Prices and costs

### Box

## THE CURRENT PERIOD OF DISINFLATION IN THE EURO AREA

Overall annual HICP inflation in the euro area declined rapidly in the second half of 2008 and in early 2009, mainly on account of a sharp fall in commodity prices. Inflation is expected to post a further sharp fall in the coming months, mainly owing to favourable base effects, as past increases in energy and food prices drop out of the annual inflation rate. There is a strong likelihood that annual HICP inflation will turn negative in mid-2009, but this will most probably be only a temporary phenomenon, as base effects stemming from the fall in oil prices since August 2008 will push up HICP inflation in the course of the second half of 2009. Such a process of rapid disinflation, reflecting strong but temporary movements in relative prices, should not be confused with outright deflation. This box clarifies the differences between these two concepts and puts the current inflation developments into perspective.

## Conceptual issues: price stability, disinflation and deflation

To start with, it is useful to recall the quantitative definition of the ECB's primary objective of price stability. The Governing Council of the ECB adopted this definition in 1998, stating that "price stability shall be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term". In addition, following a thorough evaluation of the monetary policy strategy in 2003, the Governing Council clarified that, within this definition, it aims to keep HICP inflation "below, but close to, 2%". The quantitative definition of price stability was designed in such a way as to provide a clear yardstick against which the public can hold the ECB accountable and with a view to anchoring longer-term inflation expectations. It is geared towards the medium term, given that it is impossible for a central bank to maintain a specific pre-defined inflation rate at all times, or to restore it to a desired level within a very short period of time, whereas it is possible and desirable to achieve this over the medium term. The medium-term orientation of the ECB's monetary policy strategy also provides a clear framework for distinguishing temporary downward deviations of headline inflation from levels consistent with price stability, which may be associated with disinflation, from persistent downward risks to price stability, which, if inflation expectations become unanchored, may result in deflation.

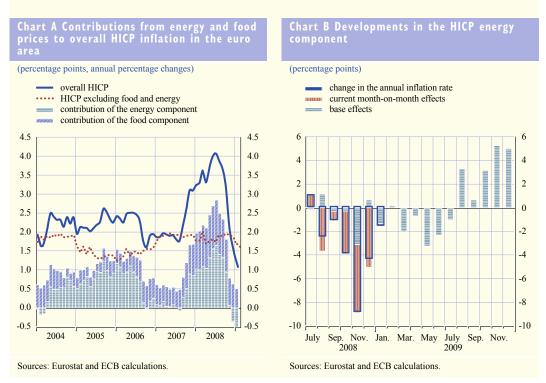
Disinflation is a process of declining inflation rates (i.e. a slower rate of increase in the general price level) which could even result temporarily in negative inflation rates. It often stems from cost-saving developments on the supply side. Examples include strong improvements in overall productivity not matched by a proportional increase in wages, tariff cuts, competition-enhancing regulatory reforms and terms of trade improvements triggered, for example, by a decline in oil prices. Such factors support economic activity by strengthening real incomes. Disinflation can be associated with sharp short-term fluctuations in annual inflation rates owing to so-called base effects discussed in detail below. Such short-term volatility in annual inflation rates is, however, not relevant from a monetary policy perspective. The medium-term orientation of the ECB's monetary policy strategy aims to ensure that short-term volatility in inflation does not lead to volatility in longer-term inflation expectations.

A deflationary process is a persistent and self-reinforcing decline in a very broad set of prices. This spiral is propagated by the anticipation that prices will decline further in the future, i.e. inflation expectations becoming unanchored and falling below levels consistent with price stability. Expectations of falling prices may, for example, lead investors and consumers to postpone purchases, reinforcing downward pressures on prices. Deflation is more likely when inflation expectations are strongly influenced by past inflation outcomes. In this respect, it is more likely to take hold in economies in which the central bank does not have a clear quantitative objective that would help to anchor private sector expectations for the medium term. In the euro area, the aim of the Governing Council of the ECB of keeping inflation below, but close to, 2% strongly anchors inflation expectations – as evidenced by the unresponsiveness of inflation expectations to past inflation outcomes <sup>2</sup> – and thereby helps to protect against deflation.

# Factors driving the current process of disinflation in the euro area

The current process of disinflation in the euro area is mainly due to a sharp fall in oil and other commodity prices, particularly food. Chart A shows the evolution of overall HICP inflation in the euro area alongside the contributions from energy prices and (unprocessed and processed) food prices. It demonstrates that these two components, but particularly energy, were the main drivers of the increase in headline inflation in the period to mid-2008. Likewise, the decline in their contributions, which reflects a significant slowdown in their annual rates of change, is the sole reason for the fall in overall inflation, which amounted to 2.9 percentage points in the period from July 2008 to January 2009.<sup>3</sup> Excluding these two components, which account for about

- 2 See L. Benati, "Investigating Inflation Persistence Across Monetary Regimes", Quarterly Journal of Economics, Vol. 123, No. 3, 2008, pp. 1005-1060.
- 3 As no detailed breakdown of the HICP in February 2009 is available yet, the last period included in the calculation is January.



Prices and costs

30% of the HICP basket, HICP inflation remained fairly stable, at around a level of 1.8%. This suggests that so far the fall in overall inflation has not been a generalised process but is closely related to temporary relative price movements.

The sharp fall in oil prices since August 2008 triggered declines in overall energy prices on a month-on-month basis. This led to a steep fall in the annual rate of change in energy prices, but the impact was reinforced by base effects stemming from past oil price increases. This is illustrated by Chart B which shows the change in the annual rate of change in the HICP energy component in each month between July 2008 and January 2009 and its decomposition into base effects and "current" month-on-month effects. Base effects are considered as the part of the change in the annual inflation rate in a particular month that stems from a deviation of the month-on-month rate of change in the base month (i.e. the same month one year earlier) from its normal (historical) pattern, taking account of seasonal fluctuations.<sup>4</sup> The current month-on-month effect is the month-on-month change in a particular month adjusted by its normal pattern.

Looking ahead, owing to the large increases in energy prices in the first half of 2008, which will drop out of the year-on-year comparison, base effects will exert a further strong downward impact on the annual rate of change in energy prices in the first half of 2009. In cumulative terms, base effects on the energy component will amount to -9.2 percentage points between February and July 2009. Given that energy has a weight of about 10% in the overall HICP, this will put significant downward pressure on overall HICP inflation. Moreover, as shown in the table below, additional downward base effects arising from the food component are in the pipeline. In cumulative terms, base effects stemming from energy and food will amount to an impact of -1.1 percentage points on overall HICP inflation in the period from February to July 2009. HICP inflation may therefore be very low or indeed negative in mid-2009, although the actual inflation outcome will not only depend on the mechanical impact of base effects but also on a number of other factors, notably actual commodity price developments in the coming months and general price pressures related to economic trends. From August 2009, overall HICP inflation will be pushed up again by base effects related predominantly to the significant decline in oil prices observed in the second half of 2008. In cumulative terms, base effects will exert upward pressure on overall inflation amounting to 1.8 percentage points between August and December 2009.

Thus, even if overall HICP inflation is negative in some months in 2009, this is expected to be only a temporary phenomenon, triggered by relative price movements. This development should not be associated with the onset of a deflationary episode.

4 For a more detailed discussion of the calculation of base effects, see the box entitled "Accounting for recent and prospective movements in HICP inflation: the role of base effects" in the December 2008 issue of the Monthly Bulletin.

#### Impact of base effects from HICP components on overall HICP inflation (percentage points) **HICP** excluding Energy Food food and energy Total impact February-July 2009 -0.9 -0.2 0.0 -1.1 August-December 2009 1.7 0.1 0.0 1.8

Sources: Eurostat and ECB calculations

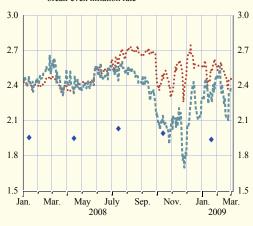
The anchoring of economic agents' inflation expectations will play a key role in this regard. Available information indicates that medium to longer-term inflation expectations are anchored at levels in line with the ECB's definition of price stability, as depicted in Chart C.

To sum up, the euro area is currently witnessing a process of rapid disinflation, driven in particular by a sharp decline in commodity prices, which will cause a U-shaped profile for headline inflation in the course of 2009. The large increase in commodity prices prior to mid-2008 and their subsequent rapid decline have been associated with sharp fluctuations in annual inflation rates. Such short-term volatility is, however, not relevant from a monetary policy perspective. The Governing Council of the ECB will continue to aim at maintaining medium-term inflation expectations solidly anchored in line with price stability.

## Chart C Longer-term inflation expectations

# (annual percentage changes)

Survey of Professional Forecasters
five-year inflation-linked swap rate five years ahead implied five-year forward five years ahead break-even inflation rate



Sources: ECB, Reuters and ECB calculations. Note: For the Survey of Professional Forecasters (SPF), average point estimates are reported. The latest SPF observation refers to 2013.