight on the MPC's ability to return inflation to target, then near-term inflation expectations might be less responsive to economic news.

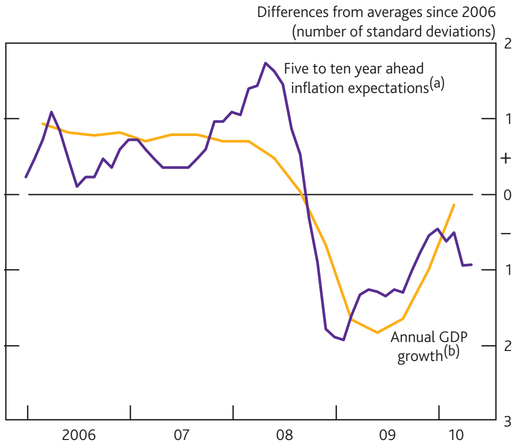
Longer-term inflation expectations

As noted above, households' longer-term inflation expectations appear to have been less volatile than their near-term counterparts, despite falling in early 2008 (**Chart 6**). This section explores what factors might explain the relative stability of longer-term inflation expectations and what might have driven their fall in 2008, which occurred against a background of rising inflation.

The relative stability of longer-term inflation expectations could reflect a well-functioning inflation-targeting regime. If households believe that movements in inflation away from target will be transitory then an increase in the volatility of inflation should not feed through into their expectations for inflation in the longer term.

But other factors appear necessary to explain the fall in longer-term inflation expectations in 2008. For example, the deterioration in the economic environment may have led some households to revise down their longer-term inflation expectations (**Chart 11**). Perhaps reflecting that, the percentage of households who reported that they expected prices to fall or remain unchanged on average over the next five to ten years reached a record high in late 2008 (**Chart 12**). The fall in longer-term inflation expectations also coincided with a near fourfold increase in the number of media headlines on deflation, suggesting that media coverage may have influenced expectations about inflation in the longer term as well as in the short term.

Chart 11 Households' expectations for inflation over the next five to ten years and real GDP



Sources: ONS and YouGov/Citigroup survey.

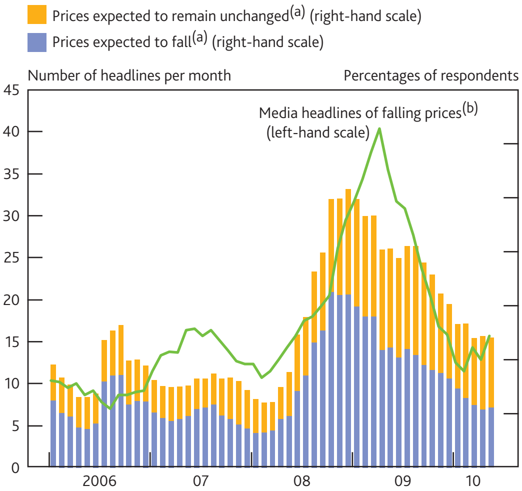
(a) Rolling three-month averages.
(b) Chained-volume measure at market prices.

Overall, measures of households' longer-term inflation expectations appear to be well-anchored. But a more prolonged period of above-target inflation could increase the risk that inflation expectations rise. The MPC continues to monitor data on longer-term inflation expectations closely.

Attitudes to monetary policy and satisfaction with the Bank

The public's attitude to monetary policy may have been affected by the recent volatility of inflation, together with wider changes in the UK economy such as the financial crisis and associated recession. This section discusses how both public awareness of and satisfaction with monetary policy have changed in the past three years. It also examines

Chart 12 Households' expectations for inflation over the next five to ten years and media discussion of falling prices



Sources: YouGov/Citigroup survey and © 2007 Factiva, Inc. All rights reserved.

(a) Rolling three-month averages.
(b) Six-month moving average. Based on searches designed to count the number of headlines referring to deflation and decreases in inflation, wages, and food and energy prices but, where possible, excluding headlines referring to non-UK deflation and house prices. Newspapers included in the search are as in Chart 4.

individuals' perceptions of past changes in interest rates and their expectations for future developments.

Awareness of the monetary policy framework

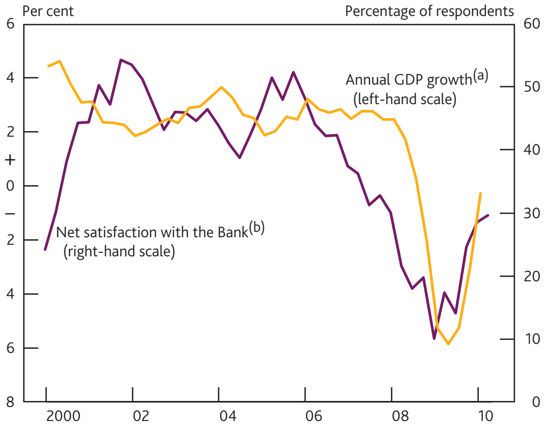
Households' awareness of the monetary policy framework appears to have been little affected by recent economic events. The proportion of respondents to the Bank/GfK NOP survey who knew, without guidance, that 'Britain's basic interest rate level' is set by either the Bank or the MPC has remained around 40% since the survey began in 1999. And when options were offered, around 70% of respondents identified the Bank of England as the group responsible for setting interest rates. Broadly the same proportion of respondents to the May 2010 survey — one half — had heard about quantitative easing as had when the question was first asked in May 2009. Those who had heard of quantitative easing were more likely to know who sets monetary policy than those who had not.

Satisfaction with the Bank

On balance, the public have been satisfied with the performance of the Bank in the past three years (**Chart 13**). But the degree of satisfaction deteriorated between 2005 and 2009, before improving more recently.

Some of the deterioration in satisfaction since late 2005 is likely to have reflected concerns about the severity of the financial crisis and the depth of the recession (**Chart 13**). Consistent with that, satisfaction has been more resilient among individuals who are more aware of the actions that the Bank has taken in response to those events. Having cut Bank Rate sharply, from 5.75% in late 2007 to 0.5% in March 2009, the MPC injected £200 billion of money into the economy by purchasing assets financed through the issuance of central bank reserves (a programme sometimes referred to as quantitative easing). In the May 2010 Bank/GfK NOP survey, the net proportion of respondents who were satisfied with the Bank was around 50% among those who had heard of quantitative easing but only about 15% among those who had not (**Chart 14**).

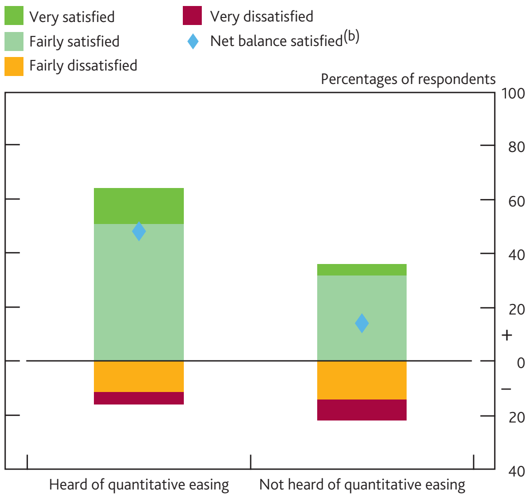
Chart 13 Satisfaction with the Bank and real GDP



Sources: Bank/GfK NOP survey and ONS.

(a) Chained-volume measure at market prices.
(b) Net satisfied is the percentage of respondents who were fairly or very satisfied with the Bank less the percentage who were fairly or very dissatisfied.

Chart 14 Satisfaction with the Bank and awareness of quantitative easing(a)



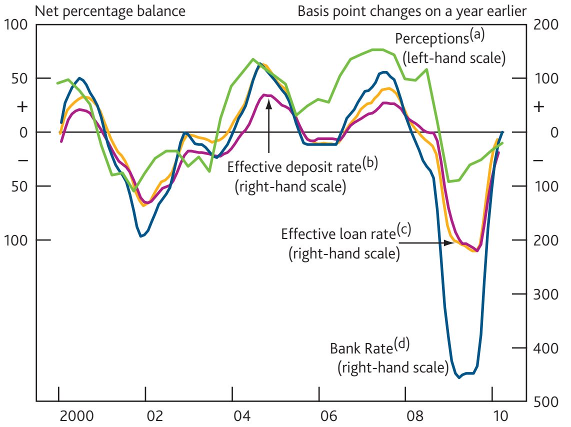
Source: Bank/GfK NOP survey.

(a) Of those who answered the question in May 2010, 45% had heard of quantitative easing and 55% had not.
(b) Net balance satisfied is the percentage of respondents who were fairly or very satisfied with the Bank less the percentage who were fairly or very dissatisfied.

Monetary policy

Households have, on balance, perceived a fall in interest rates on deposits, mortgages and bank loans in the past two years (**Chart 15**). But those perceived changes in interest rates appear smaller than the fall in average interest rates on the stocks of outstanding savings and debt, which in turn have fallen by less than Bank Rate since late 2007. Tighter credit

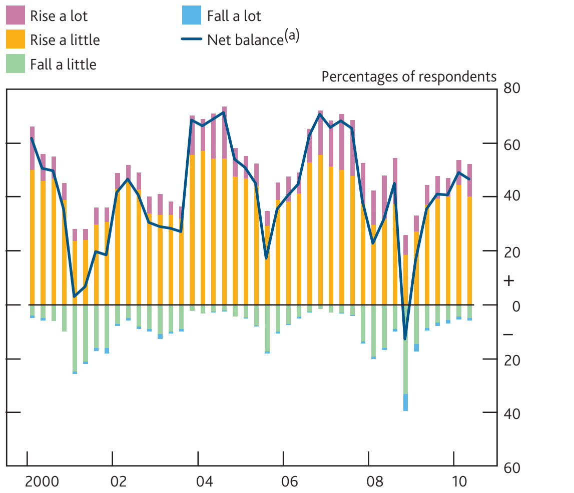
Chart 15 Interest rate perceptions and effective household interest rates



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

(a) Perceived interest rates are the percentage of respondents who thought that interest rates had risen over the past year less the percentage who thought that rates had fallen. Data are quarterly observations.
(b) Effective deposit rate is the three-month average of household time and sight deposit effective stock rates weighted by the outstanding balances.
(c) Effective loan rate is the three-month average of household secured and unsecured borrowing effective stock rates weighted by the outstanding balances.
(d) Bank Rate is the three-month average.

Chart 16 Interest rate expectations over the next twelve months



Source: Bank/GfK NOP survey.

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

conditions have driven a wedge between movements in Bank Rate and in retail rates. Changes in credit conditions may also explain why households do not appear to have recognised the full extent of the measured reduction in interest rates. For example, an individual looking to borrow money may choose not to take out a loan because the interest rate is too high. In that instance, his perception of interest rates might rise but there would be no effect on the average interest rate on the stock of loans outstanding.

Households' expectations for future monetary policy have varied considerably in recent years. On balance, households have only once expected interest rates to fall, in November 2008 (**Chart 16**). That survey followed the co-ordinated action taken by central banks around the globe on 8 October 2008, which included the MPC cutting Bank Rate by 50 basis points on that day, and the MPC's decision to cut Bank Rate by a further 150 basis points on 6 November. The size of those cuts may have led people to expect further significant reductions in interest rates and thus pushed the net balance below zero. But fewer individuals may have expected interest rates to fall further as the MPC continued to reduce Bank Rate and the scope for additional reductions became correspondingly smaller.

Conclusion

This article has examined whether the increased volatility of inflation in the past three years has affected households' attitudes to inflation and to monetary policy more generally. Over that period, households' perceptions of inflation, as measured by the Bank/GfK NOP survey, appear to have reflected some of that volatility. But their near-term inflation expectations have responded less to changes in perceptions. And their expectations for inflation in the longer term by less still.

Households' perceptions of inflation rose in tandem with official estimates of inflation between late 2007 and early 2009. But perceptions were slower to respond to the subsequent fall in inflation.

Households' expectations for inflation in the year ahead have diverged from their perceptions of current inflation for much of the past three years. It is likely that some individuals lowered their near-term inflation expectations in response to the financial crisis and the associated decrease in demand. But observation of past episodes of high inflation, after which inflation has typically reverted to target, may also have led people to place more weight on the 2% inflation target when forming their expectations.

More recently, households' near-term inflation expectations have risen back towards perceptions of current inflation. But their expectations for inflation in the longer term remain little changed, likely reflecting the credibility of the inflation-targeting regime. A more prolonged period of above-target inflation could, however, increase the risk that inflation expectations rise.

Public awareness of the UK monetary policy framework does not appear to have been affected by recent economic events. But it is likely that concerns about the severity of the financial crisis and the depth of the recession weighed on the public's satisfaction with the Bank. Over the past year, however, public satisfaction with the Bank has started to recover.

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