

Box 6

UNCERTAINTY AND THE ECONOMIC PROSPECTS FOR THE EURO AREA

Since the autumn of 2008, renewed financial turbulence and a sharp deterioration in global and domestic demand have heightened uncertainty about the euro area's economic outlook. That uncertainty has been evident in the widening dispersion of forecasters' projections for euro area growth. This box examines some indicators of the dispersion of forecasters' projections for growth and discusses what the current uncertainty about the outlook might imply for the evolution of demand in the near term.

Uncertainty matters because it can have a major influence on current demand. Business investment, for example, may be affected because decisions on capital expenditure are typically irreversible, so that it may, in an uncertain environment, induce firms to delay investment decisions until the outlook for demand becomes clearer. Uncertainty can influence household decisions in a similar way. Greater uncertainty about the economic outlook – in particular about job prospects – may induce households to reduce their current consumption and, instead, build up precautionary savings against possible fluctuations in future income.

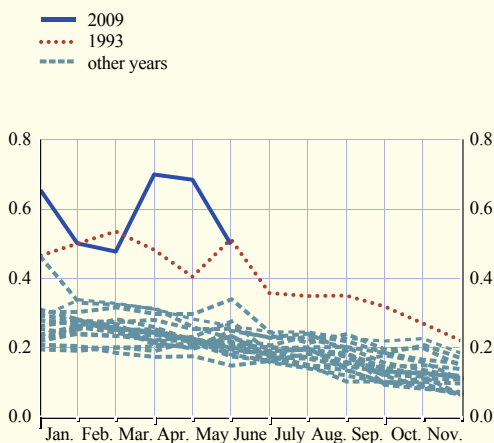
Various approaches are available for assessing the degree of uncertainty. A common method is to look at the volatility of economic or financial indicators. For example, the variation of equity indices provides one indication of current volatility in financial markets, while implied volatilities from option contracts provide an insight into market participants' views on future volatility.¹ For the real economy, it is also possible to look at recent volatility in macro series – for example, the evolution of recent changes in GDP or industrial production.

Another possible measure of the uncertainty about the outlook is the dispersion of projections for growth among forecasters. Charts A and B show the standard deviation of GDP growth forecasts by Consensus Economics, which collects projections for major economies from a number of forecasters. In the Consensus Economics survey, contributors are asked for their

¹ For a discussion of volatility in stock market indices, see Box 4, entitled "Abnormal volatility in global stock markets", in the November 2008 issue of the Monthly Bulletin.

Chart A Dispersion of projections for GDP growth in the current calendar year

(standard deviation of point estimates of growth among forecasters)

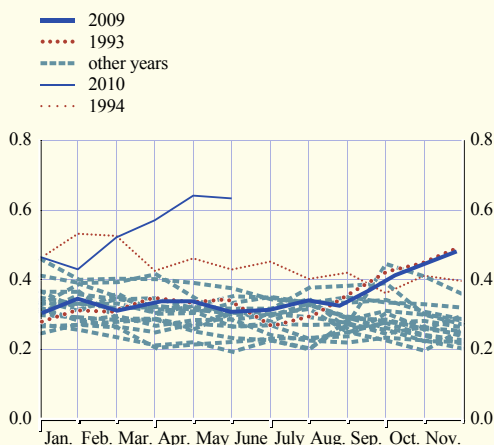


Source: Consensus Economics.

Notes: The euro area measure is derived by averaging the standard deviations of projections for Germany, France and Italy. Each line shows the standard deviation of GDP growth forecasts by Consensus Economics for the current calendar year. "Other years" represent standard deviations from 1990 to 2008.

Chart B Dispersion of projections for GDP growth in the next calendar year

(standard deviation of point estimates of growth among forecasters)



Source: Consensus Economics.

Notes: The euro area measure is derived by averaging the standard deviations of projections for Germany, France and Italy. Each line shows the standard deviation of GDP growth forecasts by Consensus Economics for the next calendar year. "Other years" represent standard deviations from 1990 to 2008.

views of growth prospects in the current calendar year and the next calendar year (i.e. they are currently being asked for projections for 2009 and 2010). Disparities among projections tend to display a seasonal pattern – as information accumulates in the course of the year (and forecasters learn more about current and prospective annual growth), forecasters tend to converge in their assessments of growth prospects – so that the range of projections submitted to Consensus Economics in January and February is typically slightly higher than in November and December. Given that, the charts compare the evolution of the dispersion of projections throughout the year, from January to December, over successive calendar years.²

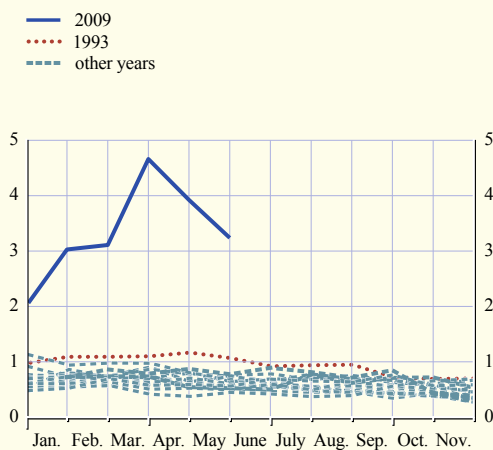
The dispersion of GDP projections has tended to be far higher in periods of recession or weak growth. Compared with other years, the range of disagreement among forecasters with regard to current and subsequent annual growth was large in the recession of the early 1990s (see Charts A and B). More recently, the dispersion of views on economic prospects has widened considerably, reaching the highest level since data first became available in 1990. The disparity of views on the current calendar year (i.e. 2009) is as high as it was during the previous euro area recession in 1993, while disagreement about growth one year ahead is the highest ever recorded. The increase in uncertainty is even more marked in the case of the industrial sector – see Charts C and D, which show the same measure of dispersion for projections of growth in industrial production. The recent sudden downturn in production has led to a significant widening of the dispersion of views on the outlook for a recovery in the industrial sector.

One possible problem with the measures shown in Charts A to D is that they only capture disagreement among forecasters about the likely overall outcome or expected profile. This may

² In Charts A to D, each line shows the standard deviation of forecasts from Consensus Economics during a calendar year. The evolution of the standard deviation for forecasts for specific years (1993, 1994, 2009 and 2010) is highlighted. The "other years" shown in the charts represent standard deviations from 1990 onwards (excluding those already highlighted).

Chart C Dispersion of projections for industrial production growth in the current calendar year

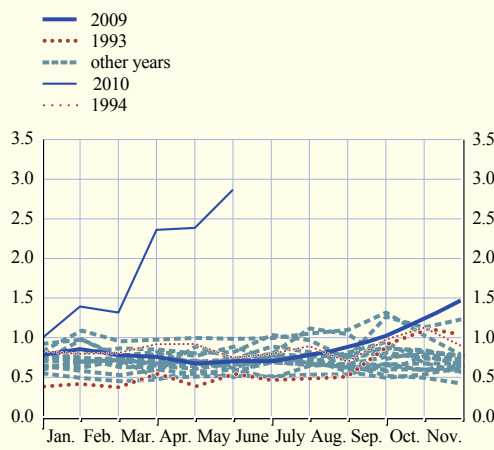
(standard deviation of point estimates of growth among forecasters)



Source: Consensus Economics.
Notes: the euro area measure is derived by averaging the standard deviations of projections for Germany, France and Italy. Each line shows the standard deviation of industrial production growth forecasts by Consensus Economics for the current calendar year. "Other years" represent standard deviations from 1990 to 2008.

Chart D Dispersion of projections for industrial production growth in the next calendar year

(standard deviation of point estimates of growth among forecasters)



Source: Consensus Economics.
Notes: the euro area measure is derived by averaging the standard deviations of projections for Germany, France and Italy. Each line shows the standard deviation of industrial production growth forecasts by Consensus Economics for the next calendar year. "Other years" represent standard deviations from 1990 to 2008.

cause important information about expectations regarding the distribution of potential projected outcomes to be missed. For example, it is possible that forecasters might agree with each other about the most likely outcome, even though the overall level of uncertainty is high. An ideal measure of uncertainty would, instead, thus capture forecasters' subjective assessments of uncertainty about the economic outlook. In this respect, the ECB's Survey of Professional Forecasters (SPF) is valuable because it not only captures respondents' subjective assessments of the expected value of growth (and inflation), but also obtains quantitative information regarding the uncertainty surrounding these central expectations. More specifically, SPF participants are also asked to assign a probability distribution to their forecasts. Chart E shows the standard deviation of the distribution for GDP growth derived by aggregating individual forecasters' responses.³

Chart E Uncertainty measure for real GDP as derived from the Survey of Professional Forecasters

(standard deviation of the aggregated probability distribution)



Source: ECB Survey of Professional Forecasters.
Note: The scale of the downward revision to growth projections in the survey for the first quarter of 2009 resulted in the outcomes of probability distributions for one-year ahead forecasts located mainly in the lowest, open-ended intervals; thus the value for the first quarter of 2009 is an underestimation of uncertainty for the first quarter of 2009.

³ For a description of the measure of aggregate forecasting uncertainty in the SPF, see Carlos Bowles, Roberta Friz, Véronique Genre, Geoff Kenny, Aidan Meyler and Tuomas Rautanen, "The ECB survey of professional forecasters (SPF): a review after eight years' experience", *Occasional Paper series*, No 59, ECB, April 2007. The aggregate distribution is constructed simply by adding up the individual probabilities reported in the SPF and dividing the sum total by the number of respondents.

Currently, it provides a picture that is broadly similar to that of the previous measures, confirming that uncertainty about the economic outlook is exceptionally high – although it has come down somewhat in the latest SPF, based on forecasts collected in July.

To sum up, since the autumn of 2008, renewed financial turbulence, together with a sharp deterioration in global and domestic demand, has increased the uncertainty about the euro area's economic prospects. Indeed, measures derived from forecasters' projections indicate that uncertainty about the economic outlook has rarely been higher. This heightened uncertainty is likely to be one of the factors that currently dampen demand. Anecdotal evidence suggests that it has been a prominent factor in shaping firms' investment expenditure in recent months. Looking ahead, the fiscal stimulus packages, combined with the monetary loosening and significant efforts to restore the functioning of the financial system, are expected to contribute to the lessening of uncertainty about the economic outlook. In addition, the projected improvement in global and domestic conditions as financial markets normalise should gradually improve confidence and reduce uncertainty in the months ahead. Indeed, as could be seen in the latest SPF, there are already signs that uncertainty among forecasters is declining again.