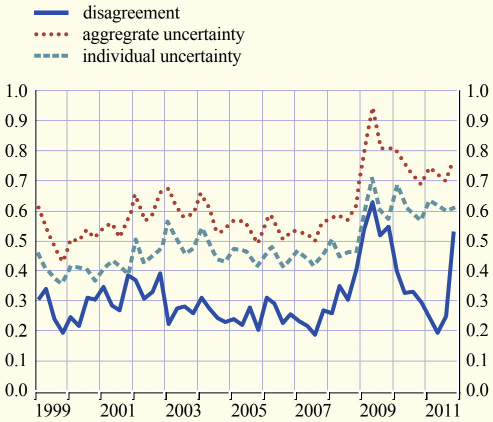
Box 7

REVISIONS TO FORECASTS IN THE ECB SURVEY OF PROFESSIONAL FORECASTERS: END-2011 COMPARED WITH END-2008

Owing to the tensions in sovereign debt markets, the economic outlook for the euro area is currently subject to high uncertainty. Indeed, measures of disagreement and uncertainty in the ECB Survey of Professional Forecasters (SPF) currently stand at relatively high levels (see Chart A). However, indicators of implied stock market volatility (e.g. the VSTOXX®

Chart A Disagreement and uncertainty around SPF real GDP growth forecasts for the year ahead

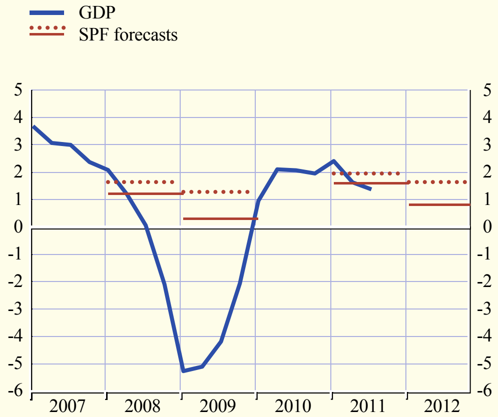
(percentage points)



Source: ECB calculations.
Note: Disagreement is defined as the standard deviation of the point forecasts. Individual uncertainty is defined as the average standard deviation of the individual density forecasts, while aggregate uncertainty is defined as the standard deviation of the aggregate probability distribution.

Chart B Euro area real GDP growth and SPF forecasts

(annual perecentage changes)



Sources: Eurostat and ECB.
Note: The solid red lines for 2008/2009 and 2011/2012 refer to forecasts provided in the fourth quarter surveys of 2008 and 2011, while the dotted lines refer to forecasts provided in the third quarter surveys of 2008 and 2011.

and the VIX®)[1] suggest that the current level of uncertainty is significantly lower than it was at the end of 2008, when the intensification of the financial market tensions led to exceptionally high uncertainty. Forecasters can take increases in uncertainty into account by incorporating them directly into their baseline outlooks or by acknowledging them in the risk assessments surrounding these outlooks. Against this background, this box compares forecast revisions in the most recent SPF round with those in the fourth quarter of 2008. The comparison focuses on expectations for real GDP growth and inflation in the current year and the year ahead.

Real GDP growth expectations

The pattern of revisions to the short-term outlook for economic growth is very similar across the two survey rounds under review. In both cases, annual real GDP growth stood at around 1½% in the second quarter, according to the latest available figures.[2] In the end-2008 survey, respondents on average revised down their forecasts for real GDP growth by 0.4 percentage point for the current year and 1.0 percentage point for the year ahead. This compares with slightly lower revisions of 0.3 percentage point and 0.8 percentage point respectively in the end-2011 survey (see Chart B).

1 The EURO STOXX 50® Volatility (VSTOXX®) indices reflect market expectations of near-term up to long-term volatility of the EURO STOXX 50® index, which covers a selection of sector-leading blue-chip companies in the euro area equity market. The CBOE Volatility Index® (VIX®) is a similar measure available for several future horizons and is based on the S&P 500® index, which covers leading companies in the US equity market. These measures of implied volatility are based on the prices of the options on the underlying indices.

2 When the SPF for the fourth quarter of 2008 was conducted, the latest available figure for real GDP growth in the second quarter was 1.4%, which was later revised down to 1.2%. When it was conducted for the fourth quarter of 2011, the latest available figure for real GDP growth in the second quarter was 1.6%.

Table A Assessment of the risks to the outlook for real GDP growth

		Survey rounds				
Views on the balance of risks [1)]		**Q3 2008**	**Q4 2008**		**Q3 2011**	**Q4 2011**
Survey horizon	2008	-26	-14	2011	-13	-9
	2009	1	-19	2012	-6	3
Probability of negative annual growth in the year ahead		**Q3 2008**	**Q4 2008**		**Q3 2011**	**Q4 2011**
Survey horizon	2009	1%	29%	2012	2%	11%

1) Figures indicate the difference between a) the number of respondents reporting a point forecast below the mean of their probability distribution (indicating upside risks) and b) the number of respondents reporting a point forecast above the mean (indicating downside risks). A positive number indicates risks tilted to the upside.

It is also of interest to look at the revisions to the risk assessments in the two survey rounds under review. In both cases, the percentage of respondents that assessed risks as being, on balance, on the downside for the current year decreased in the fourth quarter survey compared with the third quarter survey. By contrast, for the year ahead, the revisions to the risk assessments went in opposite directions: in the end-2008 survey, the balance moved from being broadly neutral to a majority of respondents assessing risks as being on the downside (despite the significant downward revision in the baseline outlook), but in the end-2011 survey, it moved from views being predominantly on the downside to being broadly neutral (see Table A). This may reflect a greater and historically unprecedented uncertainty shock in 2008, which respondents dealt with by incorporating their concerns initially more strongly into the risk assessment than into the baseline outlook. Furthermore, it may be that the three years' experience of financial market tensions and the extended run-up to the intensification of the sovereign debt crisis may have led respondents in the end-2011 survey to gauge the impact as being more imminent in terms of baseline revisions. Lastly, the 2011 uncertainty shock could entail future outcomes, the likelihood of which is difficult to compute, as they will depend largely on how the sovereign debt crisis in the euro area is resolved.

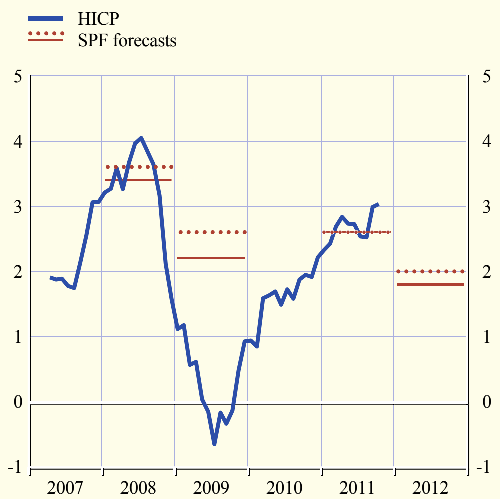
The difference between the risk assessments is also evident in the probability assigned to what may be perceived ex ante as a tail risk, namely negative real GDP growth in a year as a whole. In the end-2008 survey, the aggregate probability assigned to an average annual negative growth rate in the year ahead was 29%, up from almost zero in the previous survey round, whereas in the end-2011 survey, it was only 11%, up from close to zero in the previous round.

Inflation expectations

Revisions to the average forecast for inflation were smaller in the end-2011 survey than in the end-2008 survey. In the end-2008 survey, they were revised down by 0.2 percentage point for the current year and 0.4 percentage

Chart C Euro area HICP inflation and SPF forecasts

(annual percentage changes)



Sources: Eurostat and ECB.
Note: The solid red lines for 2008/2009 and 2011/2012 refer to forecasts provided in the fourth quarter surveys of 2008 and 2011, while the dotted lines refer to forecasts provided in the third quarter surveys of 2008 and 2011.

Table B Assessment of the risks to the inflation outlook

Views on the balance of risks [1]		Survey rounds Q3 2008	Q4 2008		Q3 2011	Q4 2011
Survey horizon	2008	-10	-7	2011	-23	7
	2009	-2	-14	2012	-8	-9

1) Figures indicate the difference between a) the number of respondents reporting a point forecast below the mean of their probability distribution (indicating upside risks) and b) the number of respondents reporting a point forecast above the mean (indicating downside risks). A positive number indicates risks tilted to the upside.

point for the year ahead, while in the end-2011 survey, there was no revision to the forecast for the current year and a downward revision of only 0.2 percentage point for the year ahead (see Chart C). The main reason for this difference is that, in the end-2008 survey, the expected path of oil prices in US dollar terms was revised down more strongly than in the end-2011 survey and the expectation of a depreciation of the euro had less of an offsetting impact than in the end-2011 survey. Furthermore, in the end-2008 survey, the expected growth of compensation per employee was revised down more strongly than in the latest survey round. Finally, in the end-2011 survey, respondents reported increasing upward pressure on inflation from indirect taxes, a factor that was not prevalent in 2008.

Revisions to the risk assessments also differed between the two survey rounds under review. In the end-2008 survey, the views on risks to the inflation outlook remained broadly unchanged (the balance being on the downside) for the current year and shifted further to the downside for the year ahead. By contrast, in the end-2011 survey, they moved from being mostly on the downside to being mostly on the upside for the current year, while they remained broadly unchanged, mostly on the downside, for the year ahead (see Table B).

Conclusion

In terms of the high levels of uncertainty, there are some similarities between the economic environment at the end of 2008 and that at the end of 2011. However, the results of the SPF for the fourth quarters of these years provide quantitative evidence of both similarities and differences in the revisions to baseline forecasts and risk assessments. While for real GDP growth the average downward revisions to the baseline outlooks were of a similar size across the two surveys, for inflation they were clearly smaller in the end-2011 survey. Revisions to the risk assessments also varied, with more respondents shifting to the downside in the end-2008 survey for both real GDP growth and inflation. These differences may reflect two factors. First, it may be that forecasters have learnt how to better deal with uncertainty shocks and tend to build them directly into revisions of baseline outlooks rather than revisions of risk assessments. Second, it could also be that the 2011 uncertainty shock does not lend itself to quantification in terms of probabilistic risk, as future economic outcomes will depend largely on political decisions with respect to the resolution of the sovereign debt crisis in the euro area, which could result in both upside and downside scenarios relative to the baseline.