

## Box 2

### Private sector expectations for inflation and economic activity in the euro area: the results of the 2002 Q3 Survey of Professional Forecasters and other available indicators

This box presents the available indicators of private sector expectations for euro area inflation and economic activity. A summary of the results of the 2002 Q3 Survey of Professional Forecasters (SPF) conducted by the ECB in the second half of July 2002 is given below. The survey's title reflects the fact that all of the participants are experts affiliated with financial or non-financial institutions based in the European Union. It is important to bear in mind that, since the participants are not given a common set of assumptions on which to base their forecasts, the SPF aggregate results most likely reflect a relatively heterogeneous set of subjective views and assumptions. Whenever possible, the SPF data have been presented in the context of other sources of private sector expectations for the same horizons.<sup>1</sup>

#### Inflation expectations for 2002, 2003 and 2004

SPF participants expect the annual inflation rate in the euro area to stand at 2.1% in 2002 and to decline to 1.8% in 2003 (see table below). This implies unchanged inflation expectations with respect to 2002 and a downward revision of 0.1 percentage point for 2003 compared with the expected inflation rates reported in the previous SPF round conducted in mid-April 2002. Survey participants mention the appreciation of the euro exchange rate as the main factor influencing this downward revision. These results are broadly in line with the figures reported by Consensus Economics in July 2002 for the same periods (2.1% and 1.9% respectively). In 2004 as a whole, SPF respondents expect inflation to average 1.9%. For the rolling horizons, June 2003 and June 2004, the expected inflation rates are 1.8% and 1.9% respectively.

As explained in the March 2002 issue of this Monthly Bulletin, the SPF questionnaire also asks survey participants to assign some probability to actual outcomes falling within specific intervals. The probability distribution resulting from the aggregation of responses helps to assess how survey participants, on average, gauge the risk of the actual outcome being above or below the most likely range. Chart A shows the aggregate probability distributions for average annual rates of HICP inflation in 2003 in the last two survey rounds.

<sup>1</sup> These horizons are the calendar years 2002, 2003, 2004 and "five years ahead, 2007". Expectations for two additional "rolling horizons" requested in the SPF are also reported. These rolling horizons are set one and two years ahead of the period for which the latest data for each particular variable are available at the time the survey is conducted. In the 2002 Q3 SPF, these rolling horizons were June 2003 and 2004 for the HICP inflation rate, the first quarter of 2003 and 2004 for the rate of growth in real GDP, and May 2003 and 2004 for the unemployment rate. These rolling horizons may be useful to identify dynamic patterns that are difficult to detect from averages over calendar years.

## Results from the 2002 Q3 SPF, the 2002 Q2 SPF and Consensus Economics (July 2002)

(annual percentage changes, unless otherwise indicated)

|  | Survey horizon |           |      |           |      |                           |
|--|----------------|-----------|------|-----------|------|---------------------------|
|  | 2002           | June 2003 | 2003 | June 2004 | 2004 | Longer term <sup>3)</sup> |
| <b>HICP inflation <sup>1)</sup></b>    |                |           |      |           |      |                           |
| 2002 Q3 SPF                            | 2.1            | 1.8       | 1.8  | 1.9       | 1.9  | 1.9                       |
| Previous SPF (2002 Q2)                 | 2.1            | -         | 1.9  | -         | -    | 1.9                       |
| Consensus (July 2002)                  | 2.1            | -         | 1.9  | -         | -    | 1.8                       |
| <b>Real GDP growth</b>                 |                |           |      |           |      |                           |
| 2002 Q3 SPF                            | 1.2            | 2.4       | 2.5  | 2.5       | 2.5  | 2.5                       |
| Previous SPF (2002 Q2)                 | 1.4            | -         | 2.6  | -         | -    | 2.5                       |
| Consensus (July 2002)                  | 1.3            | -         | 2.7  | -         | -    | 2.4                       |
| <b>Unemployment rate <sup>2)</sup></b> |                |           |      |           |      |                           |
| 2002 Q3 SPF                            | 8.4            | 8.2       | 8.1  | 7.8       | 7.8  | 7.1                       |
| Previous SPF (2002 Q2)                 | 8.5            | -         | 8.2  | -         | -    | 7.3                       |

1) The SPF results refer to the HICP, while Consensus Economics figures refer to an aggregation of the expected annual rates of growth of the national Consumer Price Indices (CPIs). For the latter the euro area figure is constructed from the Consensus data using national figures for Germany, Spain, France, Italy and the Netherlands, which represent around 85% of the euro area aggregate.

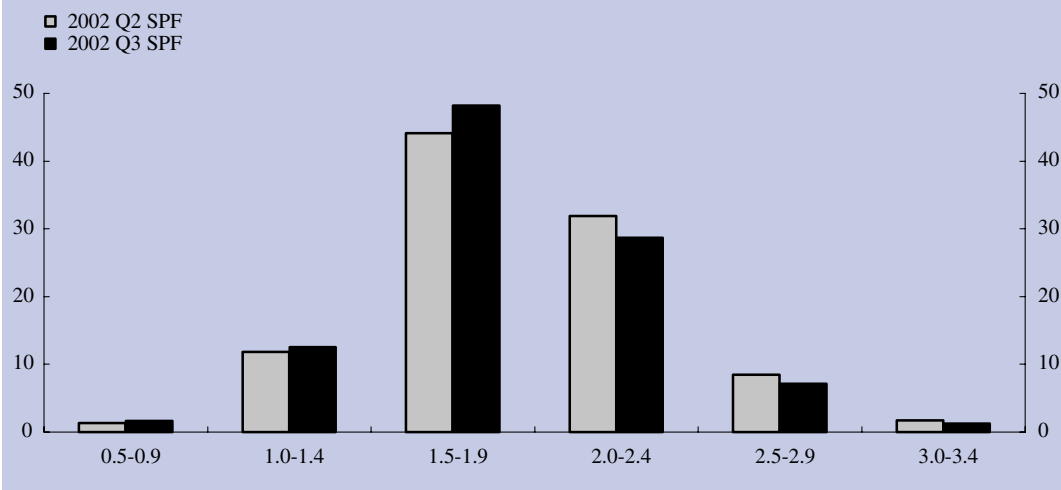
2) As a percentage of the labour force.

3) In the 2002 Q3 SPF longer-term inflation expectations refer to 2007, while in the 2002 Q2 SPF they referred to 2006. The Consensus Economics forecast refers to the period from 2008 to 2012 (data published in the April 2002 Consensus Economics Survey).

Although both distributions are centred on the interval 1.5-1.9%, which accumulates more than 40% of the probability mass in both cases, the main difference is a slight change in the assessment of risks to inflation in 2003 more to the downside. The probability assigned by respondents to inflation being at or above 2% declined to 37% in the 2002 Q3 SPF from 43% in the 2002 Q2 SPF. This indicates that, in the latest round, survey participants felt that there was a slightly lower “risk” than there had been in April that actual average inflation in 2003 will turn out to be above the most likely range of 1.5-1.9%. However, the probability of inflation in 2003 at or above 2.0% still remains higher than in the three survey rounds prior to the 2002 Q2 survey.

### Chart A: Probability distribution for average inflation in 2003 in the last two SPF rounds

(percentages)

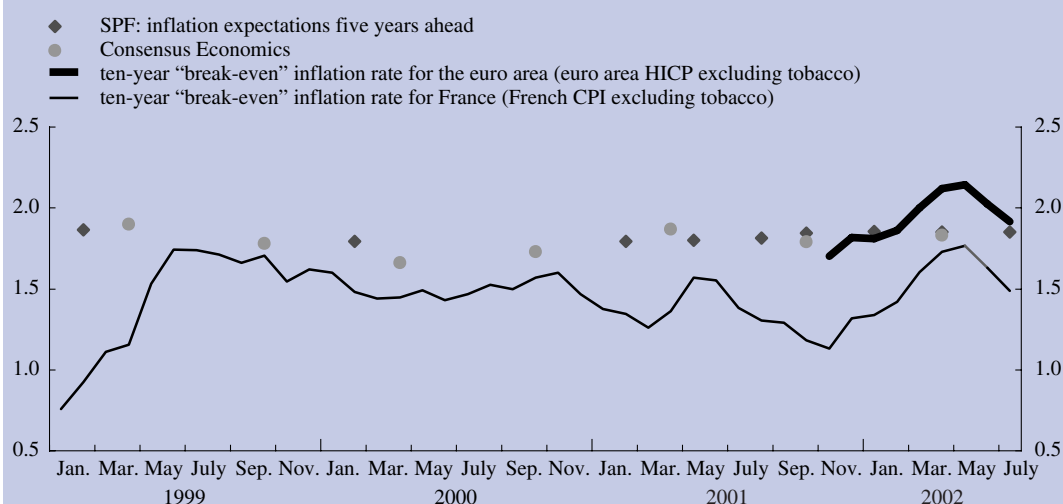


## Indicators of longer-term inflation expectations

The SPF assesses respondents' longer-term inflation expectations by asking about their expectations for inflation "five years ahead". According to the 2002 Q3 SPF, average inflation in 2007 is expected to be 1.9%, indicating unchanged inflation expectations from the previous round. This is broadly consistent with the long-term inflation expectations published by Consensus Economics in April 2002 for five euro area countries for the period 2008-12, which suggest a figure of 1.8% for the euro area as a whole. Regarding indicators extracted from financial instruments, Chart B shows that the so-called ten-year "break-even" inflation rate, which is extracted from the yields of French bonds linked to the euro area HICP and comparable bonds with a fixed coupon, fell in June and July to around 1.9%, after increasing from 1.7% to around 2.1% between November 2001 and May 2002. However, the level of the "break-even" inflation rate has to be interpreted with caution as it is not a direct measure of market participants' inflation expectations and is thus likely to be biased, in particular as a result of a range of time-varying risk premia.<sup>2</sup>

### Chart B: Indicators of long-term inflation expectations

(average annual percentage changes)



Sources: French Treasury, Reuters, Consensus Economics and the ECB.

Note: The ten-year "break-even" inflation rate for France is calculated as the difference between the yields of the French OAT maturing in April 2009 and the real yield of the French index-linked bond linked to the French CPI maturing in 2009. The "break-even" inflation rate for the euro area is the difference between the nominal yields of the French OAT maturing in 2012 and the real yield of the French index-linked bond linked to the euro area HICP maturing in 2012. The Consensus Economics figure refers to the estimate for euro area average inflation based on the expectations reported in April 2002 for five large euro area countries for the period 2008-12.

## Expectations for real GDP growth and unemployment in the euro area

SPF participants have revised their expectations for the average annual growth rate of real GDP in 2002 to 1.2%, down by 0.2 percentage point compared with the previous survey round. However, growth is expected to pick up during the course of 2002, with a higher year-on-year rate of 2.4% expected in 2003 Q1. For 2004 Q1 a growth rate of 2.5% is expected, which is also the expected average for the entire year. As regards the

<sup>2</sup> It should be noted that the "break-even" inflation rate reflects the average value of inflation expectations over the maturity of the index-linked bond under consideration and is not a point estimate for a precise year (as is the case for the SPF indicator of long-term inflation expectations). For a thorough description of the conceptual nature of the "break-even" inflation rate, refer to the box entitled "Deriving long-term euro area inflation expectations from index-linked bonds issued by the French Treasury" on page 16 of the February 2002 issue of the ECB's Monthly Bulletin.

risks to growth prospects, some participants mentioned recent financial market turbulence and its impact on consumer and business confidence and investment decisions. According to the July issue of “Consensus Forecasts”, annual rates of real GDP growth in the euro area are expected to average 1.3% and 2.7% in 2002 and 2003 respectively. These are slightly above the expectations contained in the 2002 Q3 SPF. Long-term growth prospects, at 2.5% for 2007 according to the SPF and 2.4% on average for the period 2008-12 on the basis of the information published by Consensus Economics in April 2002, remain in line with the upper end of the range of estimates for trend potential growth in the euro area. In this respect, it is interesting to note that a number of SPF respondents make their longer-term growth expectations conditional on further labour market reform in the euro area.

The SPF respondents expect the euro area unemployment rate to be 8.4% for 2002. This represents a slight downward revision from the previous SPF round. However, in view of the changes in growth expectations, this downward revision to unemployment expectations in 2002 most likely reflects revisions to historical unemployment data rather than an improved perception of labour market conditions. Thereafter, unemployment is expected to fall, averaging 8.1% in 2003 and 7.8% in 2004. Longer-term expectations are for an unemployment rate of 7.1% in 2007.