RECENT DEVELOPMENTS IN INFLATION FORECASTS AND SHORTER AND LONGER-TERM INFLATION EXPECTATIONS IN THE EURO AREA

Since late 2011, both headline HICP inflation and various measures of underlying inflation have dropped considerably from elevated levels. Much of this decline was anticipated by the Eurosystem staff macroeconomic projections, the ECB Survey of Professional Forecasters (SPF) and market-based measures derived from inflation swaps, as it reflected, to a large extent, the unwinding of energy price increases. However, further declines in inflation observed since the last quarter of 2013 were less expected and have led to a reassessment of shorter-term inflation expectations by economic agents.

At present, although the entire forward-looking profile of inflation expectations is low in relation to average levels observed since 1999, all measures of inflation expectations point to an increase in the coming years to, again, around 2%. Chart A illustrates both actual recent inflation developments and inflation expectations over short to longer-term horizons, drawing from different sources (market-based measures derived from inflation-linked swaps, survey measures from the SPF and Eurosystem staff macroeconomic projections). Each measure is

presented against a box plot of historical developments. The chart shows that current inflation is relatively low when seen in a historical context, even though there have been some occasions when inflation rates were somewhat lower in the past. For the short to medium-term horizon (two years ahead), inflation expectations are in the range 1.0-1.5%. This suggests that inflation is expected to moderately and gradually rise from current low rates. For the longer-term horizon (five years ahead) inflation expectations from market and survey-based measures are in the range 1.5-2.1%.

When comparing the recent profiles of inflation expectations from various sources, Chart B shows that market-based measures of inflation expectations are slightly lower than those from survey data and the Eurosystem staff macroeconomic projections. As discussed in Box 4 in Section 2, this partly reflects the recent developments in inflation risk premia embedded in inflation swap rates. While the inflation risk premium has, on average, been positive, recently it has become negative. Taking this effect into account, the message from the three different sources of shorter-term inflation expectations is broadly consistent.

Chart A Box plot of the profile of inflation expectations from various sources

(annual percentage changes) median since 1999 •••• June 2014 4.0 4.0 3.5 3.5 3.0 3.0 2.5 2.5 2.0 2.0 1.5 1.5 1.0 1.0 0.5 0.5 0.0 0.0 -0.5

- 1 HICP (six-month average)
- 2 HICPex (six-month average)
- 3 GDP deflator (two-quarter average)
- 4 Inflation-linked swap (one-year forward one year ahead)
- 5 SPF (two years ahead)
- 6 (B)MPE HICP (two years ahead)
- 7 Inflation-linked swap (one-year forward four years ahead)
- 8 SPF (five years ahead)
- 9 Inflation-linked swap (five-year forward five years ahead)

Sources: ECB, Eurostat, Reuters and ECB calculations. Notes: The white boxes represent 10th-90th percentiles. HICPex refers to HICP inflation excluding food and energy for the sixmonth average. Survey-based SPF inflation expectations are from the second quarter of 2014.

Prices and costs

In order to clarify the risks surrounding the central scenario, it is worth considering the uncertainty surrounding inflation expectations at different horizons, as reported by SPF respondents. Charts C and D show the probabilities of inflation being below 1% or 0% respectively, at different horizons (one year, two years and five years ahead). At present, the probability of inflation being below 1% is relatively high for shorter horizons and broadly similar to levels reported in 2009, when commodity prices were also exerting downward pressure on inflation. At the same time, the perceived probability of negative inflation remains very low (less than 5%) and lower than that reported in 2009. SPF respondents thus perceive some risk of inflation below 1% in the coming years but a limited risk of outright deflation.

In the context of differing economic developments and a rebalancing across euro area countries, aggregate inflation expectations

(annual percentage changes) HICP inflation June 2014 Eurosystem staff macroeconomic projections SPF Q2 2014 5 4 3 2 1 1 0 0 1 1999 2003 2007 2011 2015 2019 2023

Sources: ECB, Eurostat, Reuters and ECB calculations.

for the euro area may conceal different patterns at the national level. Longer-term inflation expectations for the five largest euro area economies, derived from Consensus Economics, are more volatile and exhibit some heterogeneity, but have actually converged somewhat



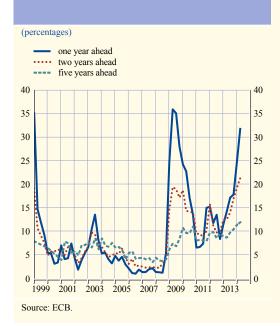
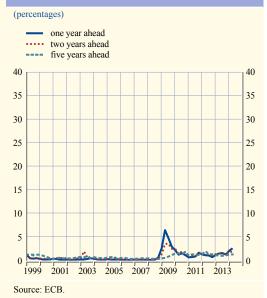


Chart D Probabilities of inflation below 0%







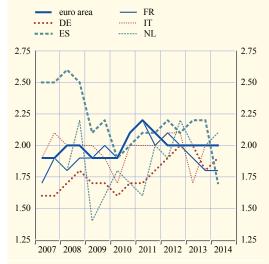
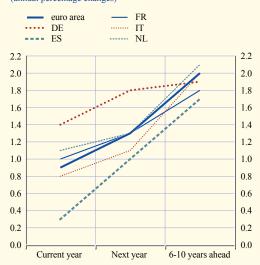


Chart F Latest (April 2014) profile of inflation expectations across the largest euro area economies

(annual percentage changes)



Source: Consensus Economics.

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since 2008 (see Chart E). The upward sloping profile is shared across all countries, although the steepness of the slope reflects current inflation conditions and is flattest for Germany and steepest for Spain (see Chart F). The convergence is in itself a welcome development as it may indicate a normalisation from the boom period seen in some euro area countries prior to the crisis.

Overall, the low level of current measures of short-term inflation expectations is broadly in line with the Eurosystem staff macroeconomic projections, as is the expectation of a gradual increase over time. More medium-term levels of inflation expectations still appear well anchored by the aim of the Governing Council to keep inflation below, but close to, 2% over the medium term.