

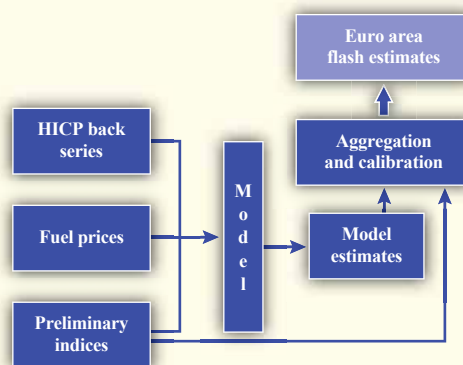
Box 5

FLASH ESTIMATES FOR THE MAIN COMPONENTS OF THE EURO AREA HICP

Since October 2001 Eurostat has published a flash estimate of headline euro area inflation, measured in terms of the all-items HICP, on the last working day of the reference month or shortly thereafter. For the first time, in September 2012 Eurostat supplemented this publication with flash estimates for the annual rates of change in the main components of the euro area HICP: energy, food (including alcohol and tobacco), non-energy industrial goods and services.

The higher degree of detail in the flash estimate, which was requested by the ECB and other users, helps facilitate a more timely assessment of price developments. There are important differences between HICP components in terms of the forces driving price changes and their persistence. For example, the energy component is the most volatile of the main components and its dynamics are driven, to a substantial extent, by developments in crude oil prices. By contrast, services prices vary much less on average and are mainly determined by domestic factors. Providing flash estimates for the main components of the euro area HICP thus allows for a more comprehensive analysis to be carried out in a more timely manner.

Chart A Methodology for deriving euro area HICP flash estimates



Source: Eurostat.

Methodology

The flash estimates for the main HICP components are available as annual rates of change rounded to the first decimal place.¹ As is the case with the headline HICP estimate, Eurostat derives the flash estimates for the main components from national data provided by the statistical offices of euro area Member States in the form of published or unpublished early estimates. The flash estimates for the headline HICP are derived separately from those of its main components. The estimates for the components are calibrated to be consistent with the estimate for the headline HICP. The derivation of the flash estimates is illustrated in Chart A.²

Where preliminary data are incomplete, estimates are obtained using econometric models. These models rely on the information on energy prices provided by the General Directorate Energy of the European Commission (published in the weekly Oil Bulletin³), on HICP back series and on HICP data for the reference month available for other countries. The overall data used both for deriving the estimate of the euro area headline HICP and for its breakdown normally cover more than 95% of the consumption expenditure in the euro area.

Reliability

The flash estimate for the headline HICP has been very reliable. Chart B shows the flash estimates, the official data and the differences between them since January 2007. Out of 69 flash estimates published in this period, the inflation rate was accurately estimated 47 times (which corresponds to two-thirds of the reference months) and differed by only 0.1 percentage point 22 times.⁴

¹ In addition to the annual rates of change, the corresponding index levels and the monthly rates of change are made available in Eurostat's online database: <http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/introduction>.

² For further information, see the article entitled "Inflation in the euro area", available in the "Statistics Explained" section of Eurostat's website at http://epp.eurostat.ec.europa.eu/statistics_explained.

³ Available on the European Commission's website at http://ec.europa.eu/energy/observatory/oil/bulletin_en.htm

⁴ See also the boxes entitled "Assessing the reliability of Eurostat's euro area HICP flash estimate", *Monthly Bulletin*, ECB, January 2006, "Evaluating Eurostat's euro area HICP flash estimate", *Monthly Bulletin*, ECB, November 2002, and for a review of baseline inflation projections "The forecast bias for euro area HICP inflation", *Monthly Bulletin*, ECB, June 2012.

As the calibration procedure leaves the flash estimate of the headline HICP unchanged, its level of reliability is not affected by the publication of flash estimates for the main components.

Regarding the reliability of the flash estimates for the main components, Eurostat tested the compilation of these estimates over a 15-month period prior to their first publication. On the basis of the results of this assessment, Eurostat has concluded that the reliability of flash estimates for the four components is expected to be sufficiently high. However, the quality and availability of the preliminary data and the higher volatility of some of the components are factors which may render their estimation less accurate than the estimation of headline all-items inflation.

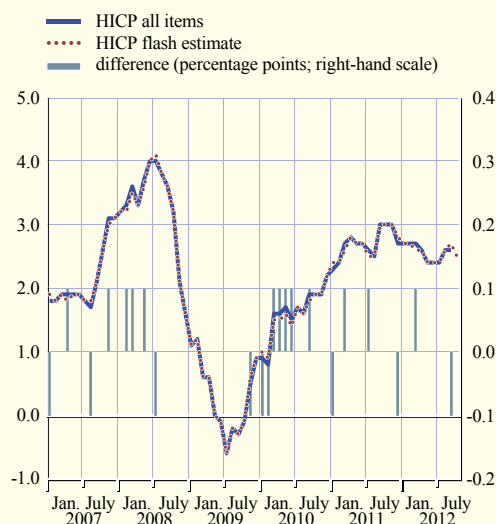
The table below compares the flash estimates for September 2012 with the official data. The headline inflation rate was overestimated by 0.1 percentage point. Similarly, the flash estimates for energy and services inflation were higher (9.2% and 2.0% respectively) than the final inflation rates for these components (9.1% and 1.7% respectively). While the annual rate of change in non-energy industrial goods prices was underestimated (0.8% compared with the final rate of 1.2%), the increase in food prices was accurately estimated at 2.9%.

Conclusion

The release of flash estimates for the main components of the HICP to supplement the flash estimate of the euro area headline inflation rate significantly improves the ECB's ability to make a timely assessment of price developments. At the same time, it should be borne in mind that the reliability of the flash estimates for the components may be more sensitive to the availability and quality of preliminary data than is the case for the all-items HICP.

Chart B Headline HICP, official data and flash estimates

(annual percentage changes, unless otherwise indicated)



Sources: Eurostat and ECB calculations.
Note: Differences are calculated between the inflation rates rounded to the first decimal point.

Headline HICP and its components, official data and flash estimates, September 2012

(annual percentage changes, unless otherwise indicated)

	Percentages of total in 2012	Flash estimate	Official data	Difference (percentage points)
Overall index	100.0	2.7	2.6	-0.1
Energy	11.0	9.2	9.1	-0.1
Food	19.1	2.9	2.9	0.0
Non-energy industrial goods	28.5	0.8	1.2	0.4
Services	41.5	2.0	1.7	-0.3

Source: Eurostat.