

**Box 4****Private sector expectations for inflation and economic activity in the euro area: the results of the 2002 Q2 Survey of Professional Forecasters (SPF)<sup>1</sup> 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 Q2 SPF conducted by the ECB in the second half of April 2002 is given below. Whenever possible, the data have been presented in the context of other sources of private sector expectations for the same horizons.<sup>2</sup>

**Inflation expectations for 2002 and 2003**

SPF participants expect the annual inflation rate in the euro area to stand at 2.1% in 2002 and to decline to 1.9% in 2003 (see the table below). This implies an upward revision in inflation expectations of 0.4 percentage point for 2002 and of 0.1 percentage point for 2003 when compared with the expected inflation rates reported in the previous survey round conducted in early February. Survey participants mention higher than previously expected oil and food prices as the main factor influencing this upward revision. These results are slightly higher than the figures (1.9% and 1.8% respectively) reported by Consensus Economics in April 2002 for the same periods.<sup>3</sup> In the SPF the inflation rate expected in March 2003 and March 2004 is 1.9% in both cases.

**Results from the 2002 Q2 SPF, the 2002 Q1 SPF and Consensus Economics (April 2002)**

(annual percentage changes, unless otherwise indicated)

HICP inflation	Survey horizon				
	2002	Mar. 2003	2003	Mar. 2004	2006 <sup>2)</sup>
2002 Q2 SPF	2.1	1.9	1.9	1.9	1.9
Previous SPF (2002 Q1)	1.7	-	1.8	-	1.9
Consensus (April 2002)	1.9	-	1.8	-	1.8
Real GDP growth	2002	2002 Q4	2003	2003 Q4	2006 <sup>2)</sup>
2002 Q2 SPF	1.4	2.3	2.6	2.6	2.5
Previous SPF (2002 Q1)	1.3	-	2.5	-	2.5
Consensus (April 2002)	1.3	-	2.7	-	2.4
Unemployment rate <sup>1)</sup>	2002	Feb. 2003	2003	Feb. 2004	2006
2002 Q2 SPF	8.5	8.4	8.2	8.0	7.3
Previous SPF (2002 Q1)	8.6	-	8.4	-	7.3

1) As a percentage of the labour force.

2) Consensus forecast refers to the period from 2008 to 2012.

As explained in the March 2002 issue of the ECB's 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

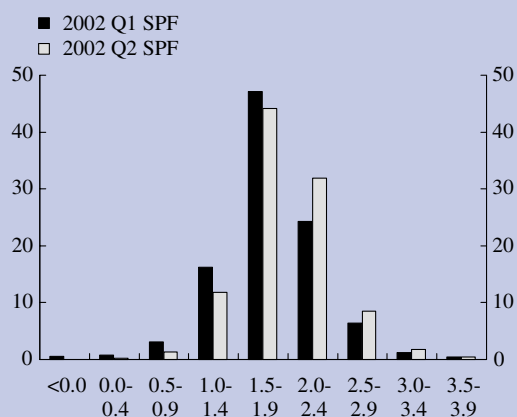
1 The survey is known as the Survey of Professional Forecasters (SPF) to reflect the fact that all of the participants are experts affiliated with financial or non-financial institutions based within the European Union. It is also important to bear in mind that, since the participants are not given a 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.

2 These horizons are the calendar years 2002, 2003 and 2006. In addition, the expectations from the two additional "rolling horizons" requested in the SPF are also reported. These so-called 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 Q2 SPF, these rolling horizons were March 2003 and 2004 for the HICP inflation rate, the fourth quarter of 2002 and 2003 for the rate of growth in real GDP, and February 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.

3 Consensus Economics figures refer to an aggregation of the expected annual rates of growth of the national Consumer Price Indexes (CPIs), while the SPF results refer to the HICP.

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

(percentages)

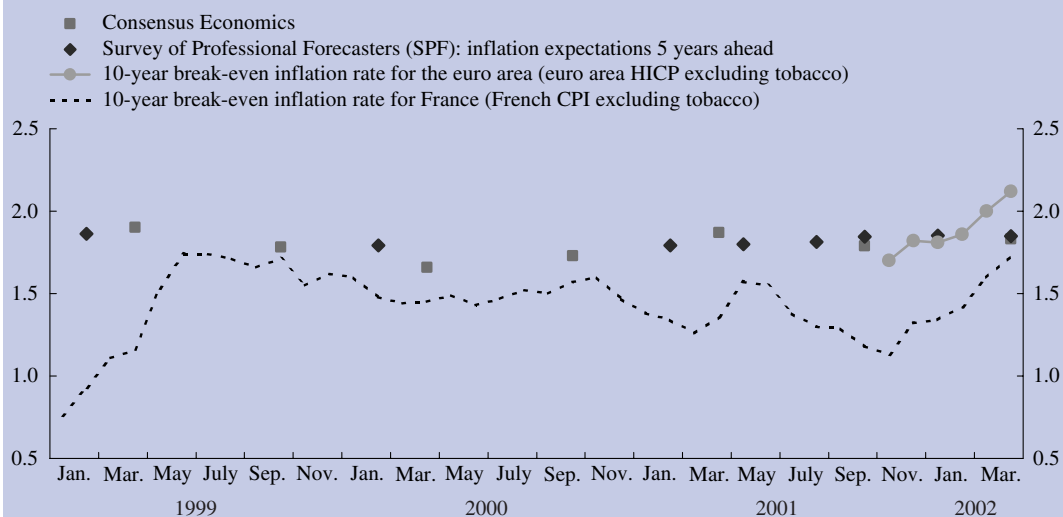


probability distributions for average HICP inflation in 2003 in the last two survey rounds. Both distributions are centred around the interval 1.5-1.9%, which accumulates more than 40% of the probability mass in both cases. The main difference is the change in the assessment of risks to inflation in 2003 between the survey rounds. In the 2002 Q1 SPF, inflation outcomes above the central range received a cumulative probability of 32%, while outcomes below 1.5% received 21%. In the 2002 Q2 SPF, however, the cumulative probability assigned to inflation outcomes above the central range of 1.5-1.9% increased to 43%. This indicates that in the latest round, survey participants feel that there is now a higher “risk” that the actual average inflation in 2003 will turn out to be above the most likely range of 1.5-1.9% than there was in February. This

change in the overall assessment of the balance of risks with regard to inflation in 2003 seems to be mostly associated with the increased uncertainty surrounding oil prices and the higher level of confidence in the strength of the recovery in economic activity in the euro area towards the end of the current year (see below) since the previous survey round.

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

(average annual percentage changes)



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

Note: The 10-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 excluding tobacco maturing in 2009.

The 10-year 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 excluding tobacco maturing in 2012.

The Consensus Economics figure refers to the estimate for the euro area average inflation based on the expectations reported for five large euro area countries for the period from 2008 to 2012 in April 2002 (see also footnote 4 in this box).

### Indicators of longer-term inflation expectations

According to the 2002 Q2 SPF, average inflation in 2006 is expected to be 1.9%, unchanged from the previous round. This level of longer-term inflation expectations is broadly consistent with other available survey measures of inflation expectations. The expectations published by Consensus Economics in April 2002 for

five euro area countries for the period from 2008 to 2012 suggest an estimate of 1.8% for long-term inflation expectations in the euro area as a whole.<sup>4</sup> Regarding indicators extracted from financial instruments, Chart B shows that the so-called ten-year break-even inflation rate extracted from French bonds linked to the euro area HICP has been edging up over recent months. However, when interpreting the levels of this measure it is important to bear in mind that break-even inflation rates are not a direct measure of market's inflation expectations. This is because a variety of risk premia, including an inflation uncertainty premium and a liquidity premium, are carried into the calculation.<sup>5</sup>

### **Expectations for euro area real GDP growth and unemployment**

SPF participants have revised upwards their expectations for the average annual growth rate of real GDP in 2002 to 1.4%, up by 0.1 percentage point compared with the previous survey round. A higher annual rate of 2.3% is expected in 2002 Q4. For 2003 Q4, a growth rate of 2.6% is expected, which is also the expected average over the year. As the main risks to growth prospects, participants mentioned uncertainty about both oil prices and the strength of the recovery in the United States. According to the April forecasts of Consensus Economics, euro area real GDP growth is expected to average 1.3% and 2.7% in 2002 and 2003 respectively. Long-term growth prospects, at 2.5% for 2006 according to the SPF and 2.4% on average for the period from 2008 to 2012 on the basis of the information published by Consensus Economics, remain in line with estimates for trend potential growth in the euro area.

According to the SPF, the euro area unemployment rate is expected to be 8.5% for 2002, reflecting the lagged effect of the slowdown in economic activity in the euro area. Thereafter, it is expected to fall, averaging 8.2% in 2003 and 7.3% in 2006. These results reflect a downward revision of the expected unemployment rate of 0.1 percentage point in 2002 and 0.2 percentage point in 2003 when compared to the previous survey round. Long-term expectations remained unchanged.

*4 The euro area figure was constructed using national figures for Germany, Spain, France, Italy and the Netherlands, which represent around 85% of the euro area aggregate.*

*5 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 of the other two indicators of long-term inflation expectations mentioned in this box). 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.*