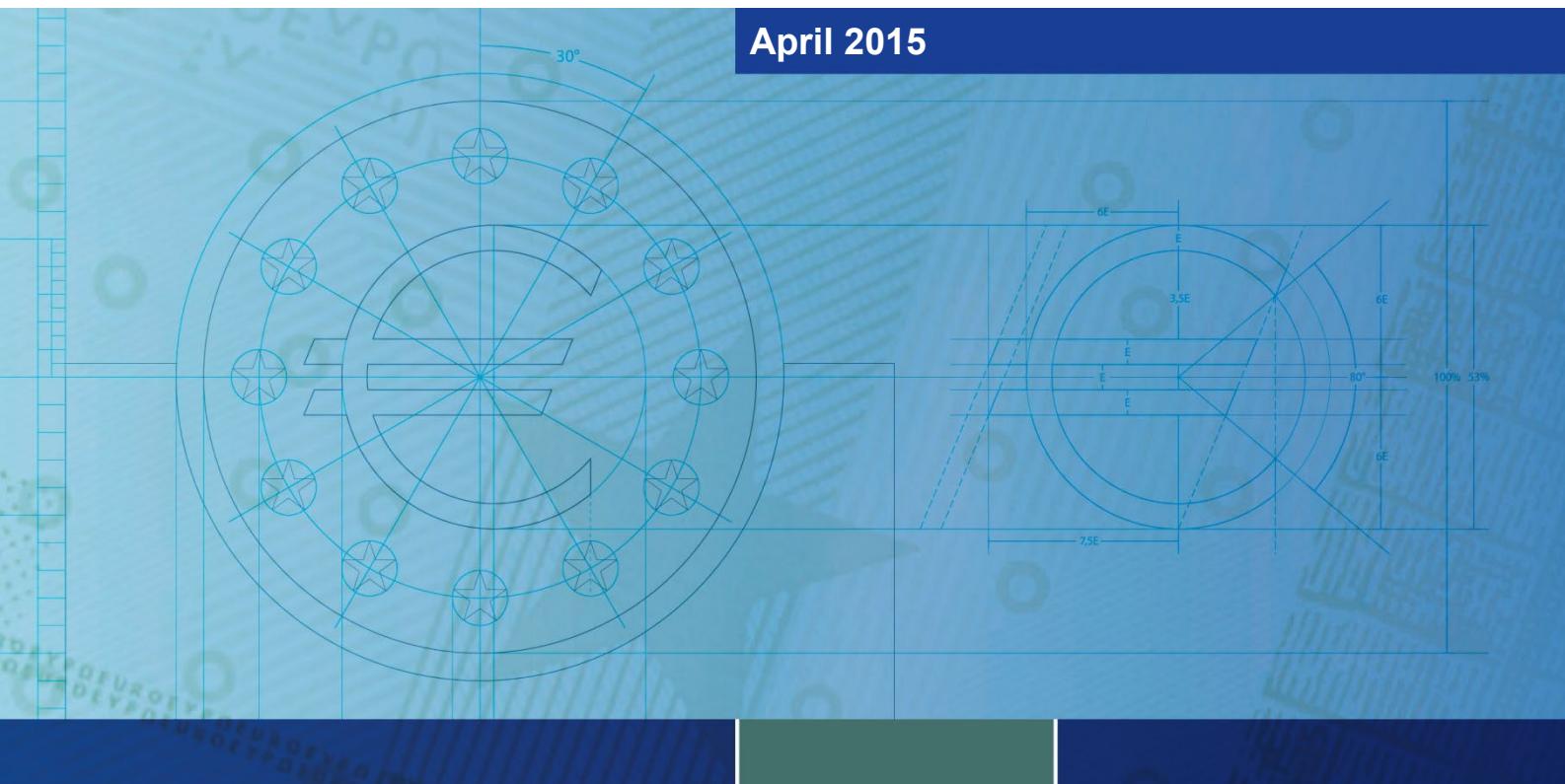


The ECB survey of professional forecasters

2nd Quarter of 2015

April 2015



The results of the ECB Survey of Professional Forecasters (SPF) for the second quarter of 2015¹ imply average inflation expectations of 0.1%, 1.2% and 1.6% for 2015, 2016 and 2017 respectively. Respondents reported that the downward revision for 2015 mainly reflected lower oil prices, whereas monetary policy measures and exchange rate developments have resulted in upward revisions for 2016 and 2017. Average longer-term inflation expectations (for 2019) stand at 1.84%, higher than the 1.77% reported in the previous round. Real GDP growth expectations were revised up for the short and medium-term horizons, standing at 1.4% for 2015, 1.7% for 2016 and 1.8% for 2017. Longer-term growth expectations (for 2019) remained unchanged at 1.7%. Unemployment rate expectations were revised down over all horizons.

Table

Results of the SPF in comparison to other forecasts and projections

(annual percentage changes, unless otherwise indicated)

	Survey horizon			
HICP inflation	2015	2016	2017	Long-term ¹⁾
SPF Q2 2015	0.1	1.2	1.6	1.8
Previous SPF (Q1 2015)	0.3	1.1	1.5	1.8
ECB staff macroeconomic projections (Mar. 2015)	0.0	1.5	1.8	-
Consensus Economics (Mar. 2015)	0.0	1.2	-	1.9
Euro Zone Barometer (Mar. 2015)	0.0	1.2	1.5	1.9
Real GDP growth	2015	2016	2017	Long-term ¹⁾
SPF Q2 2015	1.4	1.7	1.8	1.7
Previous SPF (Q1 2015)	1.1	1.5	1.7	1.7
ECB staff macroeconomic projections (Mar. 2015)	1.5	1.9	2.1	-
Consensus Economics (Mar. 2015)	1.4	1.7	-	1.6
Euro Zone Barometer (Mar. 2015)	1.4	1.8	1.6	1.5
Unemployment rate ²⁾	2015	2016	2017	Long-term ¹⁾
SPF Q2 2015	11.1	10.6	10.1	9.2
Previous SPF (Q1 2015)	11.3	10.9	10.3	9.4
ECB staff macroeconomic projections (Mar. 2015)	11.1	10.5	9.9	-
Consensus Economics (Mar. 2015)	11.2	10.8	-	-
Euro Zone Barometer (Mar. 2015)	11.1	10.7	10.1	9.5

1) Long-term expectations refer to 2019. For Consensus Economics long-term expectations are taken from the October 2014 surveys. For the Euro Zone Barometer long-term expectations are taken from the January 2015 surveys.

2) As a percentage of the labour force.

1

SPF inflation forecasts revised down for 2015 but upward for 2016 and 2017

The Q2 2015 SPF average point forecasts for inflation in 2015, 2016 and 2017 stand at 0.1%, 1.2% and 1.6% respectively (see Table). This implies a downward revision of 0.2 percentage point for 2015 but upward revisions of 0.1 percentage point for 2016 and 2017 compared with the survey round from the first quarter of 2015. Compared with the March 2015 ECB staff macroeconomic projection exercise,

¹ The survey was conducted between 31 March and 7 April 2015. The total number of responses was 59, which is broadly in line with the historical average of 58. The survey requested information on expectations for the euro area HICP inflation rate, the real GDP growth rate and the unemployment rate for 2015, 2016, 2017 and 2019, as well as for each of these variables one and two-year ahead. Participants were provided with a common set of the latest available data for HICP inflation (March 2015, -0.1% year-on-year), GDP growth (Q4 2014, 0.9% year-on-year) and unemployment (February 2015, 11.3%). The cut-off date for data used in this report was 10 April 2015.

which was finalised on the basis of data and assumptions available in mid-February, expected inflation for 2015 is higher by 0.1 percentage point in the SPF from the second quarter of 2015, but lower by 0.3 and 0.2 percentage point respectively for 2016 and 2017. SPF expectations are very similar to those from the March 2015 Consensus Economics and Euro Zone Barometer surveys.

SPF respondents see monetary policy measures and exchange rate developments as the main supporting factors for the strong pick-up in inflation in 2016 and 2017. The expected evolution of oil prices is a factor behind the anticipated increase in inflation in 2016 and 2017, as, on balance, SPF panellists expect oil prices to increase gradually from current low levels.

Respondents expect underlying inflation developments to increase by less than headline inflation. They consider that the modest pick-up expected in economic activity implies that the slack remaining in the euro area economy will be removed only gradually. Ongoing adjustments and rebalancing in some euro area countries are also expected to contribute to containing inflationary pressures.

Oil prices, exchange rates and the effects of the APP were the main factors cited as being behind the revisions since the last round. The main factor cited as being behind the downward revisions for the 2015 outlook compared with the previous survey round was the lower oil prices observed at the beginning of the year. On the other hand, exchange rate developments and the expected effects of the APP were cited as counteracting factors in the revisions.

Chart 1
Aggregated probability distribution of inflation expectations for 2015

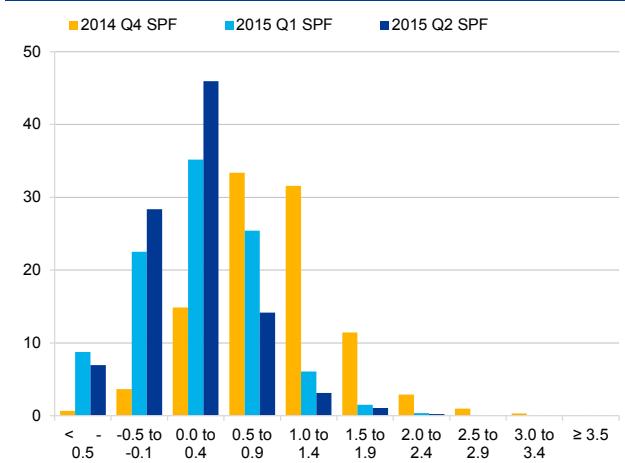
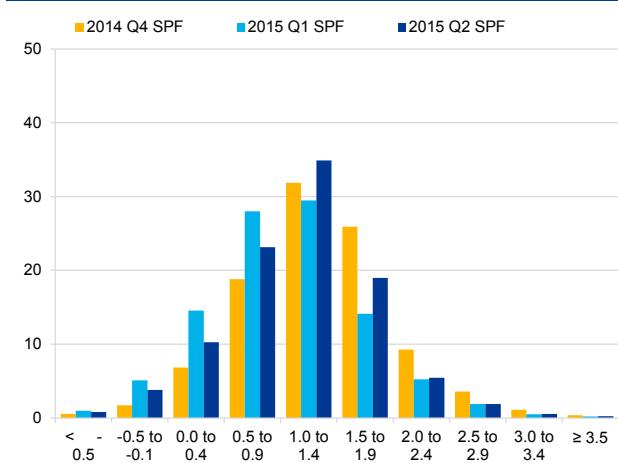
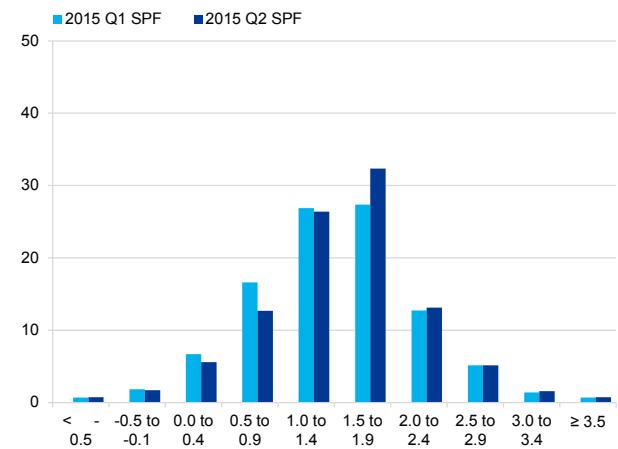


Chart 2
Aggregated probability distribution of inflation expectations for 2016



Compared with the previous SPF round, the aggregate probability distribution for expected inflation in 2015 moved further towards lower outcomes (see Chart 1). The distribution also narrowed somewhat, primarily reflecting a lower level

Chart 3
Aggregated probability distribution of inflation expectations for 2017



of disagreement between respondents over the point forecasts.² For 2016, the probability associated with higher outcomes has increased, although the most likely outcome remained in the same bin (i.e. 1.0-1.4%) – see Chart 2. For 2017 the most likely (modal) outcome is in the 1.5-1.9% range. According to survey participants, while there is a relatively high probability of inflation remaining below 1.0% in 2016 (38%) and in 2017 (21%), the probability of negative inflation remains low, at 5% in 2016 and 2% in 2017, which is slightly lower than reported in the first quarter of 2015 – see also Chart 3.

Based on both the quantitative and qualitative information provided by respondents, the balance of risks to the baseline inflation outlook is generally perceived to have remained somewhat on the downside, but to a lesser extent than in the previous survey round. A comparison of the

estimated means of the aggregated probability distribution with the average point forecasts suggests that the risks to the baseline inflation outlook are perceived as balanced for 2015 and slightly on the downside for 2016 and 2017. The qualitative comments refer to risks stemming from both external and domestic factors.

Regarding oil prices, both upward and downward risks are perceived - the former are linked primarily to geopolitical factors and the latter (which are judged to be slightly more significant on average) stem from weaker demand for, and more ample supply of, oil. Global economic developments, in particular in emerging markets, but also in the United States and from developments in Ukraine, are also reported as a downside risk. On the other hand, exchange rates are primarily seen as upward risks for the inflation outlook (i.e. further exchange rate weakness would push up import prices), particularly in the near term. Thereafter risks from exchange rates are judged to be more balanced. On the domestic side, the inflation risks that stem from the growth outlook remain slightly on the downside, although some respondents see upside risks. The possibility that inflation expectations will become unanchored is seen as less of a downside risk than in the previous round. On the other hand, a possibly stronger than expected impact of monetary policy measures, in particular the effects of the APP, are cited as sources of upward risk.

2

Longer-term inflation expectations for 2019 at 1.8%

The average point forecast for longer-term inflation expectations (for 2019) remained at 1.8%, although it increased by 0.07 percentage point to 1.84% when

² The dispersion of the aggregate probability distribution ("aggregate uncertainty") can be broken down into two factors: "disagreement" and average "individual uncertainty". Disagreement is measured by the dispersion of the individual forecasts, while average individual uncertainty is measured by the average dispersion of the individual probability distributions.

rounded to two decimal places (see Chart 4). The median of the Q2 2015 point forecasts increased slightly, by 0.05 percentage point, to 1.85% (see Chart 5).³ The SPF long-term inflation expectations are slightly below the latest inflation expectations (for 2019) from the January 2015 Eurozone Barometer and October 2014 Consensus Economics surveys, which stood at 1.9%.

Chart 4 Outlook for longer-term inflation expectations

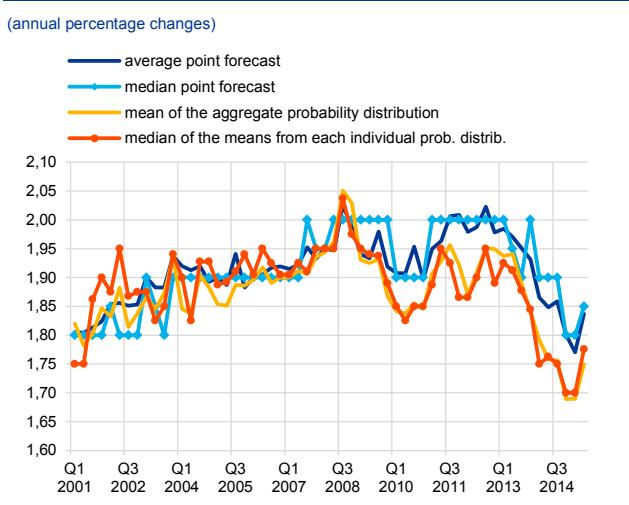
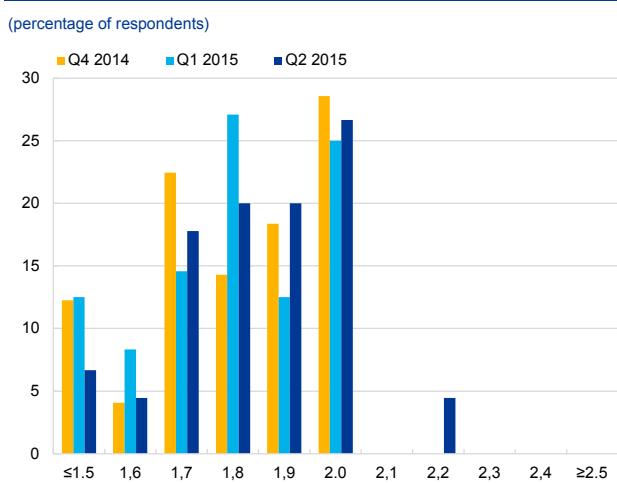


Chart 5 Cross sectional distribution of long-term inflation forecasts



The aggregate probability distribution has shifted slightly towards higher values compared with the previous SPF round (see Chart 6). On average, the balance of risks around the point forecast is assessed as remaining on the downside (as has been the case since 2009) with the estimated mean of the aggregated probability distribution standing at around 1.75% compared with the mean point estimate of 1.84%. The probability of inflation being at or above 2.0% was 37%, compared with 33% in the first quarter of 2015, while that of its being below 1% was 13% compared with 14% in the previous round. The probability of negative inflation rates remained low at 2%, in line with the previous round.

Disagreement over longer-term inflation expectations as measured by the standard deviation of the point forecasts decreased compared with the previous round.⁴ The aggregate uncertainty surrounding longer-term inflation expectations, as measured by the standard deviation of the aggregate probability distribution (see Chart 7), increased reflecting increases in average individual uncertainty (the average standard deviation of the individual probability distributions).

³ The 90th percentile of the distribution of the point forecasts remained unchanged at 2.0% and the 75th percentile rose back to 2% (having fallen below for the first time in the previous round). The 25th percentile of the distribution of the point forecasts rose by 0.02 percentage point to 1.72% and the 10th percentile rose by 0.2 percentage point to 1.70%. Thus over 80% of respondents expect longer-term inflation to be in the 1.7-2.0% range.

⁴ The quasi-standard deviation also decreased. This measure can be more robust to outliers and is calculated as half of the difference between the 16th and 84th percentiles of the sample of point forecasts, which, with “normally” distributed data, delivers the standard deviation.

However, disagreement among forecasters (the standard deviation of the individual point forecasts) declined.

Chart 6

Aggregated probability distribution of long-term inflation expectations (5 years ahead)

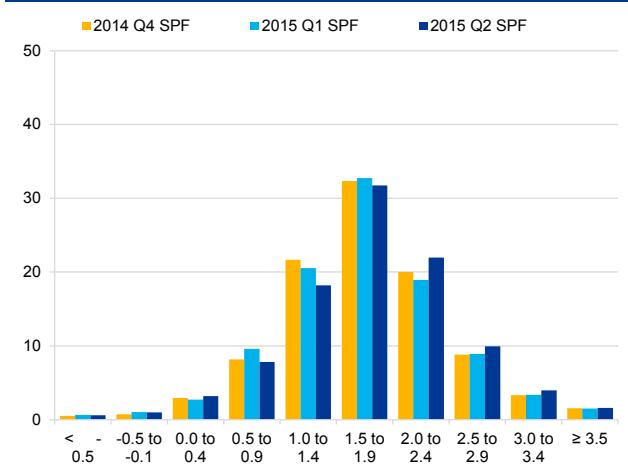
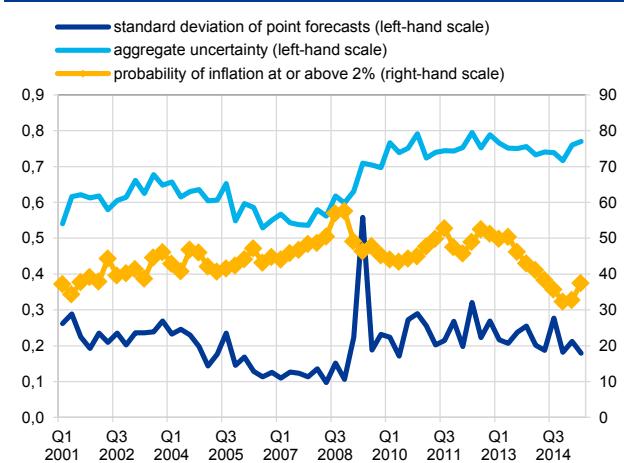


Chart 7

Disagreement and uncertainty regarding longer-term inflation expectations



3

Real GDP growth expectations revised up

The average point forecasts for real GDP growth increased to 1.4% in 2015 (+0.3 percentage point compared with the previous survey round) and to 1.7% in 2016 (+0.2 percentage point). For 2017 participants expect real GDP to grow by 1.8% (+0.1 percentage point) – see Table. The upward revisions were often explained by the low oil prices, which is expected to contribute positively to private consumption as a result of higher disposable income in households, as well as to company investment as a result of improved margins owing to lower production costs. In addition the lower exchange rate of the euro is expected to support extra-euro area exports. The ECB's APP is expected to have an effect, both via the exchange rate, which many respondents reported as the main channel, and by keeping interest rates low and thus supporting investment. Additional beneficial effects are also foreseen in improved market, business and consumer confidence.

The average SPF point forecasts are 0.1 and 0.2 percentage point below the March 2015 ECB staff macroeconomic projections for 2015 and 2016, respectively. With regard to the latest forecasts from Euro Zone Barometer and Consensus Economics, SPF expectations are in line with both for 2015 and are slightly lower than the Euro Zone Barometer (1.8%) for 2016.

Chart 8

Aggregated probability distribution of 2015 GDP growth expectations

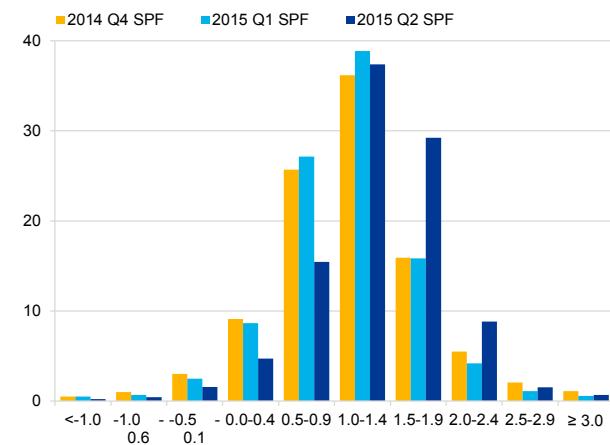


Chart 9

Aggregated probability distribution of 2016 GDP growth expectations

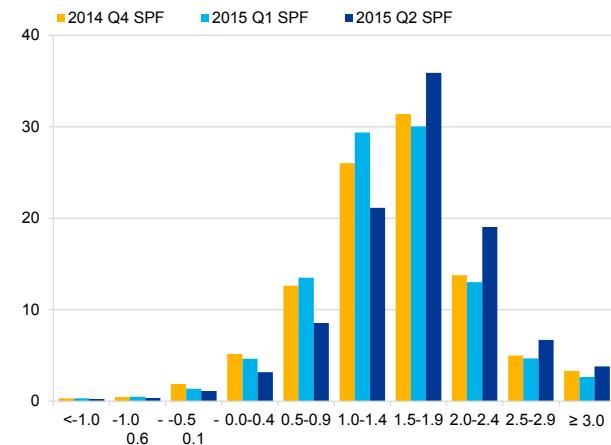


Chart 10

Aggregated probability distribution of 2017 GDP growth expectations

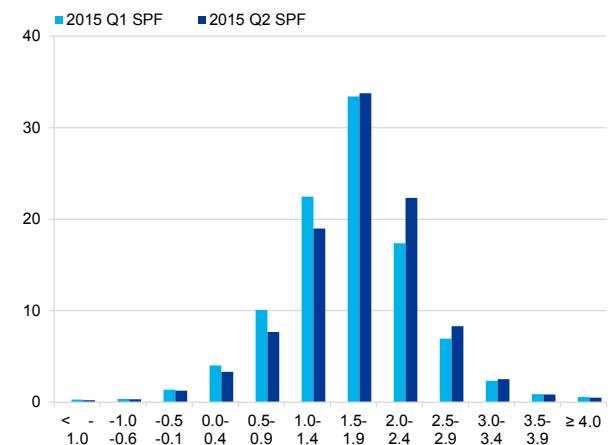
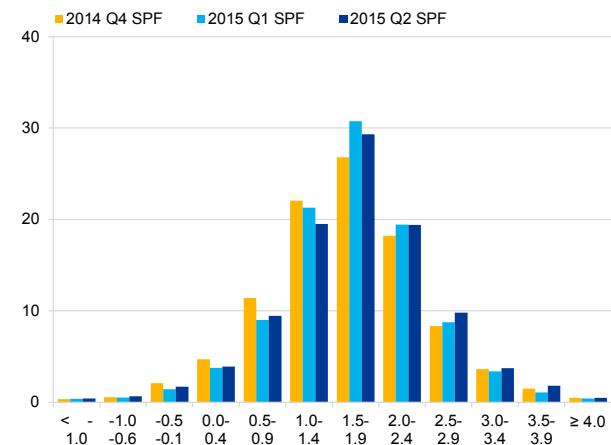


Chart 11

Aggregated probability distribution of longer-term GDP growth expectations (5 years ahead)



The aggregate probability distributions for 2015 and 2016 have shifted towards higher outcomes (see Chart 8 and Chart 9). For 2015 the highest probability (37%) continues to be assigned to the 1.0-1.4% range. For 2016 the highest probability is assigned to the 1.5-1.9% range (36%). For 2017 the largest probability (33%) continues to be assigned to the bin between 1.5% and 1.9%, but the distribution is tilted more towards higher outcomes than previously (see Chart 10).

The balance of risks to GDP growth (as measured by the difference between the mean of the aggregate probability distribution and the average point forecast) remains tilted somewhat to the downside for all three years. The qualitative comments by the respondents identify lower external demand due to geopolitical tensions relating mainly to Ukraine and Russia, but also in the Middle

East, as the dominant downside risks surrounding their forecasts. A number of respondents also mentioned political risks in some euro area countries and worry about the discontinuation of structural reforms in these countries. Concerns about lower external demand due to a slowdown in key emerging markets, in particular China, were also mentioned. Some respondents mentioned risks of heightened volatility in financial markets due to the end of the highly accommodative monetary policy by the Federal Reserve. The few upside risks mentioned relate to stronger euro area consumption and investment than already included in the baseline due to the effects of the lower oil prices on incomes and a stronger recovery of exports driven by a weaker euro exchange rate than currently assumed. A small number of respondents also see upside risks in the structural reforms in southern European countries having more positive than expected effects on growth.

Longer-term growth expectations (for 2019) remained unchanged at 1.7%. The SPF results for that horizon are higher than the latest available Consensus Economics and Euro Zone Barometer forecasts, which stood at 1.6% and 1.5% respectively. The aggregate probability distribution of the SPF longer-term growth expectations has slightly widened compared with previous rounds (see Chart 11).

4

Unemployment rate forecasts revised down over all horizons

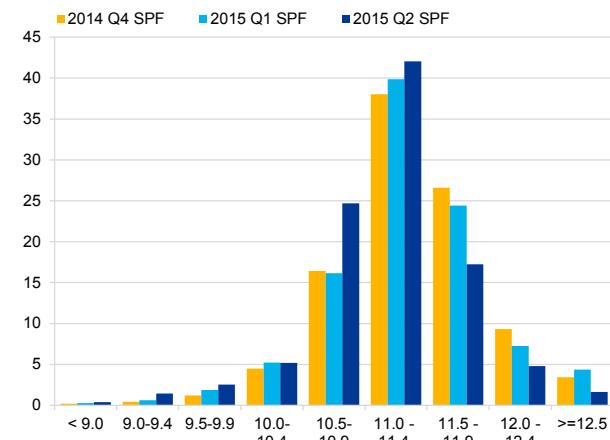
The average point forecasts for the unemployment rate currently stand at 11.1% for 2015, 10.6% for 2016 and 10.1% for 2017. Expectations were revised down over all horizons with respect to the previous round: by 0.2 percentage point for 2015, 0.3 percentage point for 2016 and 0.2 percentage point for 2017 (see Table). The latest SPF is in line with the Euro Zone Barometer for 2015 and 2017, but 0.1 percentage point lower for 2016. Compared with Consensus Economics, it is 0.1 percentage point and 0.2 percentage point lower for 2015 and 2016 respectively. Compared with the March 2015 ECB staff macroeconomic projection exercise, the SPF is the same for 2015, but is 0.1 percentage point lower for 2016 and 0.2 percentage point lower for 2017.

Risks to the baseline outlook are tilted to the upside (see Charts 12-14). These upward risks mostly reflect the perceived downside risks to GDP growth. In addition to these, for the short and medium-term horizons, some forecasters are worried that the high unemployment rate may, in part, be of a structural nature, thereby delaying the pass-through of the economic recovery to the labour market. The downside risks mentioned mainly relate to potentially greater success for already implemented and still to be implemented structural reforms.

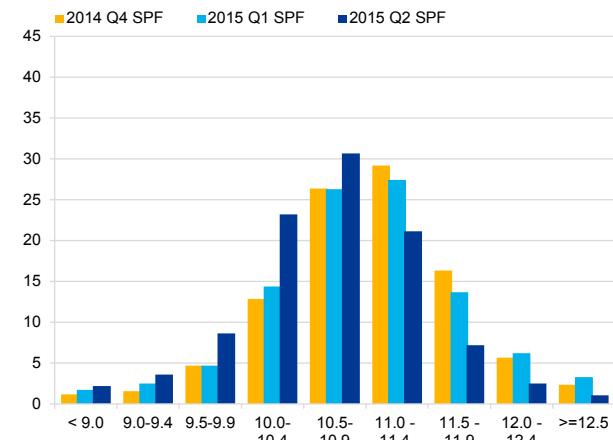
The average point forecast for longer-term unemployment rate expectations (9.2% for the reference year 2019) is 0.2 percentage point lower than in the previous SPF round. The aggregate probability distribution has shifted slightly towards lower outcomes compared with the previous SPF round (see Chart 15). In this regard, the mean of the aggregate distribution falls in the 9.0-9.4% range for the first time since the SPF round from the first quarter of 2013.

Chart 12

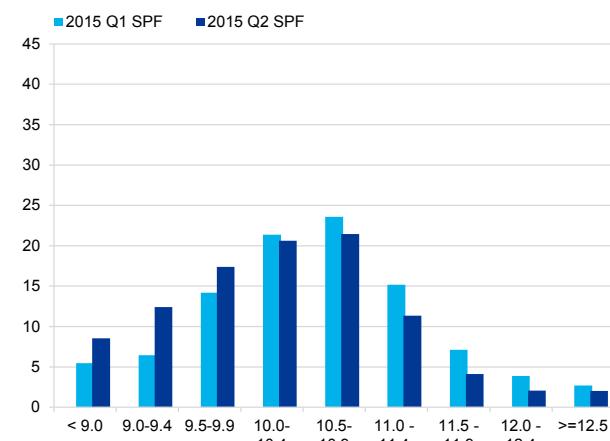
Aggregated probability distribution of the unemployment rate for 2015

**Chart 13**

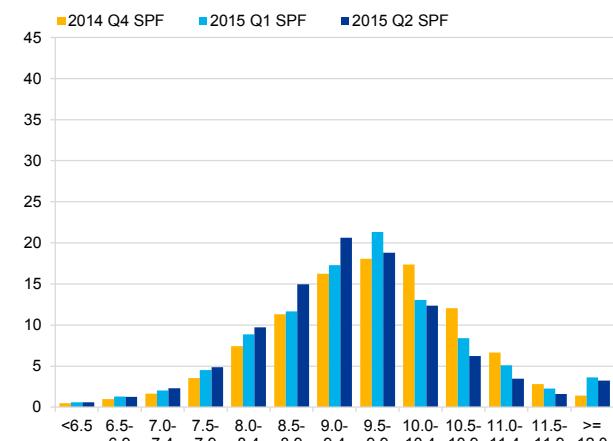
Aggregated probability distribution of the unemployment rate for 2016

**Chart 14**

Aggregated probability distribution of the unemployment rate for 2017

**Chart 15**

Aggregated probability distribution of the longer-term unemployment rate expectations



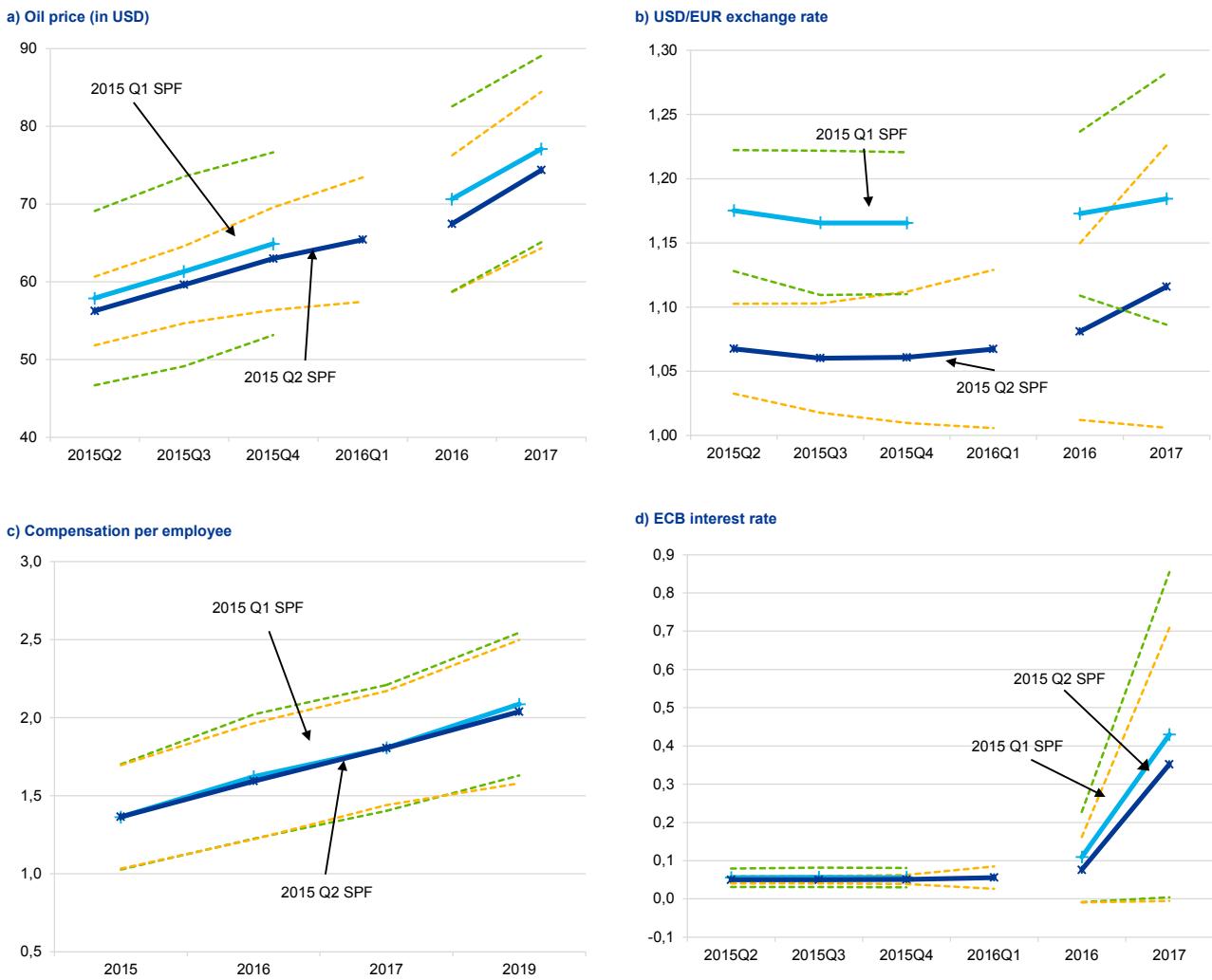
5

Other variables and conditioning assumptions

Other information provided by respondents regarding changes in their assumptions implied downward revisions of the assumed USD/EUR exchange rate, while expectations for the oil price in US Dollars, the growth rate of compensation per employee and the short-term interest rate remained rather stable compared with the previous round.

Chart 16

Underlying assumptions



Note: Dotted lines proxy the uncertainty surrounding average assumptions (plus/minus one standard deviation of the point estimates)

Oil prices are expected to average USD 52.3 per barrel in the second quarter of 2015 and to increase gradually to USD 65.4 in the first quarter of 2016 and to levels around USD 74.4 in 2017. Compared with the previous survey round, oil price assumptions are marginally lower, by around USD 2 per barrel for 2015 and by USD 3 for 2016 and 2017 (see Chart 16a). The forecast for the EUR/USD exchange rate (1.07) is lower than in the previous SPF, and is expected to be broadly stable until the first quarter of 2016 (see Chart 16b). By 2017, the exchange rate is expected to rise modestly to 1.12. Assumptions for the annual growth in compensation per employee were broadly unchanged compared with the previous SPF round, standing at 1.4% for 2015, 1.6% for 2016, 1.8% for 2017 and 2.0% for 2019 (see Chart 16c). The mean assumptions for the rate on the Eurosystem's main refinancing operations imply a marginal downward revision of 0.01 percentage point for 2015 and 0.03 percentage point for 2016. The rate is expected to be at 0.05% throughout 2015, but to then edge upwards to 0.08% in 2016 (see Chart 16d). Forecasters expect an increase to 0.35% in 2017.

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