EUROPEAN CENTRAL BANK

EUROSYSTEM

The ECB Survey of Professional Forecasters

3rd Quarter of 2015

July 2015

Content

The results of the ECB Survey of Professional Forecasters (SPF) for the third quarter of 2015[1] indicate average inflation expectations of 0.2%, 1.3% and 1.6% for 2015, 2016 and 2017 respectively. This implies small upward revisions for the first two years. Average longer-term inflation expectations (for 2020) stand at 1.86%, edging up further from 1.84% (for 2019) in the previous round. Real GDP growth expectations were broadly unchanged at all horizons, standing at 1.4% for 2015, 1.8% for 2016, 1.8% for 2017 and 1.7% in the longer term (for 2020). Unemployment rate expectations were revised somewhat further down over all horizons.

Table

Results of the SPF in comparison with other forecasts and projections

(annual percentage changes, unless otherwise indicated)

	Survey horizon			
HICP inflation	**2015**	**2016**	**2017**	**Long-term[1)]**
SPF Q3 2015	0.2	1.3	1.6	1.9
Previous SPF (Q2 2015)	*0.1*	*1.2*	*1.6*	*1.8*
Eurosystem staff macroeconomic projections (Jun. 2015)	0.3	1.5	1.8	-
Consensus Economics (Jun. 2015)	0.2	1.3	1.5	1.9
Euro Zone Barometer (Jun. 2015)	0.2	1.3	1.6	1.8
Real GDP growth	**2015**	**2016**	**2017**	**Long-term[1)]**
SPF Q3 2015	1.4	1.8	1.8	1.7
Previous SPF (Q2 2015)	*1.4*	*1.7*	*1.8*	*1.7*
Eurosystem staff macroeconomic projections (Jun. 2015)	1.5	1.9	2.0	-
Consensus Economics (Jun. 2015)	1.5	1.8	1.6	1.4
Euro Zone Barometer (Jun. 2015)	1.5	1.9	1.6	1.4
Unemployment rate[2)]	**2015**	**2016**	**2017**	**Long-term[1)]**
SPF Q3 2015	11.0	10.5	10.0	9.0
Previous SPF (Q2 2015)	*11.1*	*10.6*	*10.1*	*9.2*
Eurosystem staff macroeconomic projections (Jun. 2015)	11.1	10.6	10.0	-
Consensus Economics (Jun. 2015)	11.1	10.6	-	-
Euro Zone Barometer (Jun. 2015)	11.0	10.5	9.9	9.2

1) Long-term expectations refer to 2020 for Q3 2015 and to 2019 for Q2 2015. For Consensus Economics, long-term expectations are taken from the April 2015 surveys. For the Euro Zone Barometer, long-term expectations are taken from the April 2015 surveys.
2) As a percentage of the labour force.

1 SPF short-term inflation expectations revised upwards

The Q3 2015 SPF average point forecasts for inflation in 2015, 2016 and 2017 stand at 0.2%, 1.3% and 1.6% respectively. This implies an upward revision of 0.1 percentage point for 2015 and 2016 compared with the survey round from the second quarter of 2015 (see the table above). Forecasts for 2017 were also revised up slightly, although not visible at one decimal rounding. Compared with the June 2015 Eurosystem staff macroeconomic projection exercise, which was finalised on

1 The survey was conducted between 30 June and 6 July 2015. The total number of responses was 54, which is in line with the historical average for responses to the Q3 round. 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 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 (June 2015, 0.2% year on year), GDP growth (Q1 2015, 1.0% year on year) and unemployment (May 2015, 11.1%). The cut-off date for data used in this report was 6 July 2015.

the basis of data and assumptions available in mid-May, expected inflation is lower by 0.1 percentage point for 2015 and by 0.2 percentage point for 2016 and 2017. The Q3 SPF expectations are very similar to those from the June 2015 Consensus Economics and Euro Zone Barometer surveys.

SPF respondents see a number of factors that support the strong pick-up in inflation in 2016 and 2017. The main factors include the confirmation of ongoing, albeit moderate, growth in economic activity, monetary policy measures, exchange rate developments and base effects from past oil price developments. However, respondents expect the pick-up in economic activity to exert only slowly increasing pressure on prices as the slack remaining in the euro area economy will be removed only gradually. The impact of structural reform efforts and ongoing adjustments and rebalancing in some euro area countries is also expected to contribute to containing inflationary pressures. Overall, the factors expected to drive the inflation profile over the next couple of years are largely similar to those reported in the previous (Q2 2015) SPF round.

Respondents reported that the upward revisions from the previous round mainly reflected the confirmation of an ongoing strengthening of activity and the impact of monetary policy measures. Other factors cited were oil prices, which at the time the survey was conducted were higher than in the previous round, and the lagged impact from exchange rate developments, which have remained at relatively low levels.

Chart 1

Aggregated probability distribution of inflation expectations for 2015

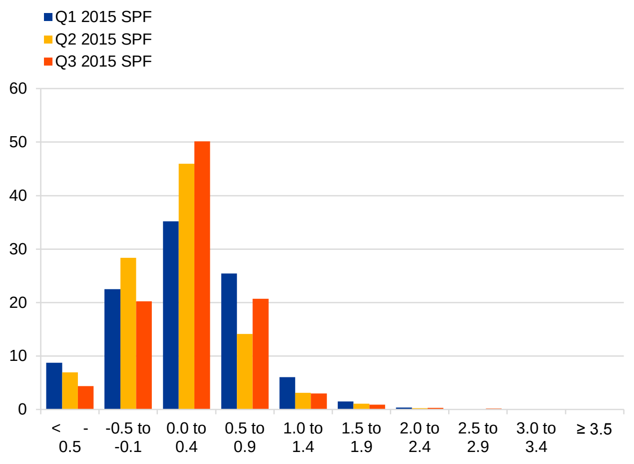
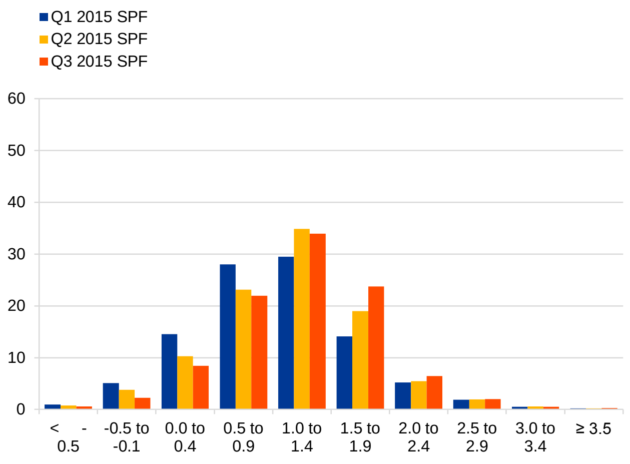


Chart 2

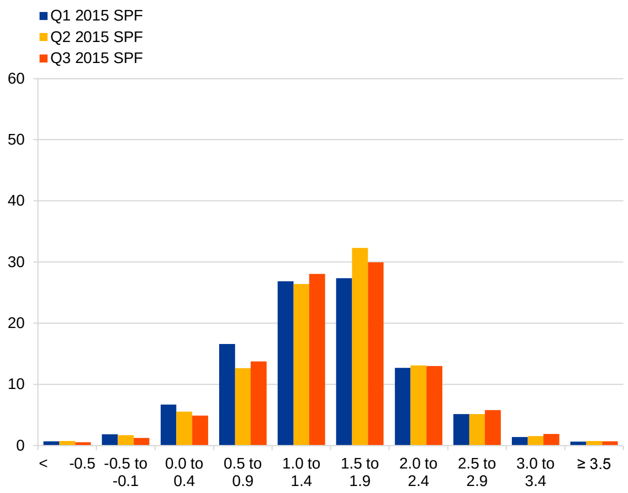
Aggregated probability distribution of inflation expectations for 2016



Compared with the previous SPF round, the aggregate probability distributions for expected inflation in 2015 and 2016 moved towards higher outcomes. The aggregate distributions also narrowed somewhat, primarily reflecting lower perceived

Chart 3

Aggregated probability distribution of inflation expectations for 2017



uncertainty, on average (see Charts 1 and 2).[2] For both years, the most likely outcome remained in the same bins (i.e. 0.0-0.4% for 2015 and 1.0-1.4% for 2016). For 2017, the most likely (modal) outcome remained 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 (33%) and in 2017 (20%), the probability of negative inflation remains low, at 3% in 2016 and 2% in 2017, which is slightly lower than reported in the second 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. 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 relatively balanced for 2015 and 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. SPF respondents also report that global economic developments, in particular in China, via foreign demand and lower economic activity are a downside risk for inflation. On the other hand, exchange rates are predominantly seen as upward risks for the inflation outlook, as either further exchange rate weakness or stronger lagged effects from past developments could push up import prices. On the domestic side, while the risks to inflation stemming from the domestic growth outlook are slightly on the downside, some respondents see upside risks from the confirmation of sustained activity growth. Developments in Greece are mentioned as a source of uncertainty and a downside risk for inflation via the activity channel. However, on average, respondents assess the risks to euro area inflation outlook to be limited.

2 Longer-term inflation expectations for 2020 at 1.9%

The average point forecast for longer-term inflation expectations increased to 1.9% (for 2020) from 1.8% (for 2019). When considered at two decimal places, the increase was only 0.02 percentage point to 1.86% from 1.84% (see Chart 4), but nevertheless implies a second consecutive round of recovering longer-term

[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.

expectations. The median of the Q3 2015 point forecasts increased further, by 0.05 percentage point to 1.90% and the modal (most reported value) remained at 2.0%. Over 80% of respondents expect longer-term inflation to be in the range 1.7-2.0% (see Chart 5).[3] The SPF longer-term inflation expectations are in line with those from the April 2015 Consensus Economics survey and slightly above the latest inflation expectations from the April 2015 Eurozone Barometer, which stood at 1.8%.

Chart 4

Outlook for longer-term inflation expectations

(annual percentage changes)

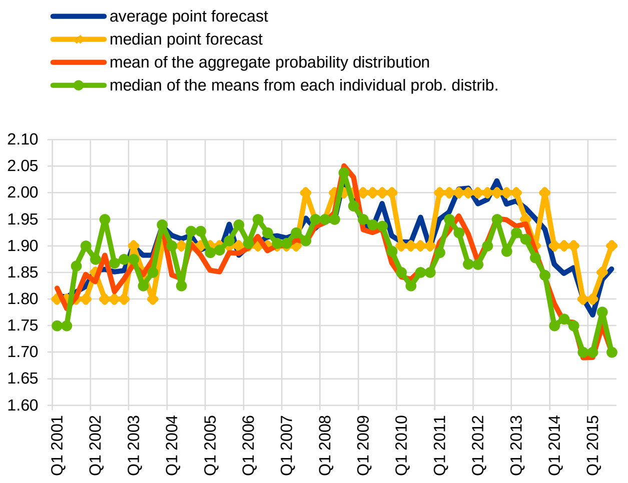
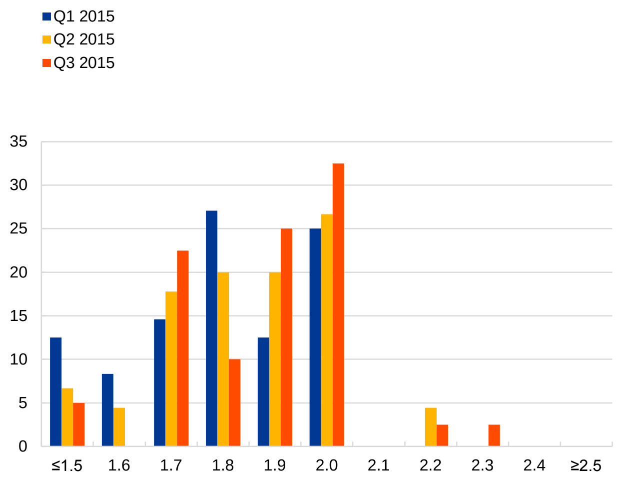


Chart 5

Cross sectional distribution of long-term inflation forecasts

(percentage of respondents)



The aggregate probability distribution was largely unchanged 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 1.70% compared with the mean point estimate of 1.86%. The probability of inflation being at or above 2.0% was 33%, compared with 37% in the second quarter of 2015, while that of its being below 1% was unchanged at 13% compared with 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, increased slightly compared with the previous round. This increase mainly reflected outliers, as the quasi-standard deviation – a measure which is more robust to outliers – remained unchanged.[4] The aggregate uncertainty surrounding longer-term inflation expectations, as measured by the standard deviation of the aggregate probability distribution (see Chart 7),

[3] The 90th and 75th percentiles of the distribution of the point forecasts remained unchanged at 2.0%. The 25th percentile of the distribution of the point forecasts rose by 0.05 percentage point to 1.77% and the 10th percentile was unchanged at 1.70%.

[4] 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.

decreased, reflecting decreases in average individual uncertainty (the average standard deviation of the individual probability distributions).

Chart 6

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

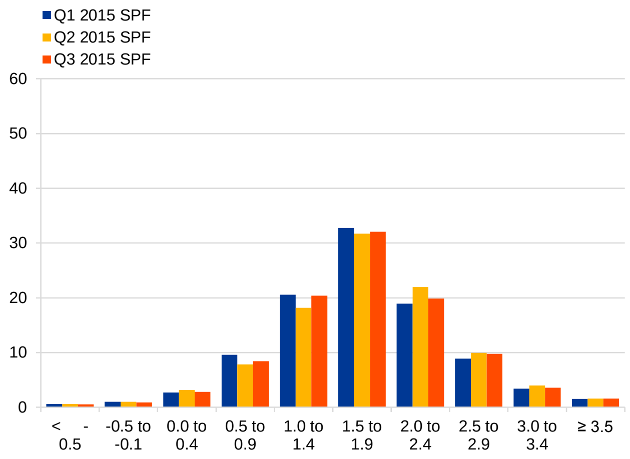
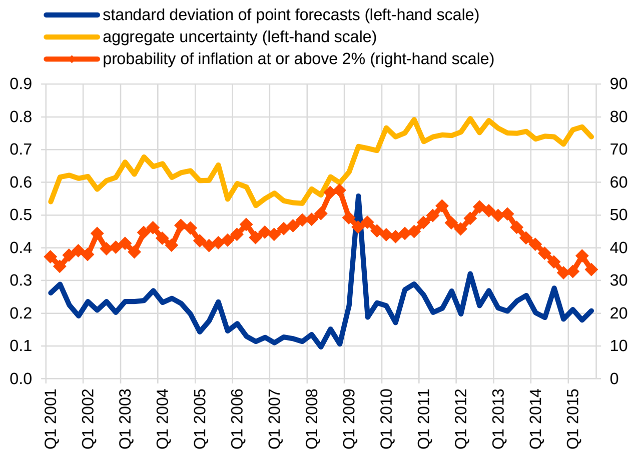


Chart 7

Disagreement and uncertainty regarding longer-term inflation expectations



3 Real GDP growth expectations broadly unchanged

Regarding the GDP forecasts, the outlook for economic activity was largely unchanged from the previous round. The average point forecast for real GDP growth remained unchanged for 2015 at 1.4%, was marginally up for 2016 to 1.8% (+0.1 percentage point compared with the previous survey round), and unchanged for 2017 at 1.8% (see the table). The upward path is explained by the ECB's accommodative monetary policy and the low oil prices. Concerning the former, many respondents expect the ECB's quantitative easing to have an upward effect, both via the exchange rate, boosting extra-euro area demand, and thanks to low interest rates, allowing for improved credit market conditions. With regard to oil prices, their low levels are expected to contribute positively to private consumption thanks to households' higher disposable income, as well as to company investment thanks to higher margins resulting from lower production costs.

The average SPF point forecasts remain somewhat below the June 2015 Eurosystem staff macroeconomic projections. They are 0.1 percentage point below for 2015 and 2016, and 0.2 percentage point below for 2017. With regard to the latest forecasts from the Euro Zone Barometer and Consensus Economics, SPF expectations are 0.1 percentage point below the forecasted level for 2015, broadly the same for 2016 and 0.2 percentage point higher for 2017.

Chart 8

Aggregated probability distribution of 2015 GDP growth expectations

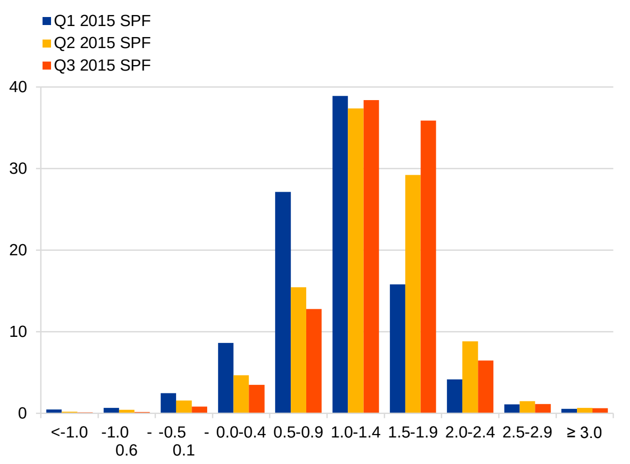


Chart 9

Aggregated probability distribution of 2016 GDP growth expectations

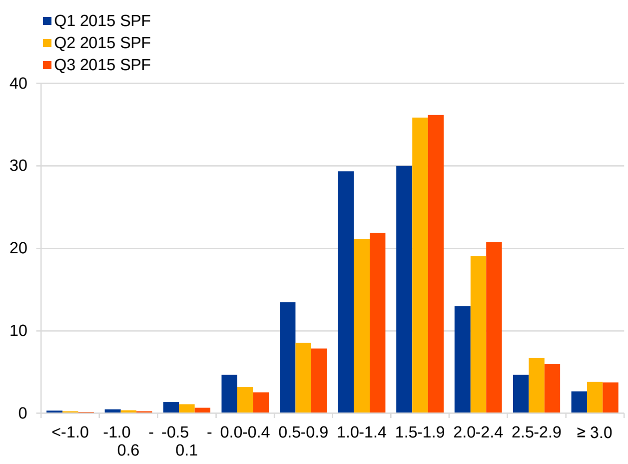


Chart 10

Aggregated probability distribution of 2017 GDP growth expectations

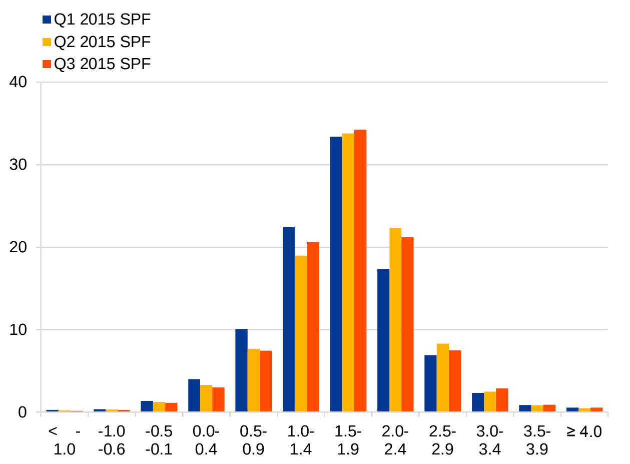
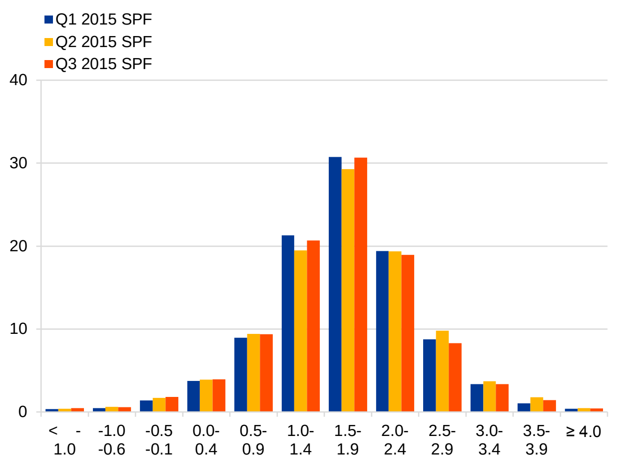


Chart 11

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



The aggregate probability distributions for 2015, 2016 and 2017 have shifted towards higher outcomes (see Charts 8-10). For 2015 the highest probability (38%) 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 (34%) also continues to be assigned to the bin between 1.5% and 1.9%.

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 majority of the qualitative comments by the respondents reported geopolitical factors as the main downside risks surrounding their forecasts. In particular, business and consumer confidence might be dampened by lower foreign demand caused by a possible escalation of the geopolitical tensions between Russia and Ukraine, as well as in the Middle East. While developments in Greece are cited as a source of uncertainty and downside risk, the majority of respondents mentioning the subject consider the likely impact on the euro area as a whole of a further deterioration in the situation to be limited. High public and private debt legacy were mentioned as possible constraints for a less restrictive fiscal policy and for increased volumes of bank lending, thus potentially reducing the scale of the recovery. Additional concerns about lower-than-expected external demand stem from the slower-than-expected world recovery, owing to a loss in momentum in emerging markets, in particular China. The few upside risks identified relate to an economic environment characterised by a longer-than-expected period of low oil prices which would improve business and consumer confidence thanks to higher disposable income. Additionally, a weaker-than-expected euro exchange rate and higher global demand were mentioned as upside risks for real GDP growth. Finally, some panellists also see upside risks in the structural reforms in southern European countries providing a higher-than-assumed contribution to growth.

Longer-term growth expectations (for 2020) remained unchanged at 1.7%. The SPF results for that horizon are 0.3 percentage point higher than the latest available Consensus Economics and Euro Zone Barometer forecasts, which stood at 1.4%. The aggregate probability distribution of the SPF longer-term growth expectations in relation to the average point forecast suggests that respondents perceive risks to be slightly to the downside (see Chart 11).

4 Unemployment rate forecasts revised slightly downwards over all horizons

The average point forecasts for the unemployment rate currently stand at 11.0% for 2015, 10.5% for 2016 and 10.0% for 2017. Expectations were revised down by 0.1 percentage point over all horizons with respect to the previous round (see the table). Compared with the June 2015 Eurosystem staff macroeconomic projection exercise, the Q3 2015 SPF figures are 0.1 percentage point lower for 2015 and 2016, but the same for 2017. Compared with the Euro Zone Barometer they are the same for 2015 and 2016, and 0.1 percentage point higher for 2017. Compared with Consensus Economics, they are 0.1 percentage point lower for 2015 and 2016.

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 essentially reflect the downside risks to real GDP growth. Additionally, a small number of respondents see stronger than expected wage pressure as a possible risk factor. Some respondents, however, refer to a higher-than-expected effect of structural reforms that are already implemented as a potential downward risk. In the long run, the lack of implementation of effective structural reforms is viewed as the major risk to the longer-term outlook for the labour market.

The average point forecast for longer-term unemployment rate expectations (9.0% for the reference year 2020) 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).

Chart 12

Aggregated probability distribution of the unemployment rate for 2015

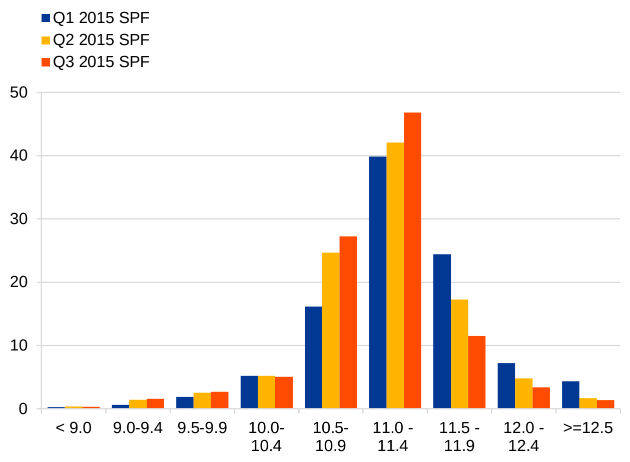


Chart 13

Aggregated probability distribution of the unemployment rate for 2016

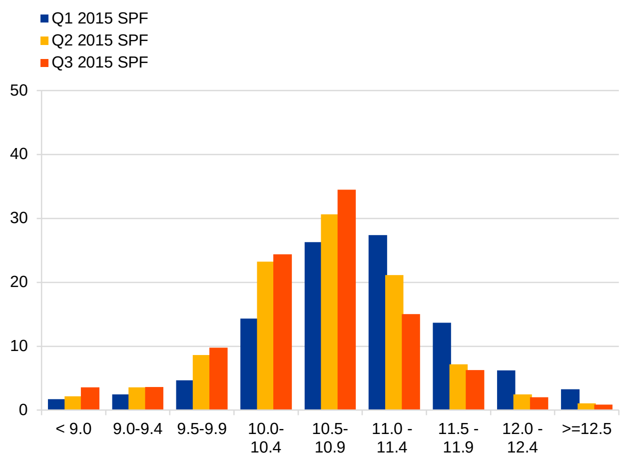


Chart 14

Aggregated probability distribution of the unemployment rate for 2017

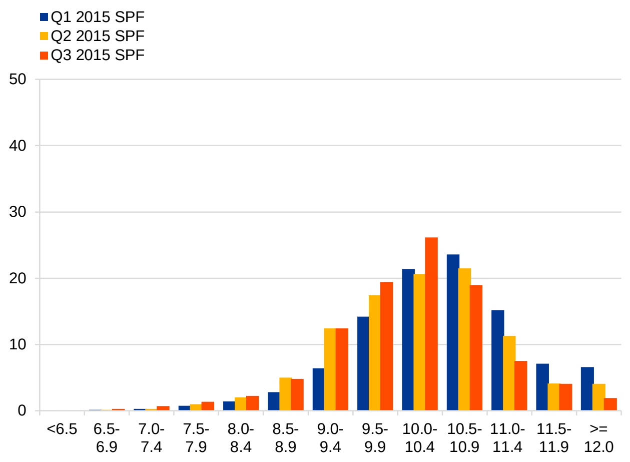
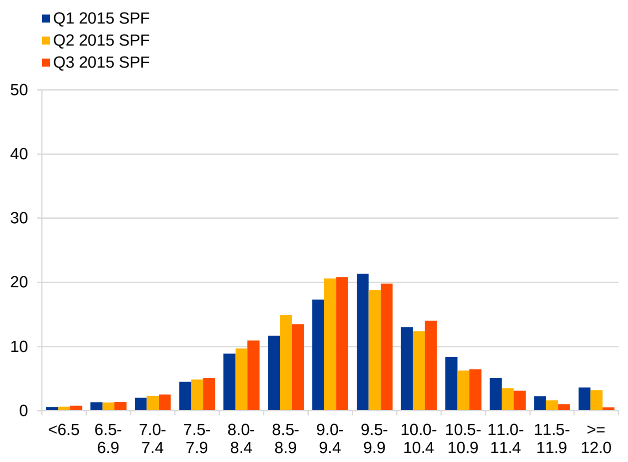


Chart 15

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 small upward revisions of the assumed oil prices in US dollars, the EUR/USD exchange rate, and the growth rate of compensation per employee, while expectations for the short-term interest rate remained relatively 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 62.7 per barrel in the third quarter of 2015 and to increase gradually to USD 68.4 in the second quarter of 2016 and to levels around USD 74.3 in 2017. Compared with the previous survey round, oil price assumptions are higher by around 5% for Q3 2015, but this difference gradually disappears up to 2017 (see Chart 16a). The expected path for the EUR/USD exchange rate (increasing from around 1.07 in 2015 to 1.12 by 2017) is slightly higher than in the previous SPF (see Chart 16b). The combination of the assumptions for oil prices in US dollar terms and the EUR/USD exchange rate imply that oil prices in euro terms are marginally higher by around €1-2 per barrel in 2015, but that this difference will disappear by 2017. The annual growth in compensation per employee is expected to be slightly higher compared with the previous SPF round, standing at 1.5% for 2015, 1.7% for 2016, 1.9% for 2017 and 2.1% for 2020 (see Chart 16c). The mean assumptions for the rate on the Eurosystem's main refinancing operations imply a marginal downward revision of 0.02 and 0.04 percentage point for 2016 and 2017. The rate is expected to be at 0.05% throughout 2015, but to then edge upwards to 0.06% in 2016 (see Chart 16d). Forecasters expect an increase to 0.31% in 2017.

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