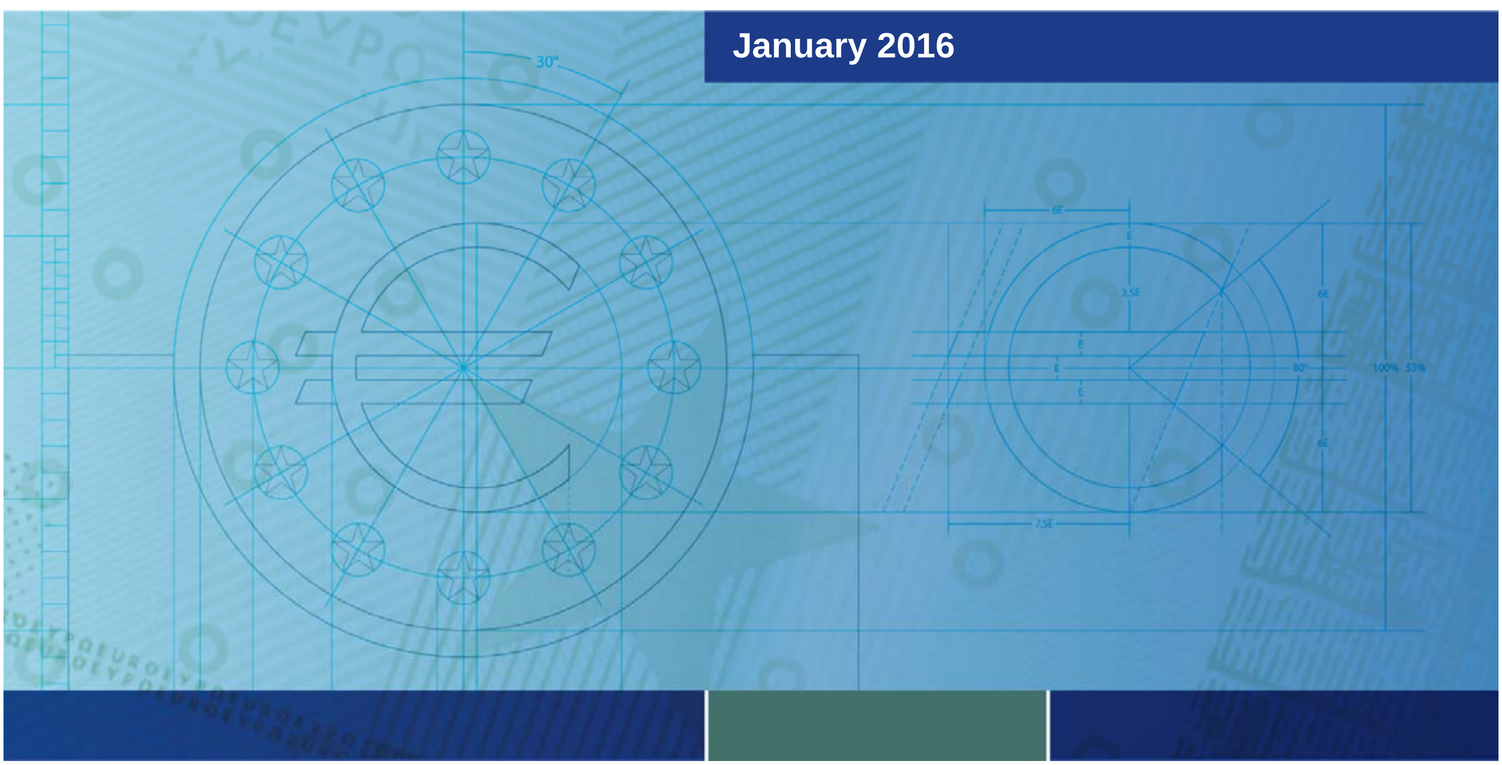
EUROPEAN CENTRAL BANK

EUROSYSTEM

The ECB Survey of Professional Forecasters (SPF)

First quarter of 2016



January 2016

Content

The results of the ECB Survey of Professional Forecasters (SPF) for the first quarter of 2016[1] show average inflation expectations of 0.7%, 1.4% and 1.6% for 2016, 2017 and 2018 respectively. This implies downward revisions of 0.3 percentage point for 2016 and of 0.1 percentage point for 2017 (expectations for 2018 were not surveyed in the previous round), but maintains the upward path in the forecast inflation profile. Average longer-term inflation expectations (for 2020) edged down to 1.8% from 1.9% (at the second decimal down to 1.80% from 1.86%). Real GDP growth expectations were unchanged at all horizons, standing at 1.7% for 2016, 1.8% for 2017 and 1.7% for 2018 and in the longer term (for 2020). Unemployment rate expectations, which continue to show a downward profile, were revised down over the whole horizon.

Table

Results of the SPF in comparison with other forecasts and projections

(annual percentage changes, unless otherwise indicated)

	Survey horizon			
HICP inflation	**2016**	**2017**	**2018**	**Longer-term[1)]**
SPF Q1 2016	0.7	1.4	1.6	1.8
Previous SPF (Q4 2015)	*1.0*	*1.5*	-	*1.9*
Eurosystem staff macroeconomic projections (Dec. 2015)	1.0	1.6	-	-
Consensus Economics (Dec. 2015)	1.0	1.5	1.6	1.9
Euro Zone Barometer (Dec. 2015)	1.0	1.5	1.7	1.8
Real GDP growth	**2016**	**2017**	**2018**	**Longer-term[1)]**
SPF Q1 2016	1.7	1.8	1.7	1.7
Previous SPF (Q4 2015)	*1.7*	*1.8*	-	*1.7*
Eurosystem staff macroeconomic projections (Dec. 2015)	1.7	1.9	-	-
Consensus Economics (Dec. 2015)	1.7	1.6	1.5	1.4
Euro Zone Barometer (Dec. 2015)	1.7	1.8	1.5	1.4
Unemployment rate[2)]	**2016**	**2017**	**2018**	**Longer-term[1)]**
SPF Q1 2016	10.3	9.9	9.4	9.0
Previous SPF (Q4 2015)	*10.5*	*10.1*	-	*9.2*
Eurosystem staff macroeconomic projections (Dec. 2015)	10.5	10.1	-	-
Consensus Economics (Dec. 2015)	10.5	-	-	-
Euro Zone Barometer (Dec. 2015)	10.5	10.2	9.8	9.5

1) Longer-term expectations refer to 2020 for the SPF and for Consensus Economics and to 2019 for the Euro Zone Barometer. For Consensus Economics and the Euro Zone Barometer, expectations for 2017, 2018 and longer term are taken from the October 2015 surveys.
2) As a percentage of the labour force.

1 The survey was conducted between 5 and 11 January 2016. The total number of responses was 57, which is broadly in line with the historical average number of responses. The survey requested information on expectations for the euro area HICP inflation rate, the real GDP growth rate and the unemployment rate for 2016, 2017, 2018 and 2020, as well as for each of these variables one and two years ahead. Participants were provided with a common set of the latest available data for HICP inflation (December 2015, 0.2% year on year), GDP growth (Q3 2015, 1.6% year on year) and unemployment (November 2015, 10.5%). The cut-off date for data used in this report was 12 January 2016.

1 Inflation expectations maintain upward profile but have been revised down for 2016 and 2017

The Q1 2016 SPF average point forecasts for inflation in 2016, 2017 and 2018 stand at 0.7%, 1.4% and 1.6% respectively. This implies downward revisions of 0.3 percentage point for 2016 and 0.1 percentage point for 2017 compared with the survey round for the fourth quarter of 2015 (see Table). Compared with the December 2015 Eurosystem staff macroeconomic projections, which were finalised on the basis of data and assumptions available in mid-November 2015, expected inflation is lower by 0.3 percentage point for 2016 and by 0.2 percentage point for 2017. The Q1 2016 SPF inflation expectations are also lower than those from the December 2015 Consensus Economics and Euro Zone Barometer surveys.

In the course of 2016 and in 2017, most SPF respondents envisage a strong pick-up in inflation from current levels. However, in the short term, oil price movements will exert a strong dampening impact on inflation and counteract favourable base effects arising from past developments. By the end of 2016 though, respondents expect headline inflation to rise, aided by increasing energy price inflation as oil prices are assumed to increase. Respondents envisage a profile of moderate but gradually increasing underlying inflation, which is shaped by the ongoing expansion of economic activity and supported by the monetary policy stance. Respondents consider that there will only be a slow closing of the output gap and labour cost growth will pick up slowly. The weaker euro exchange rate in 2015 is still expected to exert some upward pressure on inflation in 2016.

Respondents reported that the downward revisions from the previous round mainly reflected oil price declines since the previous survey. In addition, the forecast evolution of labour cost (i.e. compensation per employee) growth is slightly lower. In contrast, the US dollar/euro exchange rate is expected to be slightly lower and to have an upward impact on the inflation outlook. For more details, see the section entitled “Other variables and conditioning assumptions”.

Compared with the previous SPF round, the aggregated probability distributions for expected inflation in 2016 and 2017 moved towards lower outcomes. For 2016 the modal (or most likely) outcome is now in the 0.5-0.9% range (see Chart 1), while for 2017 it has remained in the 1.5-1.9% bin (see Chart 2). Overall, however, the probability mass on the lower side of the mean has increased. For 2018 the most likely outcome is also in the 1.5-1.9% range (see Chart 3). According to survey participants, there is a very high probability of inflation remaining below 1.0% in 2016 (65%), but this probability is lower for 2017 and 2018 (at around 20%). Respondents put the probability of negative inflation in 2016 at below 10% and considerably lower, at around 2%, in 2017 and 2018.

Chart 1
Aggregated probability distribution of inflation expectations for 2016

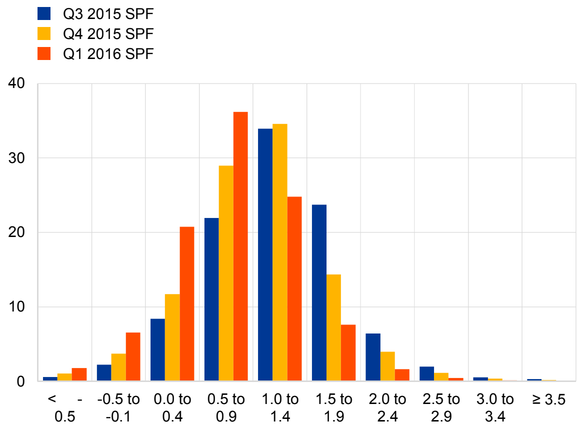


Chart 2
Aggregated probability distribution of inflation expectations for 2017

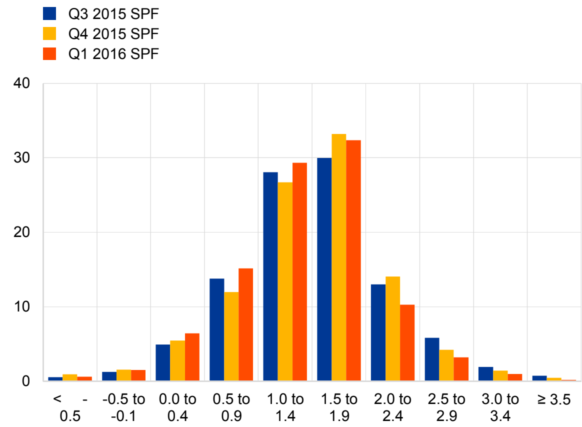
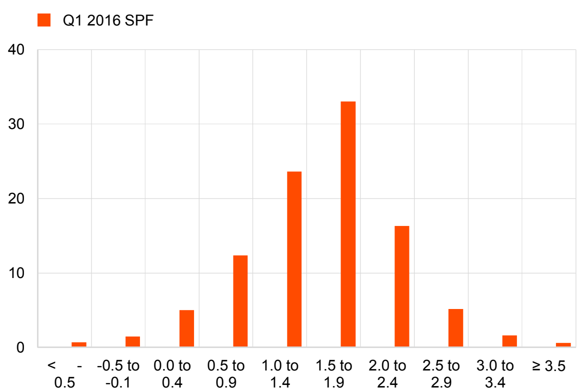


Chart 3
Aggregated probability distribution of inflation expectations for 2018



Based on both the quantitative and qualitative information provided by respondents, the balance of risks to the baseline inflation outlook remained on the downside. A quantitative 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 relatively balanced for 2016 and on the downside for 2017 and 2018. The qualitative comments refer to downside risks stemming primarily from external factors – namely oil prices and emerging market economies. Regarding oil prices, while some respondents see both upward and downward risks, the latter are perceived to dominate particularly in the shorter term and are generally linked to the ample supply of oil combined with weaker oil demand from emerging economies. Emerging market economies, in particular China and Brazil, are also cited as more general downward risks to the global demand outlook. Exchange rate developments were cited as both upward and downward risks, but the risks from these developments were judged to be broadly balanced on average.

2 Longer-term inflation expectations edged down to 1.8%

The average point forecast for longer-term inflation expectations (for 2020) edged down to 1.8% from 1.9% (or to 1.80% from 1.86% when considered at two decimal places). The median also edged down to 1.85% from 1.90%, while the modal (most reported) value was 1.9% compared with 2.0% previously (see Chart 4). Over 75% of the respondents expect longer-term inflation to be in the range 1.7-2.0% (see Chart 5).[2]

Chart 4

Outlook for longer-term inflation expectations

(annual percentage changes)

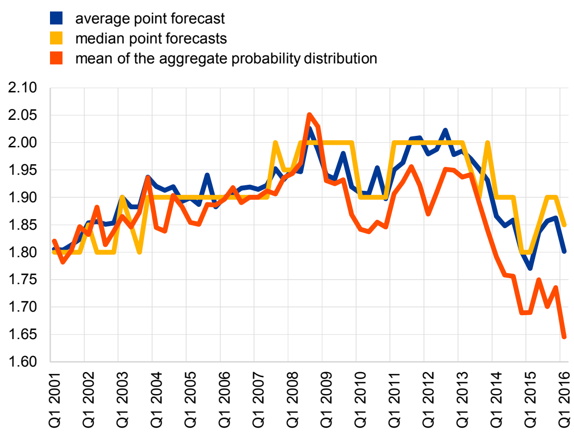
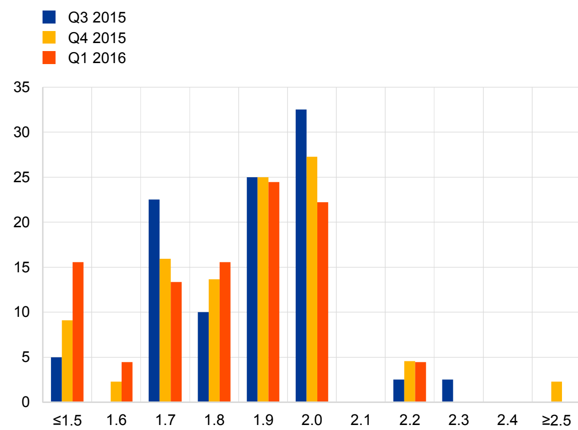


Chart 5

Cross-sectional distribution of long-term inflation forecasts

(percentage of respondents)



The aggregated probability distribution shifted down slightly when 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 1.64% compared with the mean point estimate of 1.80%. The probability of inflation being at or above 2.0% was 30%, compared with 36% in the fourth quarter of 2015, while that of its being below 1% was 15%, up from 13% in the previous round. The probability of negative inflation rates remained low at 2%.

Disagreement over longer-term inflation expectations, as measured by the standard deviation of the point forecasts, increased slightly from the previous round. This was also the case for the quasi-standard deviation – a measure which is more robust to outliers.[3] The aggregate uncertainty surrounding longer-term inflation expectations, as measured by the standard deviation of the aggregated probability

[2] The 75th percentile of the distribution of the point forecasts edged down to 1.96% from 2.0%, while the 25th percentile was unchanged at 1.70%.

[3] The quasi-standard deviation 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.

distribution (see Chart 7), was largely unchanged, as the small increase in disagreement was offset by a small decrease in average individual uncertainty (the average standard deviation of the individual probability distributions).[4]

Chart 6

Aggregated probability distribution of longer-term inflation expectations (five years ahead)

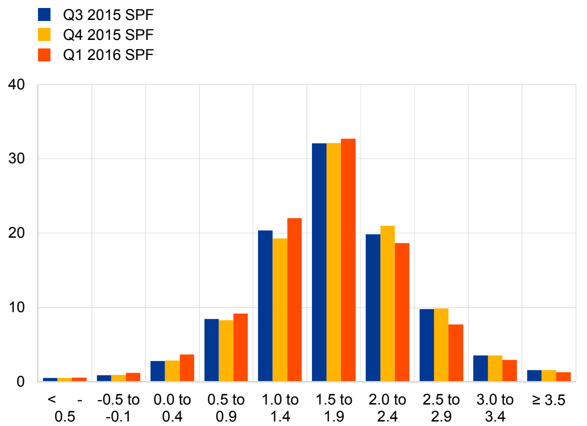
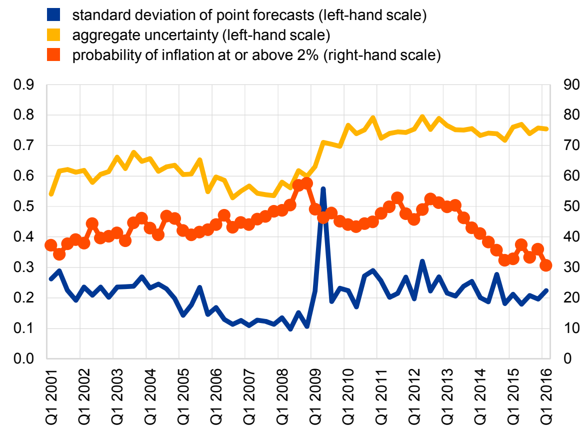


Chart 7

Disagreement and uncertainty regarding longer-term inflation expectations



3 Real GDP growth expectations are unchanged

The overall outlook for economic activity was unchanged from the previous round. The average point forecast for real GDP growth remained at 1.7% for 2016 and at 1.8% for 2017 (see Table). For 2018 participants on average expect an increase of 1.7%. According to qualitative comments provided by the respondents, their baseline scenarios continue to explain the robust economic growth with growth in private consumption and investment, as the current low level of energy prices supports disposable income of households and profit margins of companies. Furthermore, respondents expect domestic demand to benefit from the accommodative monetary policy and less restrictive fiscal policies, still outweighing the weaker expectations for external demand from emerging markets, most importantly China.

The average SPF point forecasts are broadly in line with the December 2015 Eurosystem staff macroeconomic projections. They are equal for 2016 and 0.1 percentage point lower for 2017. SPF expectations for 2016 are also in line with the latest forecasts from the Euro Zone Barometer and Consensus Economics surveys.

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[4] The dispersion of the aggregated probability distribution (“aggregate uncertainty”) can be decomposed into two factors: “disagreement” and average “individual uncertainty”. Disagreement is measured by the dispersion of the individual forecasts, whilst average individual uncertainty is measured by the average dispersion of the individual probability distributions.

Chart 8

Aggregated probability distribution of 2016 GDP growth expectations

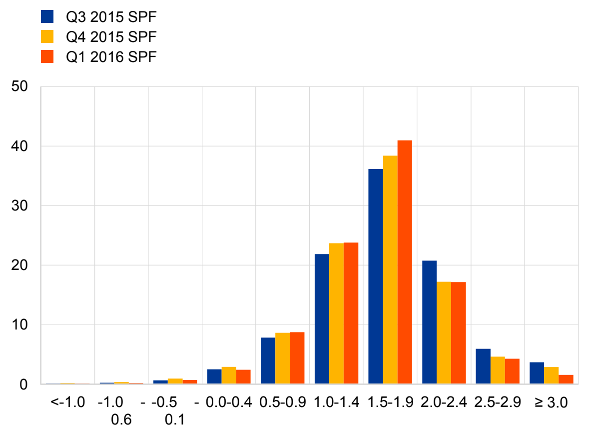


Chart 9

Aggregated probability distribution of 2017 GDP growth expectations

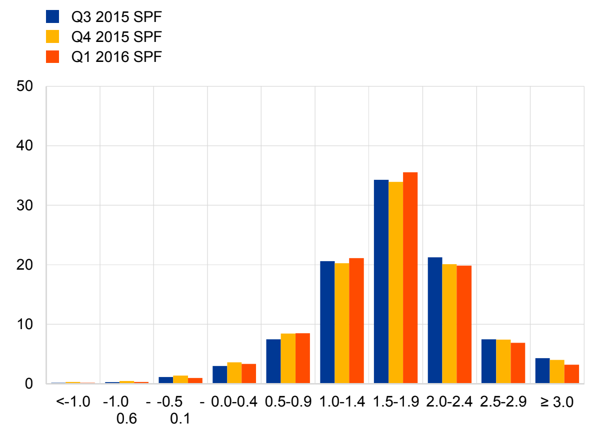


Chart 10

Aggregated probability distribution of 2018 GDP growth expectations

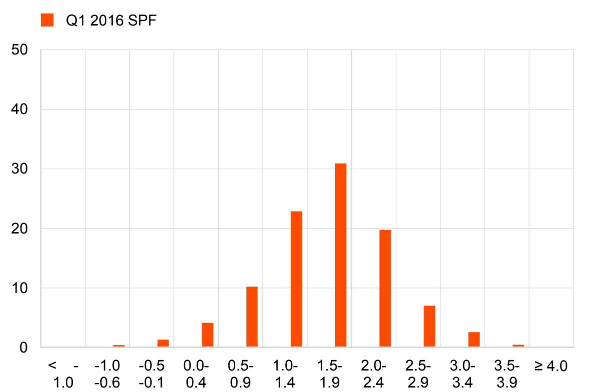
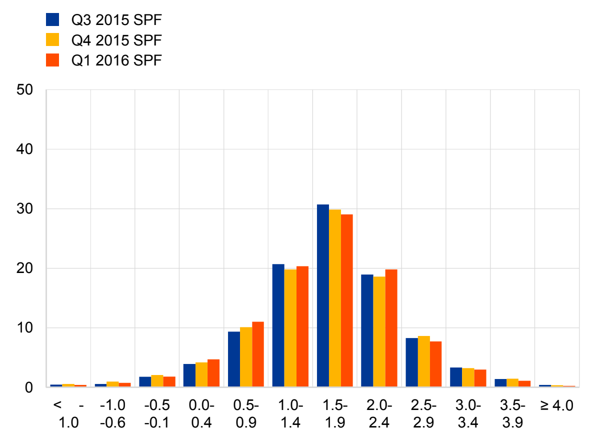


Chart 11

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



The aggregated probability distributions for 2016 and 2017 have become slightly more concentrated around outcomes between 1.5% and 1.9% (see Charts 8 and 9). For 2016 and 2017 the probabilities assigned to this bin (41% and 36% respectively) have increased compared with the previous survey round. Also for 2018 forecasters assign the highest probability (31%) to an outcome between 1.5% and 1.9% (see Chart 10).

The balance of risks to GDP growth (as measured by the difference between the mean of the aggregated probability distribution and the average point forecast) remains tilted somewhat to the downside for all three years. The majority of the qualitative comments by the respondents continued to report a possibly stronger downturn in China and other emerging economies as by far the main downside risk surrounding their forecasts. Other downside risks mentioned relate to external factors, including a possible escalation of the geopolitical tensions and more volatile global financial markets.[5] In addition to external factors, respondents somewhat more often than previously identified downside risks stemming from continuing policy uncertainty within Europe. Upside risks identified relate to structural reforms providing a higher than assumed contribution to growth and to possible public stimulus of housing investment and consumption in the context of the inflow of refugees.

Longer-term growth expectations (for 2020) remained unchanged at 1.7%. The SPF results for that horizon remain higher than the latest available Consensus Economics and Euro Zone Barometer forecasts from October 2015, which stood at 1.4%. The aggregated probability distribution of the SPF longer-term growth expectations has become marginally more dispersed (suggesting more uncertainty) and the mean of the distribution in relation to the average point forecast suggests that respondents continue to perceive risks to be slightly on the downside (see Chart 11).

4 Unemployment rate expectations have been revised down slightly

The average point forecasts for the unemployment rate were 10.3% for 2016, 9.9% for 2017 and 9.4% for 2018. This implies a downward revision by 0.2 percentage point over all horizons with respect to the previous round (see Table). The expectations path remains downward sloping. The expectations are 0.2 percentage point lower in 2016 and 2017 than those in the December 2015 Eurosystem staff macroeconomic projection exercise. They are also lower when compared with the December 2015 Consensus Economics and Euro Zone Barometer surveys.

SPF respondents perceive the balance of risks to their unemployment rate forecasts to be tilted slightly to the upside (see Charts 12-14). These upside risks are mainly mirroring downside risks to expected real GDP growth in the short run mainly owing to the current loss of momentum in emerging economies. Another short-run upside risk mentioned by some respondents is the recent high inflows of refugees. Concerning downside risks, several panellists consider that labour markets will become more flexible in the long run thanks to the implementation of structural reforms.

The average point forecast for the longer-term unemployment rate (in 2020) is 9.0%, representing a downward revision of 0.2 percentage point from the previous round. The average point forecasts are now at their lowest level since 2012, although they remain higher than average pre-crisis expectations (of around

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[5] In this round, SPF respondents were explicitly asked about their “assumptions/expectations regarding monetary policy and economic developments in the international environment and the role they play in the baseline and risks of the growth and inflation forecasts for the euro area”.

7%). Together with the average point forecast, the aggregated probability distribution has also slightly moved towards lower levels compared with the previous SPF round (see Chart 15). Compared with the previous round, the distribution of responses is more clearly skewed towards higher values. This matches the downside risks recorded for real GDP developments.

Chart 12

Aggregated probability distribution of the unemployment rate for 2016

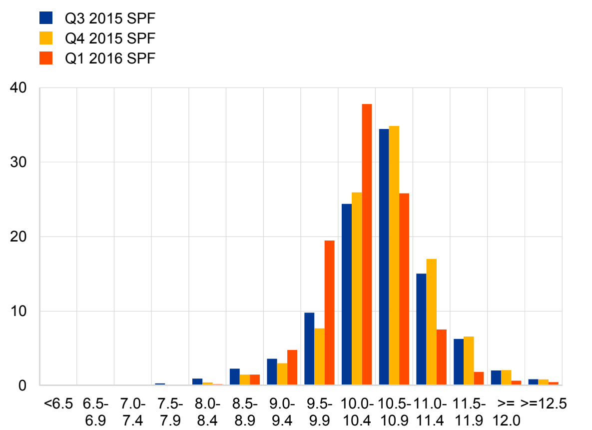


Chart 13

Aggregated probability distribution of the unemployment rate for 2017

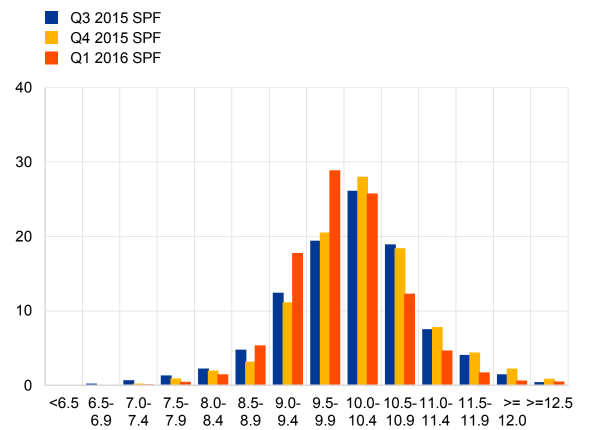


Chart 14

Aggregated probability distribution of the unemployment rate for 2018

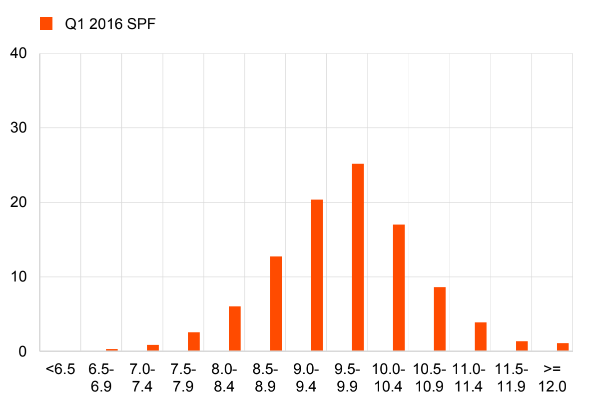
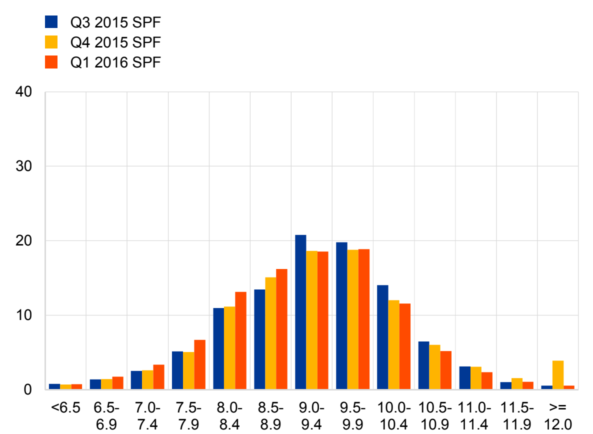


Chart 15

Aggregated probability distribution of longer-term unemployment rate expectations

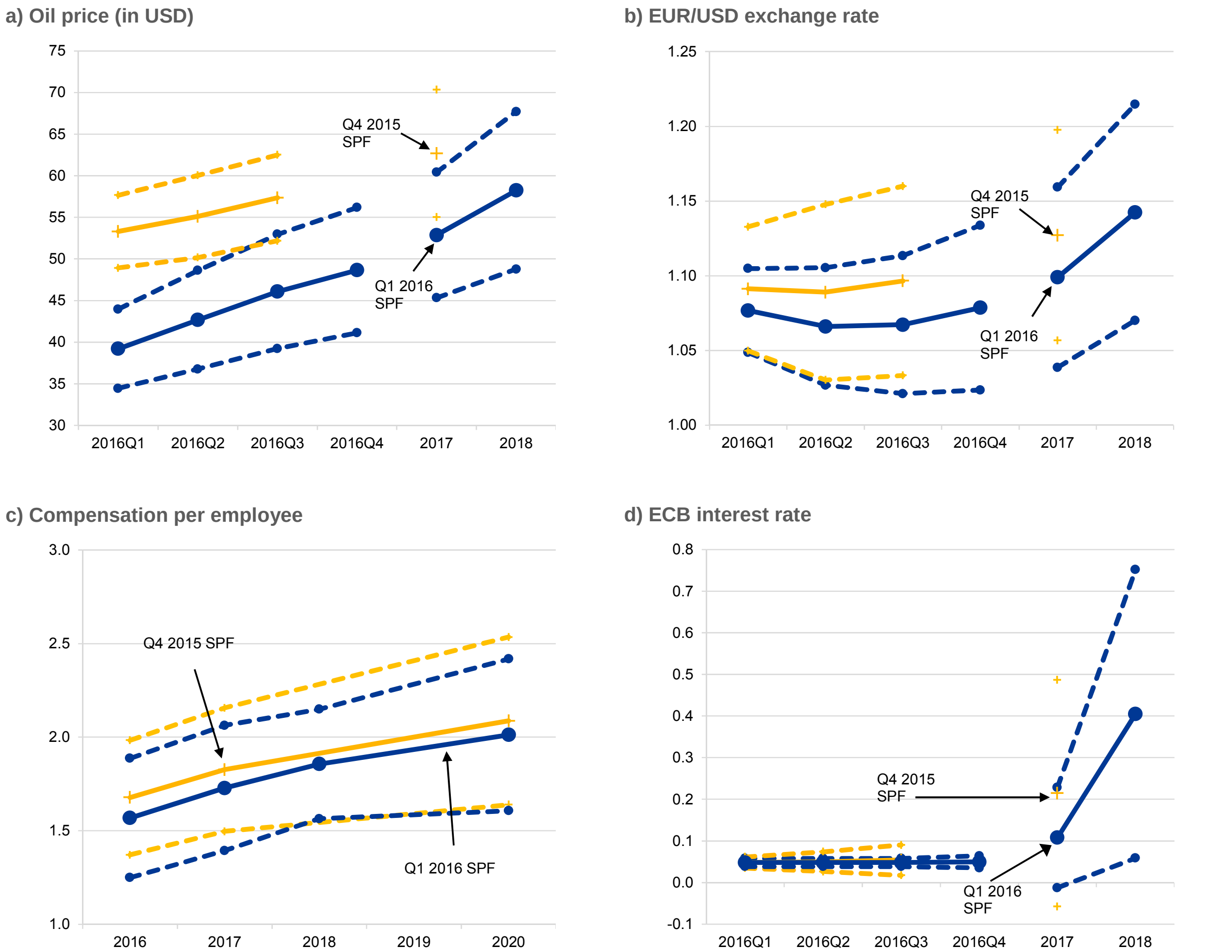


5 Other variables and conditioning assumptions

Other information provided by respondents suggests revisions in key assumption variables compared with the previous round. In particular, there have been large downward revisions of assumptions for oil prices in US dollars and smaller ones for the USD/EUR exchange rate, growth rates of compensation per employee and the short-term interest rate. Oil prices are now expected to average USD 39 per barrel in the first quarter of 2016 and to increase to USD 49 by the fourth quarter of 2016 and to levels around USD 53 in 2017 and USD 58 in 2018. Compared with the previous survey round, oil price assumptions are lower by around 25% in the first quarter of 2016 and 15-20% thereafter (see Chart 16a). The expected path for the EUR/USD exchange rate (decreasing initially from around 1.08 in Q1 2016 to 1.07 in Q2 and Q3 2016, but rising again thereafter) is slightly lower than in the previous SPF round (see Chart 16b). Despite this, the strong downward revision in assumed crude oil prices in dollar terms means that oil prices in euro terms are also substantially lower. The profile of the annual growth in compensation per employee has been revised down by 0.1 percentage point across the forecast horizon, standing at 1.6% for 2016, 1.7% for 2017, 1.8% for 2017, 1.8% for 2018 and 2.0% for 2020 (see Chart 16c). The mean assumption for the rate on the Eurosystem's main refinancing operations is that it will stand at 0.05% throughout 2016, but then edge upwards to 0.11% in 2017 and 0.41% in 2018 (see Chart 16d). Compared with the previous round, the expectation for 2017 is 0.1 percentage point lower.

Chart 16

Underlying assumptions



Notes: The dashed lines and small line markers proxy the uncertainty surrounding average assumptions (plus/minus one standard deviation of the point estimates). The assumptions for 2018 were not surveyed in the previous (Q4 2015) round.

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