#### Box 4

### RESULTS OF THE ECB SURVEY OF PROFESSIONAL FORECASTERS FOR THE THIRD QUARTER OF 2007

This box reports the results of the ECB Survey of Professional Forecasters (SPF) for the third quarter of 2007. The survey was conducted between 16 and 18 July 2007. The SPF gathers information on expectations for euro area inflation, GDP growth and unemployment from experts affiliated to financial or non-financial institutions based in the EU. Given the diversity of the panel of participants, aggregate SPF results can reflect a relatively heterogeneous set of subjective views and assumptions.

Prices and costs

#### Inflation expectations for 2007, 2008 and 2009

SPF participants revised up, on average, their inflation expectations for 2007 and 2008 to 2.0%, from 1.9% in the previous round (see table)<sup>1</sup>. The upward revisions over the forecast horizon reflect mainly higher oil price assumptions and stronger economic growth prospects, leading to increasing capacity utilisation. A few respondents also refer to higher than expected administered prices and renewed inflationary pressures from non-energy consumer goods prices. SPF inflation expectations for 2007 and 2008 are in line with the forecasts reported in the June 2007 Eurosystem staff macroeconomic projections and those published in the July 2007 issues of Consensus Economics and Euro Zone Barometer. In 2009 SPF participants expect inflation to remain at 2.0%. This point estimate is in line with the projections published in the July 2007 issue of Euro Zone Barometer and in the April 2007 issue of Consensus Economics.

SPF participants were also asked to assign a probability distribution to their forecasts. This distribution provides information on the probability of the future outcome being within a specific interval. The probability distribution resulting from the aggregation of responses also makes it easier to assess how, on average, survey participants gauge the risk of the actual outcome being above or below the most likely range. In line with the upward revision of the point estimate in 2007, the probability distribution for expected inflation in this year has shifted towards higher outcomes compared with the SPF round for the second quarter of 2007 (see Chart A). There was also some change in the associated probability distribution for 2008, where the bulk of responses has moved from the interval 1.5%-1.9% to the interval 2.0%-2.4%.

The risks surrounding these inflation expectations are assessed by the experts to be mainly on the upside, related in particular to unexpected future oil price developments, strong economic

1 Additional data are available on the ECB's website at www.ecb.int/stats/prices/indic/forecast/html/index.en.html.

## Results from the SPF, Eurosystem staff macroeconomic projections, Consensus Economics and Euro Zone Barometer

(annual percentage changes, unless otherwise indicated)

	Survey horizon					
HICP inflation	2007	June 2008	2008	June 2009	2009	Longer term 2)
SPF Q3 2007	2.0	2.0	2.0	2.0	2.0	2.0
Previous SPF (Q2 2007)	1.9	-	1.9	-	-	1.9
Eurosystem staff macroeconomic projections	1.8-2.2	-	1.4-2.6	-	-	-
Consensus Economics (July 2007)	2.0	-	2.0	-	2.0	1.9
Euro Zone Barometer (July 2007)	2.0	-	2.0	-	2.0	1.9
Real GDP growth	2007	Q1 2008	2008	Q1 2009	2009	Longer term 2)
SPF Q3 2007	2.7	2.4	2.3	2.2	2.2	2.2
Previous SPF (Q2 2007)	2.5	-	2.3	-	-	2.1
Eurosystem staff macroeconomic projections	2.3-2.9	-	1.8-2.8	-	-	-
Consensus Economics (July 2007)	2.7	-	2.3	-	2.0	1.9
Euro Zone Barometer (July 2007)	2.7	-	2.3	-	2.1	2.1
Unemployment rate 1)	2007	May 2008	2008	May 2009	2009	Longer term 2)
SPF Q3 2007	7.0	6.8	6.7	6.6	6.6	6.4
Previous SPF (Q2 2007)	7.2	-	6.9	-	-	6.7
Consensus Economics (July 2007)	7.1	-	6.8	-	-	-
Euro Zone Barometer (July 2007)	7.1	-	6.8	-	6.7	6.5

<sup>1)</sup> As a percentage of the labour force.

<sup>2)</sup> Longer-term inflation expectations refer to 2012 in the SPF, 2011 in the Euro Zone Barometer and to the period 2013-17 in Consensus Economics. The Consensus Economics forecasts for the period 2013-17 and the year 2009 were published in the April 2007 issue of Consensus Economics.

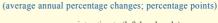
# Chart A Probability distribution for average inflation in 2007 in the latest three rounds of the SPF 1)

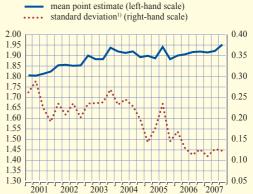


Source: ECB.

1) Corresponds to the aggregation of each individual probability distribution provided by SPF forecasters.

#### Chart B Long-term inflation expectations





Source: ECB.

1) The standard deviation of point estimates reported by each of the panel members responding to the survey.

growth and wage pressures stemming from improving labour market conditions. At the same time, several respondents mention the euro appreciation and ongoing productivity growth as factors somewhat containing inflationary pressures.

#### Indicators of longer-term inflation expectations

According to the latest SPF results, longer-term inflation expectations (five years ahead) were revised up from 1.9% to 2.0%, when rounded to one decimal place. However, the extent of this upward revision is very small when extended to two decimal points (from 1.92% to 1.95%). These expectations are marginally above the newly released expectations from the Euro Zone Barometer for 2011 and the April 2007 results from Consensus Economics for inflation expectations six to ten years ahead, which were at 1.9%. The decreasing standard deviation in the SPF indicates further convergence among respondents about their forecast for the longer-term inflation rate (see Chart B).

The average probability distribution of longer-term inflation expectations moved to marginally higher inflation rates compared with the previous round. In particular, the probability that inflation may stand at 2% or above increased to 47% compared with 46% in the previous round. These survey results can also be compared with the break-even inflation rate, an indicator of longer-term inflation expectations among market participants calculated as the yield spread between nominal and inflation-linked bonds<sup>2</sup>. The rise in the probability that longer-term inflation may stand at 2% or above is in line with developments in the implied five-year forward break-even inflation rate five years ahead, which increased from 2.1% in May 2007 to 2.3% in July 2007 (see Chart C). It should be recalled that break-even inflation rates should not be interpreted as direct measures of inflation expectations, since they may also incorporate various risk premia (such as inflation uncertainty and liquidity premia).

2 See also the article entitled "Measures of inflation expectations in the euro area" in the July 2006 issue of the Monthly Bulletin.

Prices and costs

#### Real GDP growth expectations

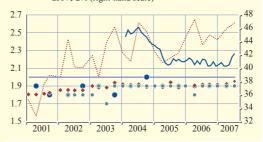
Expectations for real GDP growth have been revised upwards by 0.2 percentage point for 2007 in comparison with the previous SPF round, and now point to real GDP growth at 2.7%. This upward revision mainly reflects improved expectations for domestic demand (in particular private consumption and, to some extent, investment) supported by improving labour market conditions and continued strong growth in external demand. Expected GDP growth for 2008 remained unchanged at 2.3%. In both years, the risks surrounding these expectations are assessed by the respondents to be slightly on the downside, mainly related to the evolution of oil prices, the strength of the euro, higher interest rates and global imbalances. Overall, SPF growth expectations for 2007 and 2008 are within the ranges of the June 2007

## Chart C Longer-term inflation expectations from surveys and break-even inflation rates

(average annual percentage changes; percentage probability)

- Consensus Economics (for 2013-17; left-hand scale)
   SPF (for 2012; left-hand scale)
- Euro Zone Barometer (for 2011; left-hand scale)
   implied five-year forward break-even inflation rate five years ahead (left-hand scale)

probability of longer-term inflation being at or above 2% (right-hand scale)



Sources: Consensus Economics, Euro Zone Barometer, ECB, Reuters and ECB calculations.
Note: Ten-year break-even inflation rate derived from 2012-maturity bonds until March 2005 and from 2015-maturity bonds thereafter.

Eurosystem staff macroeconomic projections and in line with the results published in the latest issues of the Euro Zone Barometer and Consensus Economics. For 2009, real GDP growth is forecast to be 2.2%. This point estimate is slightly above the results of the July 2007 issue of Euro Zone Barometer and the April 2007 issue of Consensus Economics.

Longer-term growth expectations (i.e. for 2012) have been revised upward by 0.1 percentage point and now stand at 2.2%. According to forecasters, longer-term growth prospects depend principally on further structural reforms in the labour market and social security systems, migration flows and improved productivity.

#### Expectations for the euro area unemployment rate

Unemployment rate expectations for 2007 and 2008 have been revised down by 0.2 percentage point and now stand at 7.0% and 6.7% respectively. As in the previous SPF round, forecasters referred to the ongoing economic growth and the induced improvement of the labour market situation as being the main factors behind the further decline of the unemployment rate. SPF unemployment rate expectations for 2007 and 2008 are below those of the latest editions of Consensus Economics and the Euro Zone Barometer. For 2009, respondents expect the unemployment rate to decrease further to 6.6%, which is 0.1 percentage point lower than the forecast reported in the July issue of the Euro Zone Barometer. Longer-term unemployment rate expectations have also been revised down by 0.3 percentage point, to 6.4% in 2012. The balance of risks to these forecasts is assessed to be on the upside over all horizons. Respondents continue to mention that the decline in the unemployment rate over the longer-term horizon is mainly dependent on further, and deeper, labour market reforms.