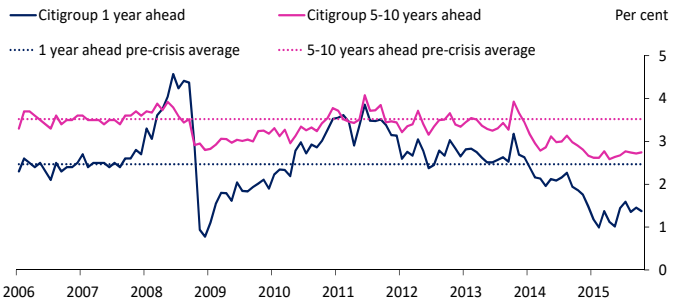
Inflation Expectations Monthly, November 2015

Main message: Household inflation expectations have remained broadly stable. Within companies, expectations for wage growth and perceived inflation have increased slightly on the quarter. Professional forecasters' expectations for inflation are broadly unchanged on the quarter, with their forecasts lower than November Benchmark two and three years ahead. 3-year forward inflation swap rates fell for the UK reaching the lowest level since 2015 Q1. Long-term inflation swap rates remained stable for the UK and the US, while euro-area 5y5y inflation swap rates grew markedly.

Households

Chart 1: Citigroup survey of household inflation expectations

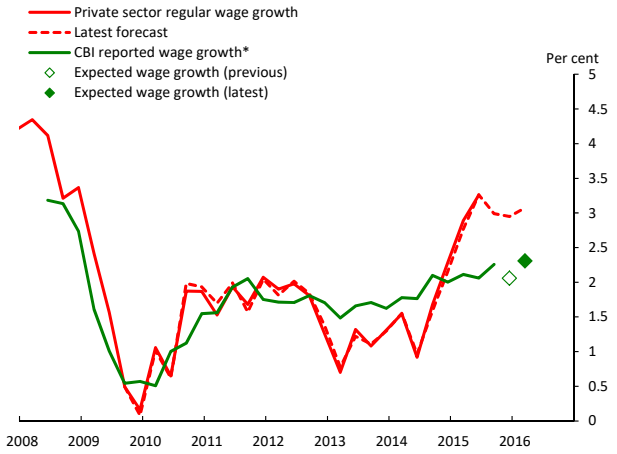


Question: *"How do you expect consumer prices of goods and services will develop over the next one and five to ten years respectively?"*

- According to the monthly Citigroup survey, one-year ahead inflation expectations fell by 0.1pp in October, while expectations five to ten-years ahead were little changed (**Chart 1**). As a result, this has meant the households section of the heatmap has been unchanged on the month. NMG survey data for 2015 H2[1] show that households' inflation expectations have remained broadly flat at all horizons (1,2 and 5 years ahead) as compared to the 2015 H1 survey.

Companies

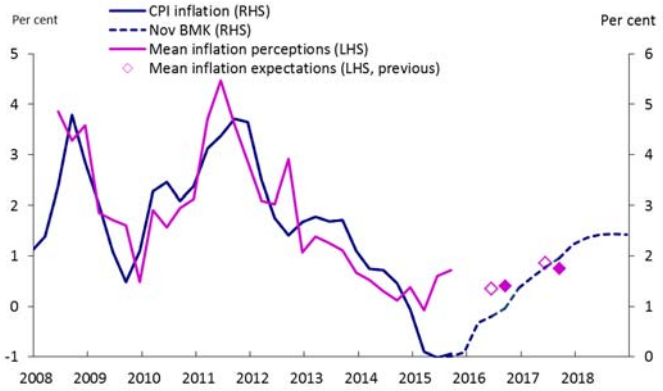
Chart 2: Wage growth and expectations in CBI surveys*



* Distribution, manufacturing & service sectors, weighted by employment shares.
Question: *"Over the next 12 months, what percentage change is expected in your firm's wage/salary cost per person employed (including overtime and bonuses) and what is expected to occur over the next 12 months?"*

- Both expectations and the outturn of wage growth have ticked up on the quarter. CBI data on firms' wage growth has increased by about 20bps in Q3, with expected wage growth 1 year ahead also increasing to 2.3% (**Chart 2**). This follows a recent period of relatively flat wage growth and wage expectations as reported in the survey.

Chart 3: CBI survey of distribution firms' price expectations

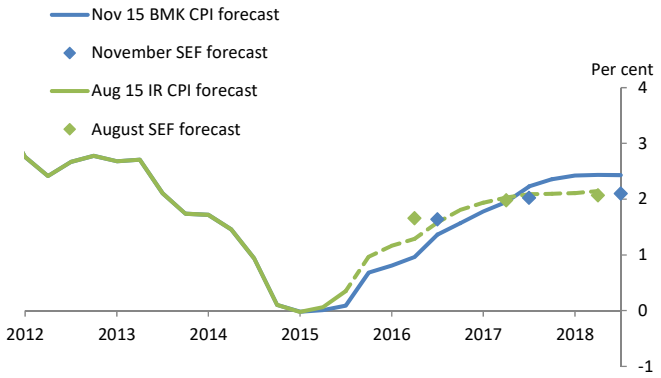


- Some firms' price expectations remained relatively flat, with perceived inflation ticking up, according to the quarterly CBI survey (**Chart 3**). Firms' inflation expectations in the distribution sector – the sector in which reported past price changes have mostly closely matched trends in CPI inflation – increased by 0.1pp and fell by 0.1pp at the one and two year horizons, respectively. Once adjusted for the approximate 1pp difference between perceived inflation and CPI inflation, firms' inflation expectations are broadly in line with the November Benchmark forecast.

[1] NMG survey data for 2015 H2 are Bank Confidential until 5th November 2015.

Professional forecasters

Chart 4: Nov 15 BMK and Aug 15 IR forecasts of CPI inflation and SEF



- Provisional data from the Bank's Survey of Professional Forecasters (SEF) for 2015 Q4[2] show that expectations for CPI inflation at one, two and three years ahead are little changed since the 2015 Q3 survey (**Chart 4**). In particular, their forecast at the three year horizon is about 30bps lower than November Benchmark. Data on their expectations for Bank Rate seem to suggest that, as their Bank Rate expectations are higher than the yield curve that the November Benchmark was conditioned on, they may not have conditioned their forecast on the yield curve, which may be a reason for lower expectations for inflation in the medium term.

Financial markets

Chart 5: Cumulative changes in 3-year instantaneous forward inflation swap rates since start of 2014

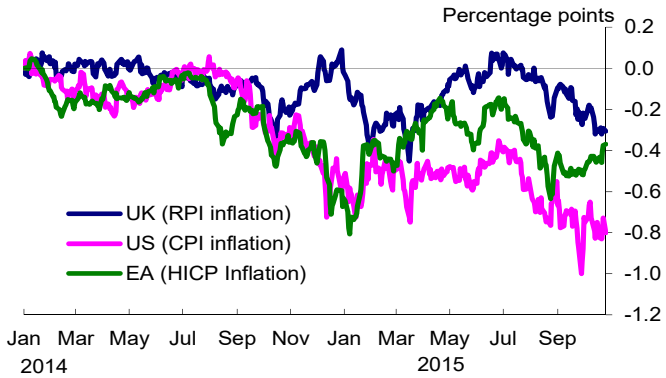


Chart 6: Cumulative changes in 5y5y inflation swap rates since start of 2014

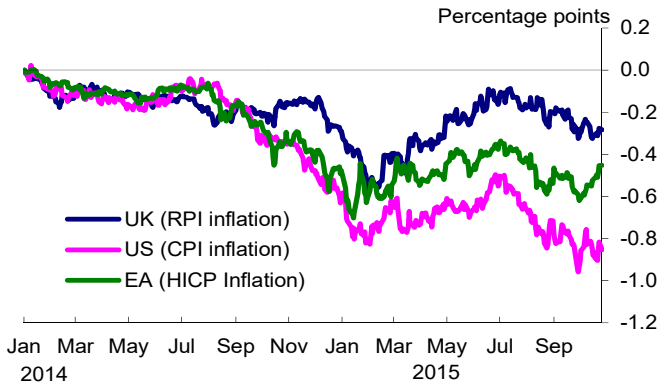
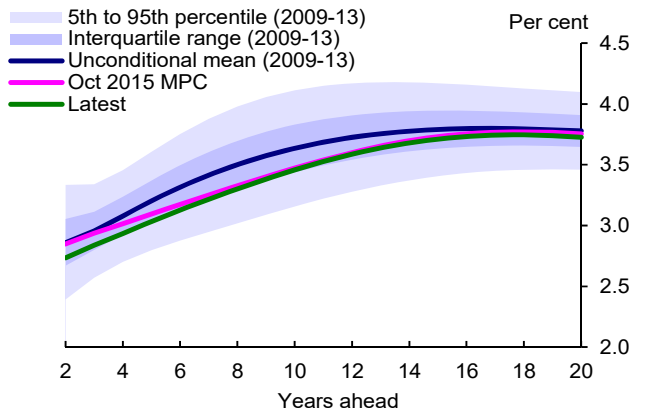


Chart 7: Term structure of instantaneous forward UK RPI inflation swap curve[1]



- UK 3-yr instantaneous forward inflation swap rates decreased by 10 bps between October MPC and 26 October. This move pushed the UK rates to the lowest level since March 2015. US rates fell by 7 bps between October MPC and 26 October, while euro-area rates rose by 9bps (**Chart 5**). US and euro-area rates are 20 and 27 bps above their September and August troughs, respectively.

- UK and US 5y5y inflation swap rates fell slightly, by 3 and 1 bps respectively, between October MPC and 26 October. In the same period euro-area 5y5y inflation swap rates grew markedly, by 13bps (**Chart 6**). UK and US 5y5y inflation swap rates remain 19 and 35 bps below their July peaks, respectively, while euro-area 5y5y inflation swap rates are only 10 bps below their June peak.

- The UK instantaneous forward inflation swap curve is down slightly at shorter maturities, yet it still remains within its historic interquartile range (see **Chart 7**). In contrast, US and euro-area inflation swap curves remain significantly below historical averages, significantly away of their respective interquartile ranges (see **Charts 8** and **9**). Since October MPC the US curve is broadly unchanged, while the euro-area curve shifted up across all maturities.

- Overall, financial market measures of inflation expectations remain below, but still close, to their 2009-13 mean in the UK (**Chart 7**). Whereas in the US and euro area these measures remain well below their respective 2009-13 means (**Chart 8** and **Chart 9**).

[2] SEF survey data for 2015 Q4 are provisional and Bank Confidential until 5th November 2015.

Chart 8: Term structure of instantaneous forward US CPI inflation swap curve[1]

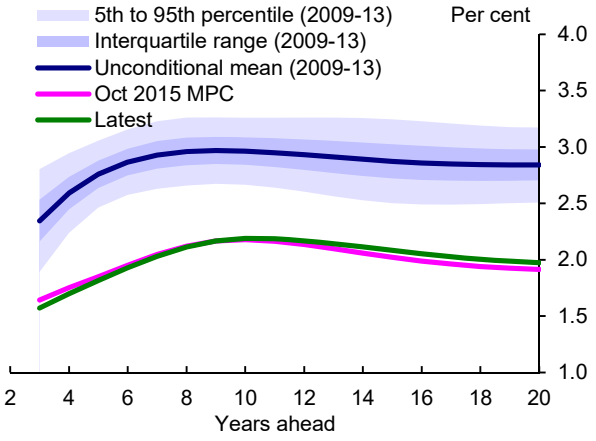
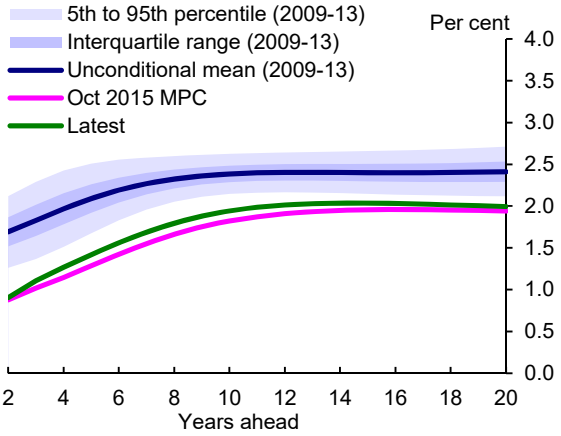


Chart 8: Term structure of instantaneous forward euro area CPI inflation swap curve[1]

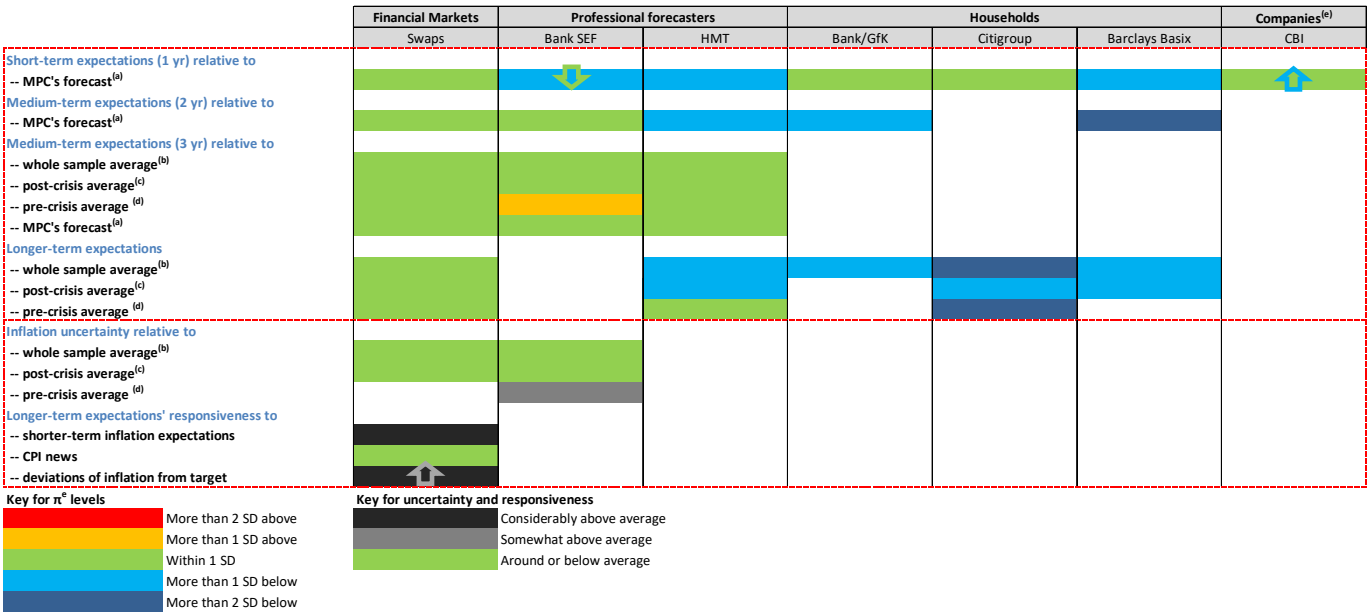


[1] For the methodology behind these unconditional distributions, see

Inflation expectations heatmap

- On the household side, there has been no change in the heatmap as new data from the monthly Citigroup survey for October has been little changed. On the professional forecasters side, provisional data from the Survey of External Forecasters has shown a slight fall in the median 1 year inflation forecast which, coupled with a slight increase in the August *Inflation Report*[3] short-term forecast, has led to the corresponding cell turning from light green to light blue. The responsiveness of the level of longer term inflation swaps (5-year, 5-year) to the level of CPI has increased from grey to black this month, with the other financial market measures of responsiveness being unchanged. For companies, new data from the CBI survey for Q3 have shown a tick up in the expectation for prices 1 year ahead (**Chart 3**) which has meant the corresponding cell has turned from light blue to green.
- Overall however, the heatmap has been little changed on the month, with the general picture continuing to be that there is a divergence in the levels of expectations of households and those implied by financial market measures.

Chart 9: Latest heatmap*



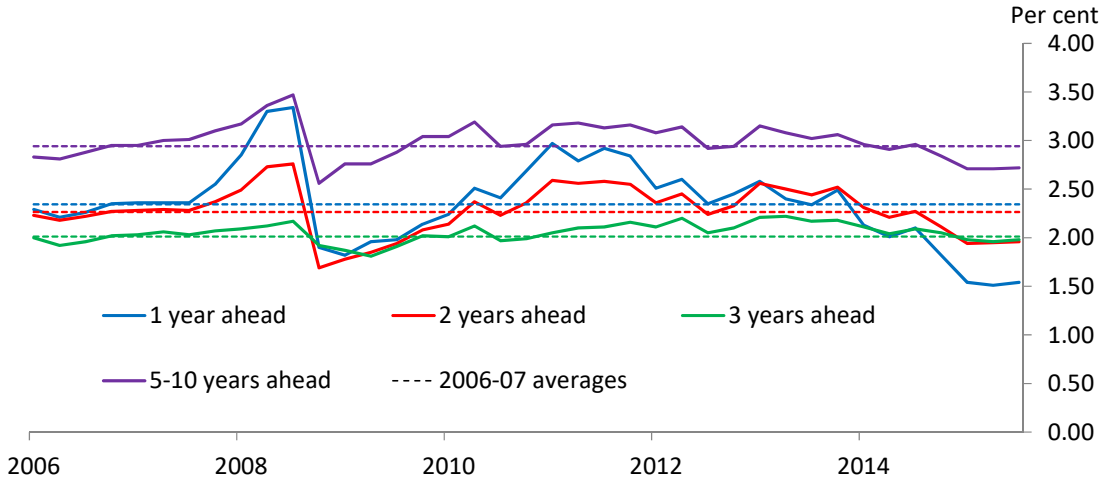
* Colour of the arrows indicates the colour of the cell last month.

[3] The comparison made to the MPC's forecast is with the latest available public forecast, which is the August 2015 *Inflation Report* forecast.

Summary measure

- The summary measure including new 2015 Q3 data from the CBI and HMT surveys was broadly unchanged at all horizons as compared to the last update, and has generally remained at below pre-crisis levels.

Chart 10: Summary measure of inflation expectations



The summary measures use factor methods to extract the underlying signal from different indicators of inflation expectations at different horizons. See for more details.

Table of inflation expectations

Households' inflation expectations	Series[a] average (pre-FG)	Pre-[b] crisis average	Average[c] since 2009	Q2	Q3	Q4
1 year ahead						
Bank NOP	2.8	2.3	3.3	2.2	2.0	-
Barclays Basix[d]	3.0	2.9	3.1	1.3	1.6	-
Citi/YouGov[g]	2.7	2.5	2.7	1.2	1.5	1.4[i][j]
2 years ahead						
Bank NOP	2.9	-	2.9	2.3	2.3	-
Barclays Basix	3.4	3.3	3.4	1.7	2.0	-
5 years ahead						
Bank NOP	3.3	-	3.3	2.8	2.8	-
Barclays Basix	3.8	-	3.8	2.8	3.0	-
Citi/YouGov[g]	3.4	3.5	3.4	2.6	2.7	2.7[i][j]
Professional Forecasters						
Survey of External Forecasters (SEF)						
3 years ahead	2.0	1.9	2.0	2.1	2.1	2.1
Companies' inflation expectations						
CBI Survey						
1-year ahead change in general level of prices in the UK markets the firm competes in	0.5	-	0.4	0.3	0.4	-

Financial Markets[e]	Series[a] average (pre-FG)	Pre-[b] crisis average	Average[c][f] since 2009	Q2[g]	Q3	Q4[i]
Inflation swaps						
1yr instantaneous fwd	2.7	2.6	2.8	2.6	2.5	2.5
2yr instantaneous fwd	2.8	2.8	2.9	3.0	2.9	2.8
3yr instantaneous fwd	2.9	2.8	3.0	3.1	3.1	2.9
5yr5yr fwd	3.4	3.0	3.5	3.3	3.4	3.3
Inflation uncertainty[h][k]						
3yr	202	-	231	158	163	158

Highlighted cells indicate new data since previous chartpack.

(a) The series average is calculated between the start of each series and the announcement of forward guidance in August 2013.

(b) The pre-crisis average is calculated between the start of each series and 2007 Q4.

(c) The average since 2009 is calculated between 2009 Q1 and the announcement of forward guidance in August 2013.

(d) Series and pre-crisis averages start in 1997.

(e) Financial market measures are linked to RPI.

(f) Average excludes CPAC uncertainty period between 18/05/2012 and 09/01/2013

(g) Figures refer to quarter average.

(h) Pre-crisis average excluded due to insufficient data points prior to 2008.

(i) Citi data are up to October while 2015 Q3 financial markets data are up to 26/10/2015.

(j) The Citigroup survey was carried out between the 21st-22nd October 2015

(k) Standard deviation of the option-implied distribution for annual RPI inflation, measured in basis points