

4 Costs and prices

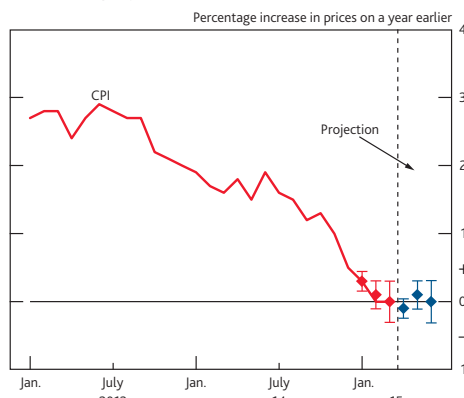
CPI inflation was 0.0% in February and March. The current low level of inflation can largely be explained by lower energy, food and imported goods prices, although it also reflects subdued growth in domestic costs. Inflation is likely to remain around zero in the very near term. Sterling oil prices, although higher, remain around 40% below their mid-2014 peak. Wage growth remained weak in early 2015. Inflation expectations remain broadly consistent with the MPC's 2% target.

Table 4.A Monitoring the MPC's key judgements

Developments anticipated in February	Developments since February
Inflation expectations	Broadly on track
<ul style="list-style-type: none"> Indicators of inflation expectations consistent with meeting the 2% target in the medium term. 	<ul style="list-style-type: none"> Movements in indicators of inflation expectations have been mixed. On balance, longer-term measures appear to be broadly consistent with the 2% target.
Earnings growth	Weaker than expected
<ul style="list-style-type: none"> Four-quarter AWE growth of around 3½% in 2015 Q3. 	<ul style="list-style-type: none"> Four-quarter AWE growth was 1.7% in the three months to February.
Unit labour costs	Broadly on track
<ul style="list-style-type: none"> Four-quarter whole-economy unit labour cost growth to rise to around 1½% by mid-2015. 	<ul style="list-style-type: none"> Unit labour costs grew by a little under 1% in the four quarters to 2014 Q4.
The exchange rate, utility bills and commodities	Exchange rate and oil prices higher than expected; fuel and utilities prices as expected
<ul style="list-style-type: none"> Commodity prices and sterling ERI to evolve in line with conditioning assumptions. Domestic petrol prices to fall in 2015 Q1. Domestic gas prices to fall by a little over 4% in H1, in line with recent announcements. 	<ul style="list-style-type: none"> US dollar oil futures higher, gas futures broadly as expected. Sterling ERI was higher in Q1 than expected. Petrol prices fell by around 10% over 2015 Q1. Domestic gas prices have fallen in line with previous announcements.
Import prices	Weaker than expected
<ul style="list-style-type: none"> Non-fuel import prices to fall by around 1% in the year to 2015 Q3. 	<ul style="list-style-type: none"> Non-fuel import prices estimated to have fallen by 0.5% in the year to 2015 Q1.

Chart 4.1 CPI inflation expected to remain around zero over the next few months

Bank staff projection for near-term CPI inflation^(a)



(a) The red diamonds show Bank staff's central projection for CPI inflation in January, February and March 2015 at the time of the February *Inflation Report*. The blue diamonds show the staff projection for April, May and June 2015. The bands on either side of the diamonds show uncertainty around these projections based on one root mean squared error of projections for CPI inflation one, two and three months ahead made since 2004.

CPI inflation was 0.0% in March, as expected at the time of the February *Report*. Since inflation remains more than 1 percentage point away from the MPC's 2% target, the Governor has written a second consecutive open letter to the Chancellor.⁽¹⁾ As explained in that letter, the weakness in inflation is primarily a consequence of past falls in the prices of commodities and some other imported goods, although domestic cost pressures also remain subdued (Section 4.1).

CPI inflation is likely to remain around zero in the very near term, and could temporarily turn negative. But as past falls in energy and food prices drop out of the annual comparison towards the end of the year, inflation is expected to pick up. The outlook for inflation will remain sensitive to global influences (Section 4.2) and developments in domestic costs (Section 4.3).

4.1 Consumer prices

CPI inflation was 0.0% in February and March, down from 0.5% in December (Chart 4.1), broadly as expected at the time of the February *Report*.

Around three quarters of the weakness in inflation relative to the 2% target can be attributed to smaller than average contributions from energy, food and other goods prices (Table 4.B). A fall in petrol prices, due to a fall in global oil prices, subtracted nearly 0.7 percentage points from CPI inflation in March relative to its pre-crisis average contribution. After recent reductions in household gas prices, the contribution from household energy utilities to inflation was 0.3 percentage points below its pre-crisis average. Lower food price inflation subtracted 0.5 percentage points relative to its pre-crisis average, driven by a combination of lower agricultural prices, the appreciation of sterling relative to the euro and competition among supermarkets. The appreciation of sterling has also weighed on the prices of other imported

(1) The letter is available on the Bank's website at www.bankofengland.co.uk/monetarypolicy/Documents/pdf/cpiletter130515.pdf.

Table 4.B Around three quarters of the weakness in inflation is due to food, energy and other goods prices

Contributions to March 2015 CPI inflation relative to the pre-crisis average

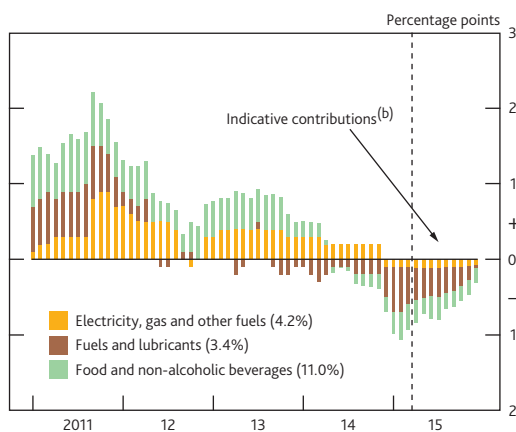
Percentage points	1997–2007 average	March 2015	Difference
Energy, food and other goods ^(a)	0.4	-1.1	-1.5
Services	1.6	1.1	-0.5
Total^{(a)(b)}	2.0	0.0	-2.0

Sources: ONS and Bank calculations.

(a) Adjusted for the 0.37 percentage point downward bias from clothing that existed until 2010.
 (b) Totals may not sum exactly due to rounding.

Chart 4.2 The drag on inflation from food and energy prices will diminish over 2015

Contributions to CPI inflation^(a)

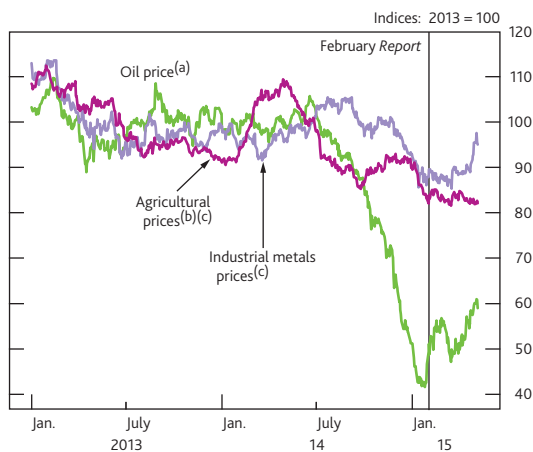


Sources: Bloomberg, Department of Energy and Climate Change, ONS and Bank calculations.

(a) Contributions to annual CPI inflation. Data are non seasonally adjusted.
 (b) Bank staff estimates. Fuels and lubricants estimates use Department of Energy and Climate Change petrol price data for April 2015 and are then based on the May 2015 sterling oil futures curve shown in Chart 4.4. The CPI weights used to produce these contributions are 2015 weights, shown in parentheses.

Chart 4.3 Oil prices have risen since February

US dollar oil and commodity prices



Sources: Bloomberg, S&P indices and Thomson Reuters Datastream.

(a) US dollar Brent forward prices for delivery in 10–21 days' time.
 (b) Total agricultural and livestock S&P commodity index.
 (c) Calculated using S&P US dollar commodity price indices.

goods and on the prices of goods with a sizable imported content (Section 4.2).

Lower prices for a range of goods with a sizable import content is likely to be one reason why measures of core inflation — which attempt to strip out volatile components such as food and energy — have fallen recently. These measures are also likely to pick up weakness in domestic price pressures. These domestic price pressures remain subdued, but as in February are judged to account for only around 0.5 percentage points, or one quarter, of the weakness in inflation relative to the target.

CPI inflation is expected to remain around zero for the next few months, as past falls in energy and food prices remain in the annual comparison (Section 4.2). Factors such as the timing of summer sales may lead to some near-term volatility in inflation, and there is a possibility that inflation temporarily turns negative. This would not, however, be associated with the potentially damaging consequences of persistent deflation, as discussed in the box on page 35.

As past falls in food and energy prices start to drop out of the annual comparison towards the end of 2015 (Chart 4.2), inflation is likely to rise notably. Beyond that, the path of inflation will be sensitive to developments in global prices (Section 4.2) and domestic costs (Section 4.3).

4.2 Global costs and prices

Falls in global commodity prices and the appreciation in sterling have been key factors pulling down UK CPI inflation over the past year. The extent to which inflation remains low will depend, in part, on the evolution of these factors.

Global commodity prices

The Brent crude spot oil price has risen significantly since the February Report (Chart 4.3), to around US\$63 in the fifteen working days to 7 May. One driver of that rise is likely to have been an unexpected slowing in the growth of US oil inventories, which indicates less of an imbalance between oil supply and demand. A reduction in the perceived likelihood that Iranian sanctions will be lifted in the second half of the year may also have played a role.

The oil price futures curve, on which the MPC conditions its forecast, reaches US\$73 by 2018 Q2, but there are significant risks around that path. In the near term, further rises in inventories, which are already at high levels, could increase the cost of storage, which may lead to falls in spot oil prices in order to make storage economical. In the medium term, there remains uncertainty about the degree to which low oil prices will reduce extraction investment and future supply. And oil prices will remain sensitive to the outlook for global demand growth.

Deflation

CPI inflation was 0.0% in March, and the United Kingdom could experience a period of temporary deflation at some point over the next few months. Current low inflation is judged to be largely a consequence of positive supply shocks, in the form of lower energy and food prices. This, in turn, has boosted real incomes and domestic demand (Section 2).

In certain circumstances, particularly if it becomes widespread and persistent, deflation may itself have adverse consequences. This was the case during the periods of deflation in the United Kingdom and the United States in the 1920s and early 1930s, and to some extent in Japan in the late 1990s and early 2000s.

As this box sets out, it is the ability of monetary policy to respond to changes in inflation that matter for the economy, rather than falling prices as such. The current evidence suggests little sign that a period of temporary price deflation in the United Kingdom would be associated with any adverse consequences.

Deflation can generate adverse consequences...

There are two main channels by which low, or negative, inflation can generate adverse consequences:

- **Delayed consumption:** for a given nominal interest rate, lower inflation, or lower expected inflation, raises the real interest rate. As the real interest rate rises, households can buy more in the future with income saved today. So lower inflation could, unless it is counteracted by a rise in real incomes, lead to delayed consumption and weaker demand. That, in turn, could cause prices to fall further and lead to persistently weak demand.
- **Debt deflation:** the value of debt is often fixed in nominal terms, and the ability to repay debt depends on the nominal interest rate and on nominal income growth. If price

deflation is accompanied by low — or negative — nominal income growth and relatively high nominal interest rates, households, companies and the government may find it progressively harder to repay debt. In response, they may be forced to cut back on spending in order to meet debt repayments, further reducing demand and prices, and any resulting arrears and defaults may lead to stress for financial institutions.

In both cases, however, what matters is not deflation directly but rather the extent to which policymakers are able to respond. The appropriate response to signs that deflation may become persistent would be to lower nominal interest rates in order to offset rising real interest rates and counteract falling nominal incomes. Indeed, cuts in interest rates during the crisis were necessary to limit the extent of the downturn. Where monetary policy makers' toolkits are constrained — for example by having a fixed exchange rate or from a lack of tools to reduce nominal interest rates and increase monetary stimulus — the risk of delayed consumption and debt deflation may increase, which in turn could lead to more persistently weak demand.

...but in current UK circumstances, it is highly unlikely

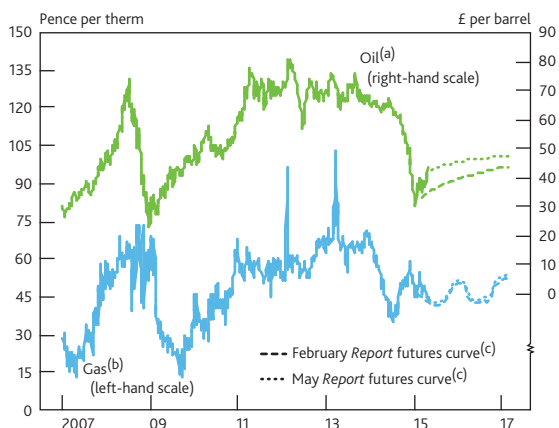
Recently, real incomes in the United Kingdom have been growing at their strongest rate since 2008. There is little evidence of consumers delaying purchases (Section 2). Most measures of inflation expectations are broadly consistent with the 2% target (Section 4.4). There are also few signs of either debt deflation or increases in financial stress due to debt affordability concerns. The ratio of household debt to income has continued to fall — albeit from a relatively high level. Nominal interest rates faced by households for new borrowing remain low. And indicators of household debt affordability — such as arrears and mortgagors reporting financial distress — remain benign. Moreover, the MPC has the tools to bring inflation back to the target, and stands ready to use such measures as appropriate.

Wholesale gas prices, which influence CPI inflation predominantly through their impact on household utility bills, have been broadly unchanged since February (**Chart 4.4**). Cuts to household gas prices — announced earlier in 2015 in response to past falls in wholesale gas prices — by five of the six largest domestic utility suppliers have already affected CPI, and the remaining company's price cut will do so in May.

There have been mixed moves in non-energy commodity prices since February (**Chart 4.3**). Prices of industrial metals have risen by around 5%, in part due to growing evidence that metal producers may be starting to reduce supply. Agricultural commodity prices, in contrast, have been broadly stable since February, having fallen at the end of 2014.

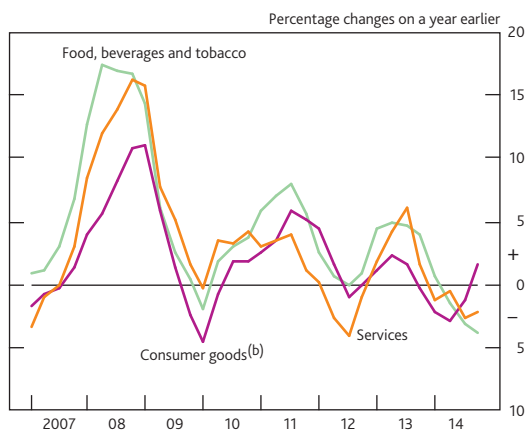
Chart 4.4 The oil futures curve has flattened

Sterling oil and wholesale gas prices



Sources: Bank of England, Bloomberg, Thomson Reuters Datastream and Bank calculations.

- (a) Brent forward prices for delivery in 10–21 days' time converted into sterling.
 (b) One-day forward price of UK natural gas.
 (c) Futures prices at the time of the February Report are averages during the fifteen working days to 4 February 2015. Futures prices at the time of the May Report are averages during the fifteen UK working days to 7 May for gas and averages during the fifteen US working days to 7 May for oil.

Chart 4.5 Components of import price inflation have divergedImport price inflation by category^(a)

- (a) Deflators for imported consumer goods and services from the ONS National Accounts.
 (b) Excludes imports of cars.

Table 4.C Wage growth remains below pre-recession rates

Whole-economy earnings

	Averages				2014		2015
	2001–07	2008 Q3–2010 Q2	2013	2014 H1	Q3	Q4	Q1
Percentage changes on a year earlier							
(1) Total AWE ^(a)	4.3	1.4	1.2	0.9	1.0	2.1	1.8
(2) AWE regular pay ^{(a)(b)}	4.0	2.1	0.9	1.0	1.2	1.7	2.1
(1)–(2) Bonus contribution ^{(a)(c)}	0.3	-0.7	0.2	0.0	-0.2	0.4	-0.3
Pay settlements ^(d)	3.2	2.5	1.8	2.0	2.0	1.9	1.9
Memo: three-month on three-month annualised regular pay ^(a)							
	4.0	1.7	1.0	0.7	2.6	3.0	2.4

Sources: Bank of England, Incomes Data Services, the Labour Research Department, ONS and XperTHR.

- (a) Figures for 2015 Q1 are estimated based on data for January and February and Bank staff's projections for March.
 (b) Whole-economy total pay excluding bonuses and arrears of pay.
 (c) Percentage points. The bonus contribution does not always equal the difference between total AWE growth and AWE regular pay growth due to rounding.
 (d) Average over the past twelve months, based on monthly data.

Non-energy import prices

Import prices have a direct effect on CPI through their impact on the cost of imported goods and services bought by households, as well as an indirect effect through their impact on the cost of inputs for businesses. Import prices, excluding fuel, fell by 1.2% in the year to 2014 Q4, as the significant appreciation of sterling since March 2013 continued to weigh on prices.

The sterling ERI is 16% higher than its trough in March 2013, but this masks a more significant appreciation against the euro and a sizable depreciation against the US dollar (Section 1). This may have implications for the timing of pass-through to CPI inflation. The prices of food-related imports are closely linked to the euro exchange rate, due to trade links and product competition. Prices of other consumer goods, by contrast, tend to be relatively more sensitive to the US dollar. Consistent with this, imported food prices have been falling, while the prices of other imported consumer goods have risen over the four quarters to 2014 Q4 (Chart 4.5). As a consequence, imported food prices are expected to continue pulling down CPI inflation over the coming months, while imported consumer goods prices are expected to start supporting CPI inflation to some extent, although pass-through here is likely to take longer than for food since prices in this sector change less frequently.

In the central projection, import prices are assumed to be pulling down CPI inflation a little in early 2015, with more downward pressure to come over the forecast period. The extent to, and speed at, which movements in import prices feed through to inflation remains highly uncertain, however, and there are risks in both directions.

4.3 Domestic influences on inflation

Domestic cost pressures, particularly wage and unit labour cost growth, have picked up relative to a year ago, but remained subdued relative to historical averages.

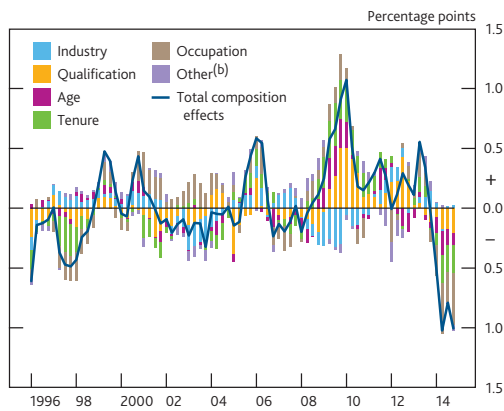
Recent developments in nominal wages

Wage growth has been weak since the 2008/09 recession (Table 4.C). This is likely to have been largely a result of weak productivity growth and significant slack in the labour market. Despite a significant narrowing in labour market slack since mid-2013 (Section 3), however, wage growth has remained weak: annual pay growth was 1.7% in the three months to February, below expectations at the time of the February Report (Table 4.A). There are several factors that might explain why wages have remained weak, some of which are likely to persist for longer than others.

The composition of employment growth may explain some of the recent weakness in average wage growth. Employment growth since mid-2013 has been disproportionately in lower-skilled jobs, with a rising proportion of staff who are

Chart 4.6 The changing composition of employment weighed on average wage growth in 2014

Estimates of the contribution of employment characteristics to four-quarter wage growth^(a)

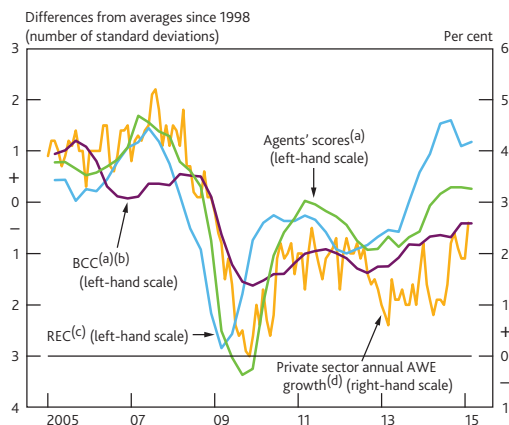


Sources: Labour Force Survey and Bank calculations.

- (a) Estimates are shown relative to their averages over 1995 Q2–2014 Q4. Estimates of the effect of individual and job characteristics are derived from a regression of these characteristics on levels of employee pay using Labour Force Survey data. The estimate of the total compositional effect is obtained by combining these estimates with changes in the composition of the labour force.
- (b) Other includes gender, region of residence, whether working full-time and whether in public sector employment.

Chart 4.7 Some survey indicators point to stronger pay growth

Private sector earnings and indicators of pay growth



Sources: Bank of England, BCC, KPMG/REC/Markit and ONS.

- (a) The Bank's Agents' scores and the BCC survey are produced by weighting together indices for the manufacturing and service sector according to their employment shares. The Bank's Agents' scores are the end-quarter score, and are available from June 1998.
- (b) Four-quarter moving average measure. Non seasonally adjusted.
- (c) The REC measure is produced by weighting together survey indices for the pay of permanent and temporary placements using shares in employment; quarterly averages.
- (d) Excludes bonuses and arrears of pay.

new to roles (Section 3). Assuming that those employees are earning commensurately lower wages, this would push down growth in measured average earnings. Bank staff estimates suggest that the changing composition of employment growth — including the mix of occupations, industries, ages and job tenures — could explain around 1 percentage point of the recent weakness in average annual earnings growth (Chart 4.6). Compositional effects will only suppress wage growth for as long as such shifts continue.

Another explanation for weak wage growth that might be more persistent is if there were a greater degree of slack in the labour market. At the time of the August 2014 *Report*, the MPC judged that some of the unexplained weakness in wage growth was due to a greater degree of slack than it had previously thought.⁽¹⁾ Having assessed the evidence on the degree of slack, including that of wage growth, the best collective judgement of the MPC is that slack is broadly in the region of ½% (Section 3). There is, however, considerable uncertainty around this judgement and a range of views on the Committee.

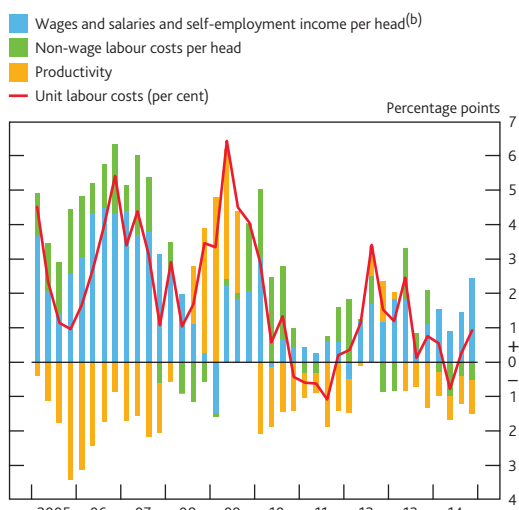
The past narrowing in slack may be taking longer than usual to feed through to wage growth, in which case the weakness may be more temporary. There is evidence from the REC survey of strong growth in starting salaries (Chart 4.7). Job moves have risen but remain below their pre-crisis average rate (Section 3), suggesting that it may take longer than usual for these higher pay pressures to feed through to average wages. As confidence about job prospects strengthens and the number of job moves increases further, those higher starting salaries and the need to retain staff are likely to pull up aggregate wage growth.

A further explanation is that there may have been a change in the relationship between domestic labour market slack and wage growth. For example, it is possible that it may have become easier to recruit employees for some occupations from outside the United Kingdom. This may have reduced the sensitivity of wages to domestic slack.

Wage growth may also remain weak for longer if low inflation, or low expectations of wage growth, influence wage bargaining. Lower food and energy prices mean that households are better off for a given level of nominal income, which may lead them to be satisfied with smaller pay increases. And they may be slow to adjust pay expectations upwards in response to an improving labour market following the extended period of low pay growth. Perhaps consistent with this, according to a recent survey by the CIPD, the mean expectation of employees for pay growth in 2015 was lower than in 2014.

(1) For a summary of that judgement see the box on page 28 of the August 2014 *Report*; www.bankofengland.co.uk/publications/Documents/inflationreport/2014/ir14aug.pdf.

Chart 4.8 Unit labour cost growth picked up in 2014 Q4
Decomposition of four-quarter whole-economy unit labour cost growth^(a)

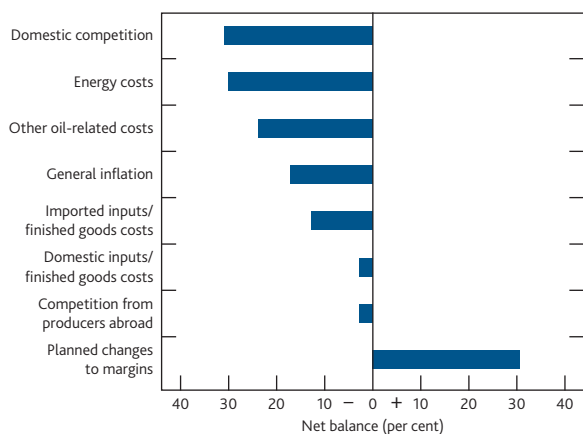


Sources: ONS and Bank calculations.

- (a) Unit labour costs are calculated as total labour costs divided by GDP. GDP is based on the MPC's best collective judgement of the final estimate of GDP. Estimates are consistent with the Bank staff estimates of population growth, which are explained in footnote (a) of Chart 3.9.
- (b) Self-employment income is calculated from mixed income, assuming that the share of employment income in that is the same as the share of employee compensation in nominal GDP less mixed income.

Chart 4.9 A desire to increase margins may support prices to some extent

Agents' survey: factors affecting companies' pricing decisions^(a)



- (a) The survey asked respondents how they expected the factors listed to affect the change in their output prices in the year ahead, compared with the change over the past year. Based on 424 responses to a survey carried out by the Bank's Agents between 6 February and 25 March 2015. Responses have been weighted by turnover. A positive net balance indicates a greater proportion of companies responded that the factor would support prices.

Near-term outlook for wages

In the near term, pay growth is expected to strengthen, driven by the narrowing in slack and a pickup in productivity growth, and as the temporary factors weighing on pay growth — such as compositional effects and subdued job turnover — diminish. The continued weakness in wage growth has led the MPC to reassess the persistence of the factors dragging on pay growth, and in particular the possibility that the compositional effects may be slow to fade. As a consequence, wage growth is expected to pick up at a slower rate than at the time of the February Report. The uncertainty around the path for wages is considerable.

Unit wage and unit labour costs

A key determinant of the cost of producing goods and services is the extent to which growth in labour costs is accompanied by growth in labour productivity. Unit labour costs — based on the MPC's GDP backcast — rose by 0.9% in the four quarters to 2014 Q4 (Chart 4.8), as strength in the National Accounts measure of wages and salaries was only partially offset by productivity growth. The non-wage component — which includes costs such as pension contributions and which can be erratic — dragged on unit labour cost growth. There is uncertainty about the wages and salaries measure of earnings, however, and growth in the average weekly earnings measure, which is probably a better indicator of current earnings growth, grew by around 1 percentage point less over the same period. Overall, therefore, unit labour costs probably provide a reasonable measure of companies' true labour cost growth at present.

Unit labour cost growth is expected to pick up to 1.8% in the four quarters to 2015 Q1. In the medium term, wages are expected to continue to grow faster than productivity, consistent with CPI inflation returning to the 2% target within two years (Section 5).

Companies' pricing decisions

A key factor in the evolution of inflation is how companies set prices relative to their production costs. Cost pressures are subdued at present, given relatively subdued labour cost growth, combined with the appreciation in sterling and weak global cost pressures (Section 4.2). So an important question is the extent to which competitive pressures will cause companies to reflect this in lower prices, or whether strong demand will instead lead them to pass through less to prices and increase their margins.

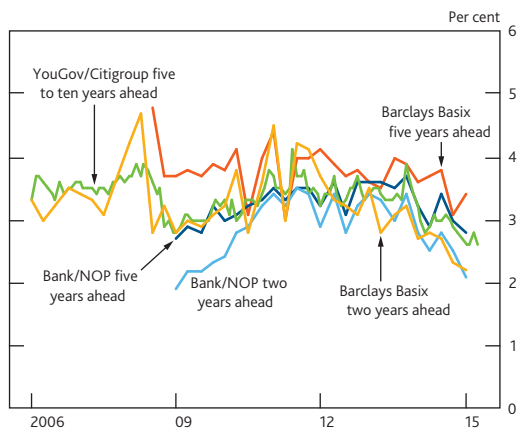
In aggregate, companies' profit margins do not appear particularly low relative to their pre-crisis averages. A recent survey conducted by the Bank's Agents, however, suggests that there is a significant minority of companies for whom profit margins remain below normal levels. Furthermore, the survey suggests that some companies intend to use the opportunity of weak cost pressures to rebuild profit margins (Chart 4.9).

Table 4.D Inflation expectationsIndicators of inflation expectations^(a)

Per cent	2000 (or start of series) to 2007 averages ^(b)	Averages since 2008	2013	2014			2015	
				H1	Q3	Q4	Q1	Q2 ^(c)
One year ahead inflation expectations								
Households^(d)								
Bank/NOP	2.4	3.2	3.5	2.7	2.8	2.5	1.9	n.a.
Barclays Basix	2.8	3.0	2.8	2.4	2.4	1.9	1.7	n.a.
YouGov/Citigroup (Nov. 2005)	2.5	2.6	2.7	2.2	2.1	1.7	1.2	1.1
Companies (2008 Q2) ^(e)	n.a.	0.5	0.4	0.7	0.6	0.3	0.4	n.a.
Financial markets (Oct. 2004) ^(f)	2.6	2.7	3.0	2.9	3.0	2.6	2.5	2.5
Two to three year ahead expectations								
Households^(d)								
Bank/NOP (2009 Q1)	n.a.	2.9	3.3	2.7	2.8	2.5	2.1	n.a.
Barclays Basix	3.2	3.3	3.2	2.8	2.7	2.3	2.2	n.a.
Professional forecasters (2006 Q2)^(g)								
Financial markets (Oct. 2004) ^(h)	2.8	3.0	3.1	3.1	3.1	3.0	2.9	3.0
Five to ten year ahead expectations								
Households^(d)								
Bank/NOP (2009 Q1)	n.a.	3.2	3.6	3.1	3.4	3.0	2.8	n.a.
Barclays Basix (2008 Q3)	n.a.	3.8	3.8	3.7	3.8	3.1	3.4	n.a.
YouGov/Citigroup (Nov. 2005)	3.5	3.3	3.5	3.0	3.0	2.8	2.7	2.6
Financial markets (Oct. 2004) ⁽ⁱ⁾	3.0	3.5	3.5	3.4	3.4	3.3	3.1	3.2
Memo: CPI inflation	1.6	2.8	2.6	1.7	1.5	0.9	0.1	n.a.

Sources: Bank of England, Barclays Capital, Bloomberg, CBI (all rights reserved), Citigroup, GfK NOP, ONS, YouGov and Bank calculations.

- (a) Data are non seasonally adjusted.
 (b) Dates in parentheses indicate start date of the data series.
 (c) Financial markets data are averages from 1 April to 7 May 2015. YouGov/Citigroup data are for April.
 (d) The household surveys ask about expected changes in prices but do not reference a specific price index, and the measures are based on the median estimated price change.
 (e) CBI data for the manufacturing, business/consumer services and distribution sectors, weighted together using nominal shares in value added. Companies are asked about the expected percentage price change over the coming twelve months in the markets in which they compete.
 (f) Instantaneous RPI inflation one year ahead implied from swaps.
 (g) Bank's survey of external forecasters, inflation rate three years ahead.
 (h) Instantaneous RPI inflation three years ahead implied from swaps.
 (i) Five-year, five-year forward RPI inflation implied from swaps.

Chart 4.10 Households' longer-term inflation expectationsSurvey measures of households' inflation expectations beyond one year ahead^(a)

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

- (a) Measures do not reference a specific price index and are based on median estimated price changes. Data are non seasonally adjusted.

4.4 Inflation expectations

How persistent below-target CPI inflation proves to be will depend, in part, on inflation expectations and the extent to which they influence households' and companies' spending, and wage and price-setting decisions.

Most measures of short-term inflation expectations fell further in Q1, taking them well below their levels in mid-2014 (Table 4.D). Short-term expectations would, however, be expected to respond to changes in actual inflation and the near-term inflation outlook, both of which are much lower than they were a year ago.

Longer-term inflation expectations are potentially more informative when judging whether expectations remain well anchored. Most measures of households' longer-term inflation expectations fell in Q1 (Chart 4.10) and remain low relative to their past averages. That could suggest a downside risk from inflation expectations, but there are a number of factors that make it hard to interpret the level of those measures. Households' expectations are likely to be particularly sensitive to changes in current inflation. Historical averages may also not be an appropriate comparison for judging whether expectations remain consistent with the 2% target: most of these measures have a short backrun during which CPI inflation was above 2% on average. Furthermore, the proportion of respondents to the Bank/NOP survey reporting that they were confident inflation would be within 1 percentage point of the 2% inflation target in two to three years' time rose in 2015 Q1 to its highest level since 2011. There is also little evidence at present that lower expected inflation has reduced household spending (Section 2).

Recent changes in other longer-term measures of inflation expectations were more mixed. Professional forecasters' expectations and financial markets based measures — such as those derived from swaps — have changed little since February, and remain at around their pre-crisis averages. According to the *Deloitte CFO Survey*, however, the proportion of companies expecting inflation in two years' time to be lower than 1.5% rose in 2015 Q1. Nevertheless, around 60% of survey respondents expected inflation to be within 0.5 percentage points of the 2% target.

Overall, taking into account the range of indicators, the MPC continues to judge that inflation expectations remain broadly consistent with the 2% target. There is a risk that lower expectations begin to affect spending and wage and price-setting decisions, causing low inflation to be more persistent. The MPC will continue to monitor measures of expectations closely.