



EUROPEAN CENTRAL BANK
EUROSYSTEM

The ECB Survey of Professional Forecasters

First quarter of 2018

January 2018



Contents

| | | |
|----------|--|----------|
| 1 | Both HICP inflation and HICP excluding food and energy inflation expected to pick up steadily over the period 2018-20 | 3 |
| 2 | Longer-term inflation expectations unchanged at 1.9% | 5 |
| 3 | Real GDP growth expectations revised upwards significantly for 2018 and 2019 | 6 |
| 4 | Unemployment rate expectations revised downwards again | 7 |
| 5 | Other variables and conditioning assumptions | 9 |

The results of the ECB Survey of Professional Forecasters (SPF) for the first quarter of 2018 show average inflation expectations of 1.5%, 1.7% and 1.8% for 2018, 2019 and 2020, respectively, implying small upward revisions for 2018 and 2019 (expectations for 2020 were not surveyed in the previous round).¹ Average longer-term inflation expectations (which refer to 2022) remained at 1.9%. Expectations for real GDP growth were also revised upwards, and stood at 2.3%, 1.9%, and 1.7% for 2018, 2019 and 2020, respectively. Expectations for real GDP growth in the longer term remained at 1.6%. Unemployment rate expectations were revised down, particularly in the longer term.

Table 1
Results of the SPF in comparison with other expectations and projections

(annual percentage changes, unless otherwise indicated)

| | Survey horizon | | | |
|--|----------------|------|------|---------------------------|
| | 2018 | 2019 | 2020 | Longer term ¹⁾ |
| HICP inflation | | | | |
| Q1 2018 SPF | 1.5 | 1.7 | 1.8 | 1.9 |
| Previous SPF (Q4 2017) | 1.4 | 1.6 | - | 1.9 |
| Eurosystem staff macroeconomic projections (Dec. 2017) | 1.4 | 1.5 | 1.7 | - |
| Consensus Economics (Jan. 2018) | 1.4 | 1.6 | 1.7 | 1.8 |
| Euro Zone Barometer (Dec. 2017) | 1.4 | 1.6 | 1.8 | 1.9 |
| Memo: HICP inflation excluding food and energy | | | | |
| Q1 2018 SPF | 1.2 | 1.5 | 1.7 | 1.8 |
| Previous SPF (Q4 2017) | 1.4 | 1.5 | - | 1.8 |
| Eurosystem staff macroeconomic projections (Dec. 2017) | 1.1 | 1.5 | 1.8 | - |
| Real GDP growth | | | | |
| Q1 2018 SPF | 2.3 | 1.9 | 1.7 | 1.6 |
| Previous SPF (Q4 2017) | 1.9 | 1.7 | - | 1.6 |
| Eurosystem staff macroeconomic projections (Dec. 2017) | 2.3 | 1.9 | 1.7 | - |
| Consensus Economics (Jan. 2018) | 2.2 | 1.8 | 1.3 | 1.4 |
| Euro Zone Barometer (Dec. 2017) | 2.1 | 1.7 | 1.5 | 1.4 |
| Unemployment rate²⁾ | | | | |
| Q1 2018 SPF | 8.4 | 7.9 | 7.6 | 7.5 |
| Previous SPF (Q4 2017) | 8.6 | 8.2 | - | 7.9 |
| Eurosystem staff macroeconomic projections (Dec. 2017) | 8.4 | 7.8 | 7.3 | - |
| Consensus Economics (Jan. 2018) | 8.5 | 8.1 | - | - |
| Euro Zone Barometer (Dec. 2017) | 8.5 | 8.1 | 8.0 | 7.7 |

1) Longer-term expectations refer to 2022 for the SPF and Consensus Economics and to 2021 for the Euro Zone Barometer.

2) As a percentage of the labour force.

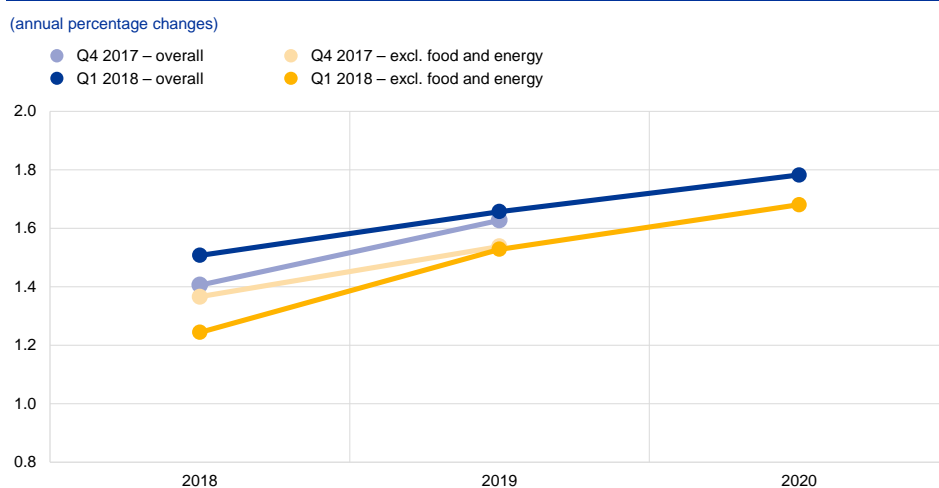
¹ This survey was conducted between 5 and 11 January. The total number of responses was 56, which is broadly comparable with the average number of responses to surveys in the first quarter (59). The survey requested information on expectations for the euro area HICP inflation rate (overall and excluding food and energy), the real GDP growth rate and the unemployment rate for 2018, 2019, 2020 and 2022, as well as for each of these variables one and two years ahead, with respect to the latest available data point. Participants were provided with a common set of the latest available data for annual HICP inflation (December 2017 flash estimates: overall inflation, 1.4%, excluding food and energy 0.9%), annual GDP growth (Q3 2017, 2.6%) and unemployment (November 2017, 8.7%).

Both HICP inflation and HICP excluding food and energy inflation expected to pick up steadily over the period 2018-20

The results of the survey for the first quarter of 2018 show average inflation expectations of 1.5%, 1.7% and 1.8% for 2018, 2019 and 2020, respectively (see Chart 1). Compared to the previous survey, this represents upward revisions of 0.1 percentage points (p.p.) for 2018 and 2019 (see Chart 1). Expectations for 2020 were sampled for the first time in this survey. The SPF inflation profile for the period 2018-2020 is comparable with the expectations reported in other surveys (i.e. within 0.1 p.p. of those figures).

Chart 1

Inflation expectations: overall HICP and HICP excluding food and energy



Average expectations for inflation excluding food and energy were 1.2%, 1.5% and 1.7% for 2018, 2019 and 2020, respectively. Compared to the previous survey, this represents a downward revision of 0.1 p.p. for 2018, but little change for 2019.

The probabilities assigned to lower inflation outcomes (less than 1.5%) for 2018 and 2019 declined. For 2018, this was counter-balanced by a marked increase in probabilities assigned to inflation outcomes of 1.5% to 1.9%, with little significant change in the probabilities given to outcomes of 2.0% or higher (see Chart 2). The probability distribution for 2018 is thus narrower than at the time of the previous survey, indicating a reduction in uncertainty. The change in the probability distribution for 2019 can be characterised more as a general shift towards higher inflation outcomes (see Chart 3). Expected probabilities for inflation outcomes for 2020 were sampled for the first time in this survey and were symmetrically distributed around a central range representing inflation outcomes of 1.5% to 1.9% (see Chart 4).

Chart 2

Aggregate probability distribution for inflation expectations for 2018

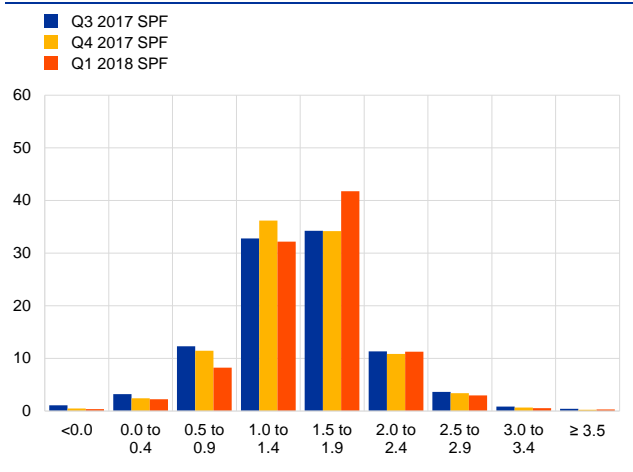


Chart 3

Aggregate probability distribution for inflation expectations for 2019

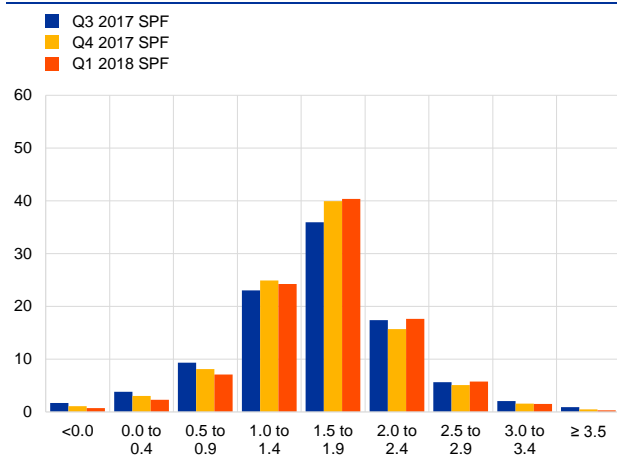
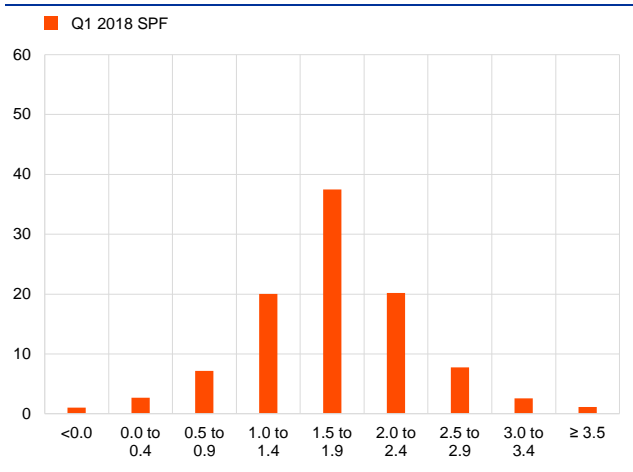


Chart 4

Aggregate probability distribution for inflation expectations for 2020



Professional forecasters expected inflation to react only with a delay to the pick-up in real economic activity in the Eurozone. This survey invited

respondents to elaborate specifically on what they viewed as the main reasons for the relatively muted response of inflation to the strengthening economic expansion seen so far, and how they saw the growth-inflation relationship evolving. In their answers, they typically noted that there had been a capacity overhang and considerable slack in the labour market (which was greater than suggested by the unemployment rate alone), which had only recently been used up. Moreover, some respondents considered wage bargaining to be a backward-looking process, which would have been influenced by the previous weak HICP inflation. These two effects, however, were now expected to diminish, and with it, inflation to pick up as

the cyclical expansion progressed. Furthermore, professional forecasters emphasised that there was likely to be considerable heterogeneity across both countries and economic sectors in the relationship between economic activity and inflation.

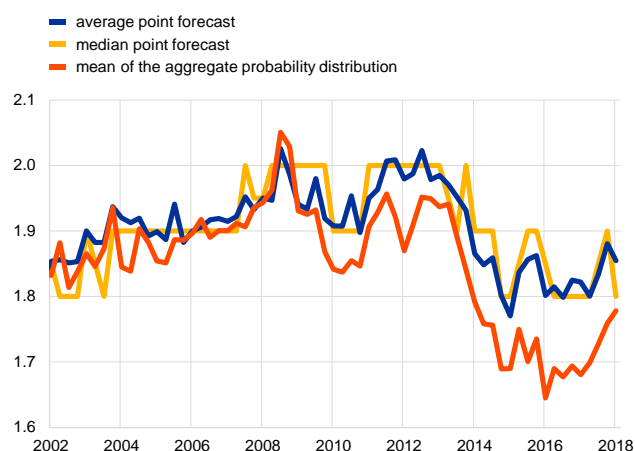
The labour market was seen as the key channel through which increased real economic activity would translate into higher inflation. Other factors, however, were identified as risks which could attenuate the impact on inflation. For example, continued competitive pressures, aided in part by the increasing role of the internet and technological progress, were seen as possible factor constraining price pressures, despite the economic upswing. Another such constraining factors cited were the ability to offshore production and support services further to low labour cost countries and a continued strengthening of the euro.

The average point forecast for longer-term inflation expectations remained unchanged at 1.9%. The median point forecast ticked down whereas the mean of the expected probability distribution increased (see chart 5). Overall, these three measures indicate that longer-term inflation expectations have recovered somewhat since the series lows in 2016, but not yet fully to their pre-crisis rates.

Chart 5

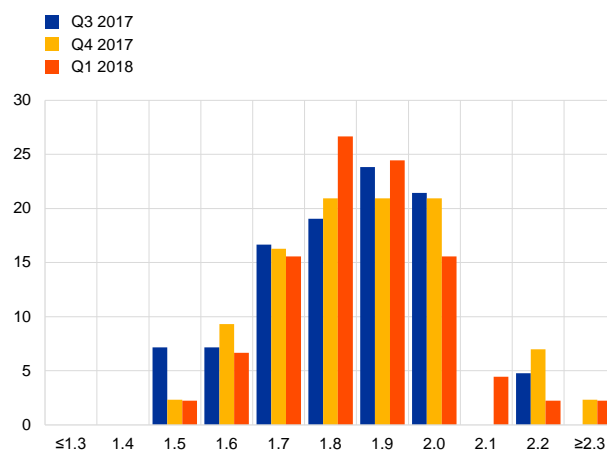
Longer-term inflation expectations

(annual percentage changes)

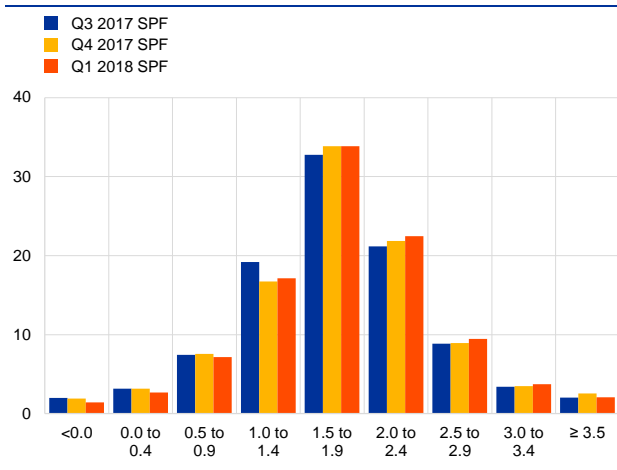
**Chart 6**

Distribution of point expectations for HICP inflation in the longer term

(percentages of respondents)

**Chart 7**

Aggregate probability distribution of longer-term inflation expectations



The proportion of forecasters reporting a longer-term expectation of 1.8% or 1.9% increased. That was counterbalanced by similar reductions in the proportions of professional forecasters reporting point forecasts of either 2.0% and above, or 1.7% and below (see Chart 6).

The aggregate probability distribution has shifted further towards the right. Consistent with the developments in the distribution mean, the probabilities assigned to nearly all probability ranges in the survey covering outcomes of 1.0% or more increased, while the reported probabilities assigned to outcomes of 0.9% or less decreased (see Chart 7).

The perceived balance of risks to longer-term inflation expectations remained to the downside.

The asymmetry of a forecast distribution is indicative of

the balance of risks that the forecast embodies. In the context of the SPF, where probabilities are reported for discrete intervals, there are a number of alternative ways of measuring its asymmetry. Furthermore, because the point forecast is reported separately to the distribution in the SPF, these two pieces of information can

be combined to derive a further indicator of the balance of risks, calculated as the mean of the aggregate probability distribution minus the average point forecast. These different measures all continued to point to a balance of risks that is to the downside.²

3 Real GDP growth expectations revised upwards significantly for 2018 and 2019

Expectations for real GDP growth in 2018, 2019 and 2020 stood at 2.3%, 1.9%, and 1.7%, respectively. Compared to the previous survey, this represents upward revisions of 0.4p.p. for 2018 and 0.2p.p. for 2019. Respondents attributed these revisions to the recent better-than-expected releases of hard and soft data for the euro area as well as for the rest of the world, which indicated continued support from foreign demand. Longer-term growth expectations continued to stand at 1.6%.

The aggregate probability distributions moved further towards higher outcomes in the near term and, albeit to a smaller extent, also for the longer term. Consistent with the pattern of revisions seen for the point forecasts, the revisions to probability distributions were greatest in the near term (see Charts 8-11). The probability of real GDP growth of over 2% in 2018 increased from 46% to 70%. For 2019, respondents assigned 50% probability to growth at or above 2.0%, up from 33% in the previous survey. For both 2018 and 2019, annual growth between 2.0% and 2.4% was regarded as the most likely outcome. For the longer-term horizon, the probability mass shifted slightly to the right, with a probability of growth over 1.5% at 61%, up from 57% in the survey for the fourth quarter of 2017.

Chart 8
Aggregate probability distribution for GDP growth expectations for 2018

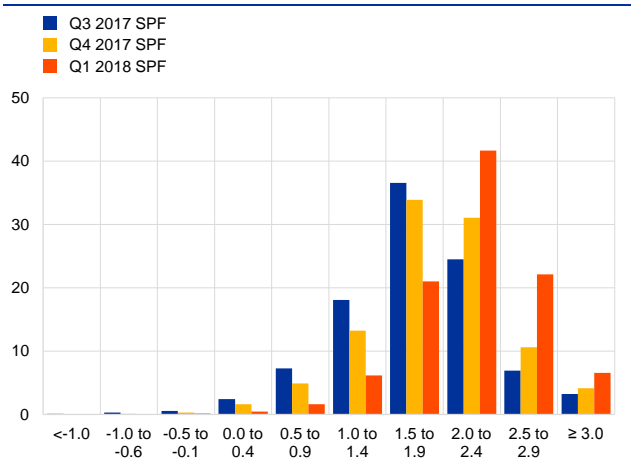
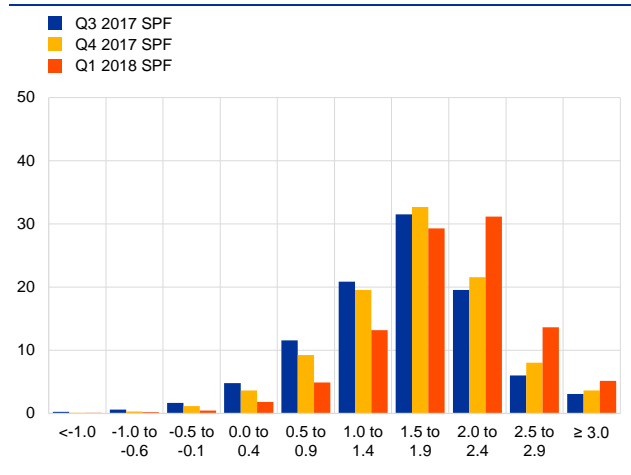


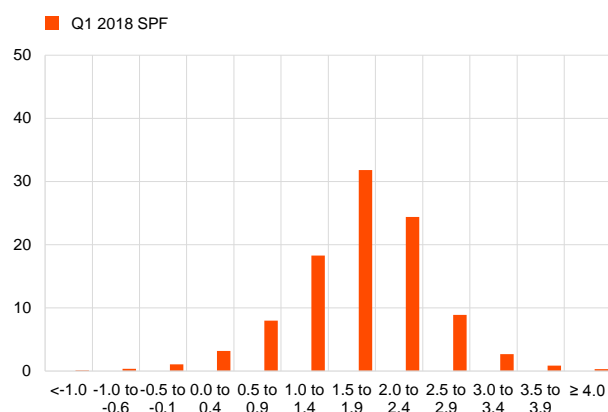
Chart 9
Aggregate probability distribution for GDP growth expectations for 2019



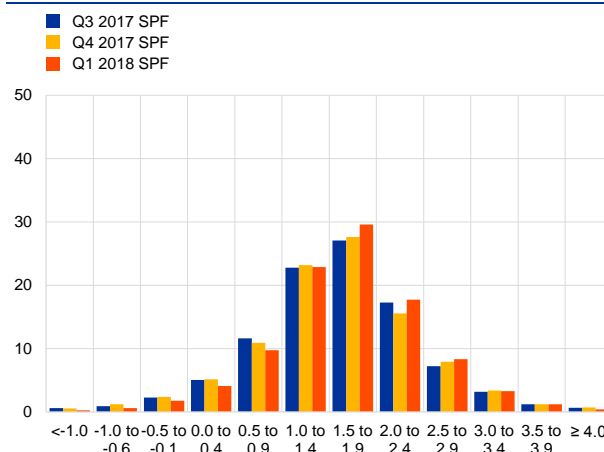
² For further information, see the box entitled “How do professional forecasters assess the risks to inflation?”, Economic Bulletin, Issue 5, ECB, 2017.

Chart 10

Aggregate probability distribution for GDP growth expectations for 2020

**Chart 11**

Aggregate probability distribution for longer-term GDP growth expectations



Overall, risks were seen as broadly balanced. At each horizon, the mean of the aggregate probability distribution was in line with the respective average point forecast. In their qualitative comments, respondents cited both upside and downside risks. Upside risks included the possibility that the current good economic sentiment would result in the economic recovery turning out to be stronger than that embodied in the central expectation, particularly in the short term. Downside risks included a variety of political factors, both inside and outside the euro area; for example, several respondents continued to cite the risk of a stronger-than-expected slowdown in China and a more general deceleration in global trade.

4

Unemployment rate expectations revised downwards again

Expectations for the unemployment rate in 2018, 2019 and 2020 were 8.4%, 7.9% and 7.6, respectively, on average. This implies further downward revisions, of 0.2p.p. for 2018 and 0.3p.p. for 2019, compared with the previous survey (see Table 1). According to the qualitative explanations provided by the forecasters, their downward revisions to the unemployment rate mainly mirrored their upward revisions to real economic growth expectations. The downward revisions to point forecasts were also reflected in changes to the aggregate probability distributions, which shifted towards lower unemployment rate outcomes (see Charts 12 to 14).

Longer-term unemployment rate expectations were revised down markedly.

The average point forecast for the longer-term unemployment rate was 7.5%, representing a 0.4p.p. downward revision from the previous survey. This the largest downward revision to the long-term unemployment expectation between two rounds in the survey's history, and the lowest rate since 2012, although it is still above average pre-crisis expectations (of around 7%). The aggregate probability distribution also moved towards lower levels compared with the previous SPF round (see Chart 15).

Risks were considered to be balanced over the period 2018-2020, but to the upside in the longer term. Over this period, the means of the aggregate probability distributions were in line with the average point forecasts, suggesting that risks were, on average, considered broadly balanced. A few respondents, however, pointed to the downside risk that the implementation of structural reforms might ultimately lead to stronger growth and lower levels of unemployment. At the longer-term horizon, the means of the aggregate probability distribution was 0.2 p.p. greater than the average point forecast, signalling upside risk on balance. This is consistent with the downside risks recorded for longer-term real GDP expectations.

Chart 12

Aggregate probability distribution for the unemployment rate for 2018

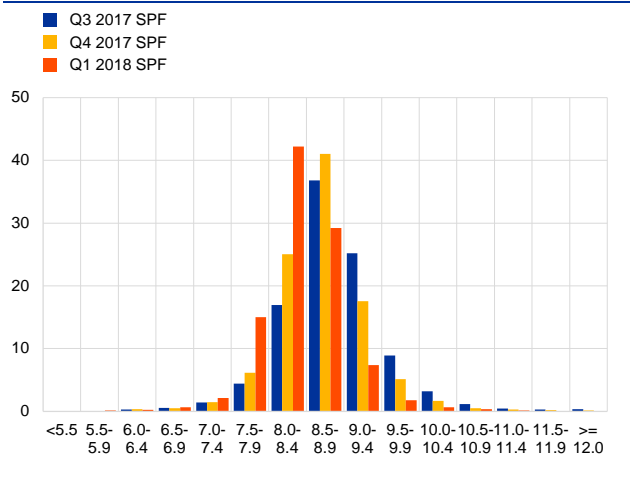


Chart 13

Aggregate probability distribution for the unemployment rate for 2019

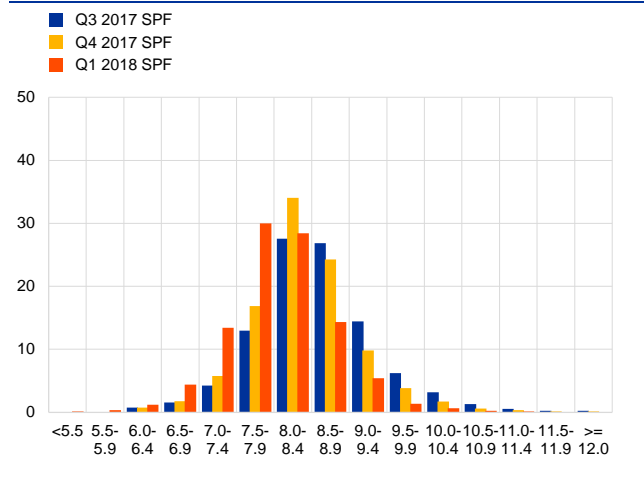


Chart 14

Aggregate probability distribution for the unemployment rate for 2020

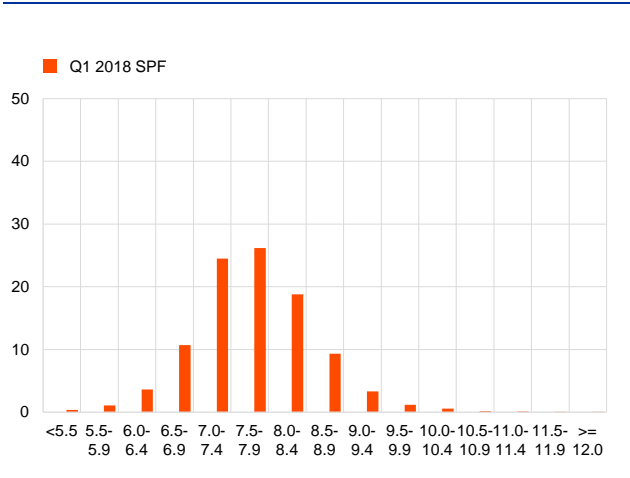
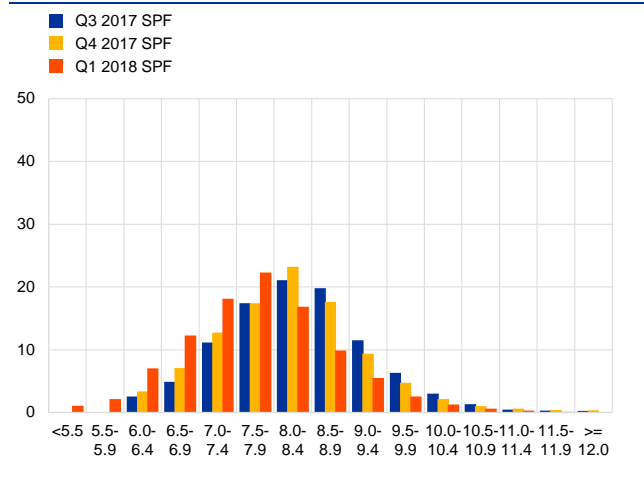


Chart 15

Aggregate probability distribution for the unemployment rate in the longer term



5 Other variables and conditioning assumptions

Respondents also reported that they expected: (i) US dollar-denominated oil prices to remain broadly constant until 2019 before increasing slightly; (ii) a very gradual strengthening of the USD/EUR exchange rate; (iii) the ECB's main refinancing rate to stay at zero in 2018, but to increase from 2019; and (iv) labour cost growth to increase slowly until 2020, before levelling off.

The mean assumption for the Eurosystem's main refinancing rate was that it would remain at around 0% throughout 2018, before increasing a little to stand at 0.24% in 2019 and 0.65% in 2020 (see panel (a) of Chart 16). This represents no change to the expectations for 2018 and 2019 reported in the previous survey; expectations for 2020 were sampled for the first time in this survey.

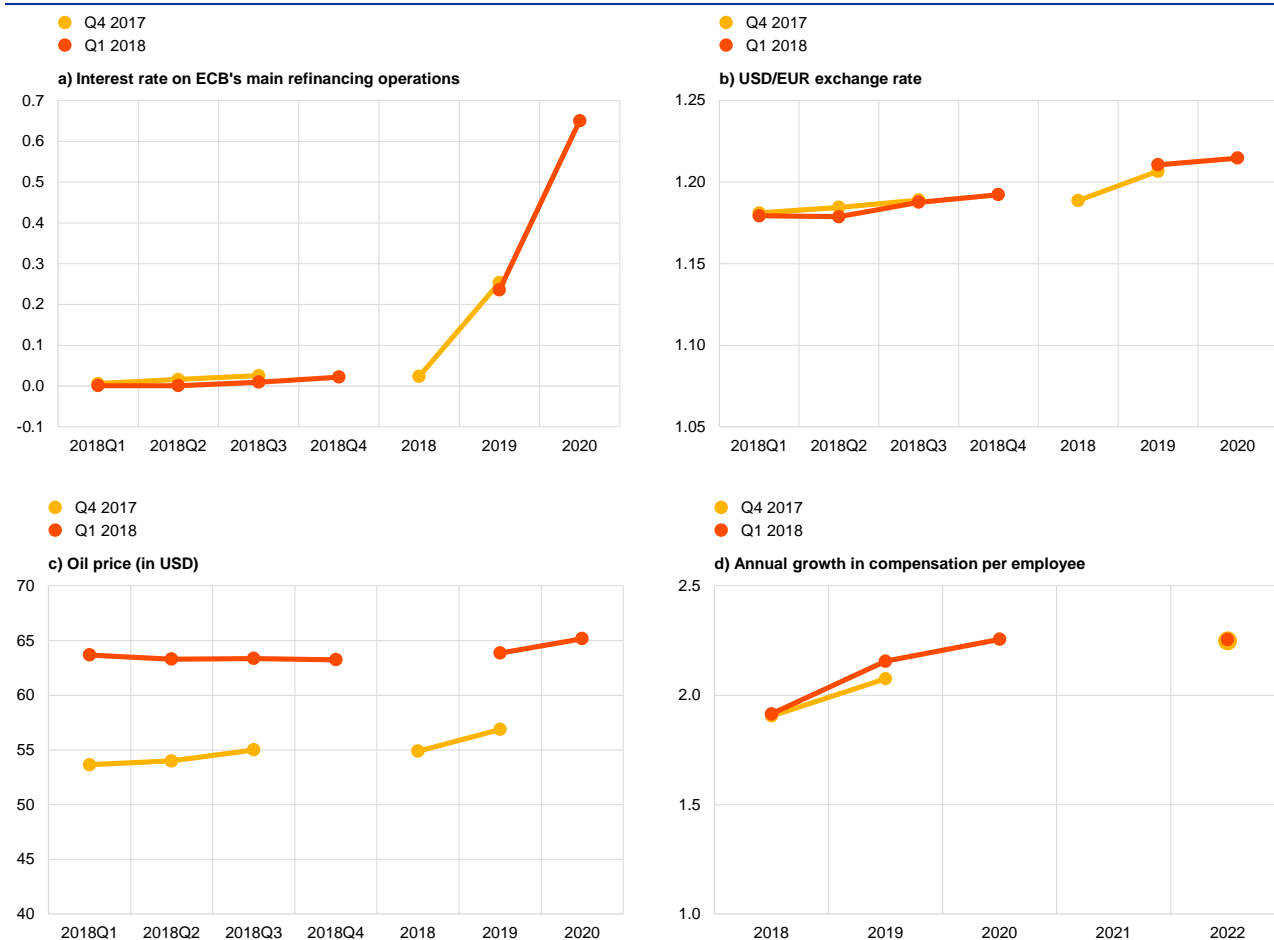
The USD/EUR exchange rate has remained broadly unchanged relative to the previous survey, both in terms of current and forward dynamics, which embody a steady, yet gradual strengthening of the euro (see panel (b) of Chart 16).

US dollar-denominated oil prices were expected to average \$63 for 2018 and \$64 for 2019 and \$65 for 2020. This implies that forecasters now expect prices to be 17% higher for each quarter in 2018, on average, than they did in the survey in the fourth quarter of 2017. Because there has been little change in the expected USD/EUR exchange rate since the previous survey, the change in the implied profile for the oil price expressed in euro terms is of a similar magnitude (see panel (c) of Chart 16).

Annual growth in compensation per employee was expected to stand at 1.9% in 2018, 2.2% in 2019, and 2.3% in both 2020 and 2022, largely unchanged from the previous survey (see panel (d) of Chart 16).

Chart 16

Underlying assumptions



© European Central Bank, 2018

Postal address 60640 Frankfurt am Main, Germany
 Telephone +49 69 1344 0
 Website www.ecb.europa.eu

All rights reserved. Reproduction for educational and non-commercial purposes is permitted, provided that the source is acknowledged.

ISSN 2363-3670 (pdf)
 EU catalogue no QB-BR-18-001-EN-N (pdf)