



# ECB Survey of Monetary Analysts (SMA)

April 2019

Thank you for participating in this survey – your time and input are greatly appreciated.

**Please return the completed questionnaire to the ECB's email address [ecb-sma@ecb.europa.eu](mailto:ecb-sma@ecb.europa.eu) by close of business on Friday, 22 March 2019.**

**Disclaimer:** This survey has been formulated by ECB staff; members of the ECB's decision-making bodies are not involved in the formulation of the survey. The survey's purpose is to gather analysts' expectations of the evolution of monetary policy instruments and initiatives that the ECB has already announced, as well as their expectations for the economy and financial markets. The questions never presume or signal an intention to undertake any particular policy action in the future.

**Legal statement:** Your individual answers to this voluntary survey will be treated confidentially, in accordance with applicable Union law, and used for the purpose of the survey only. If public disclosure of your individual answers were required the ECB would seek to obtain your prior consent.

## Completing the questionnaire

The questionnaire is organised in four separate sections:

1. Key ECB Interest Rates, Market Rates and Conditions;
2. Asset Purchase Programme and Reinvestment;
3. Targeted Longer-Term Refinancing Operations;
4. Macroeconomic Outlook.

You are invited to respond to all questions, although if you are unable to respond to a question you may leave it blank.

## Entering your responses

For your ease of reference, in certain sections of the questionnaire recent values of the data have been included. Details about the recent values and their cut-off dates can be found in the "Reference Data" Annex to this questionnaire.

## Data format

If a percentage rate is required as input, always omit the % sign. Similarly, if the question asks to express the answer in basis points, always omit writing bps. If a date is required as input, always provide it in the format MMM YYYY (e.g. Mar 2019).

Unless otherwise stated, the questionnaire asks for future realisations of monetary policy instruments, financial and macroeconomic variables that you consider *most likely* to prevail over specific forecast horizons. In other words, your forecasts should reflect your modal projections over the forecast horizons and, if possible, should be mutually consistent for all surveyed variables.

## Market rates

EONIA stands for the euro overnight index average and is a measure of the effective interest rate prevailing in the euro interbank overnight market. Expectations for the EONIA beyond 2019 are provided without prejudice to the ongoing discussions of the Euro short-term rate (€STR) as a new benchmark rate and the future transition from EONIA.

EUR OIS stands for euro overnight index swap and is calculated on the basis of EONIA.

With regard to swap spreads, we are seeking your estimate of the spread between the relevant benchmark sovereign bond and a maturity-matched swap against 6M Euribor (I-Spread), expressed in basis points according to the euro convention (lower numbers denote a more expensive bond).

The focus on the EONIA and EUR OIS rates in the questionnaire is only for the sake of brevity. The ECB considers the entire set of available interest rates when assessing prevailing market conditions.

## Macroeconomic variables

For real GDP growth you are asked to provide your expectations of the change in the variable in quarter-on-quarter (q-o-q) terms (not annualised), that are calendar and seasonally adjusted. In addition, you are asked for your expectations of the long-run growth rate of GDP – this should be provided in year-on-year (y-o-y) terms.

For HICP inflation and HICP inflation excluding energy and food, you are asked to provide your expectations of the change in the variable in year-on-year (y-o-y) terms. If your institution constructs projections at a monthly frequency for these variables, then a quarterly frequency may be calculated by taking the average of the y-o-y changes for each of the three months in the quarter.

For the unemployment rate you are asked to provide period averages in seasonally adjusted terms.

## Administration & contacts

If you have any questions please contact us at [ecb-sma@ecb.europa.eu](mailto:ecb-sma@ecb.europa.eu).

If your contact details or the contact person (i.e. the person that should receive the survey questionnaire) has changed, please inform us of the new details by sending an email to [ecb-sma@ecb.europa.eu](mailto:ecb-sma@ecb.europa.eu).

## Privacy Statement for the Survey of Monetary Analysts (SMA)

Participation in the Survey of Monetary Analysts (SMA) is voluntary.

All personal data are processed in accordance with EU Data Protection Law<sup>1</sup>. The European Central Bank (ECB) is the controller and the Monetary Policy Strategy Division in the ECB's Directorate General Monetary Policy is the unit responsible for processing your data.

Your personal data are processed based on your consent. The purpose of the processing is to maintain a list of contact persons in the participating organisations to whom any questions related to the survey may be addressed. There will be no further processing of your personal information if you withdraw your consent, although earlier processing will remain lawful.

Personal data will be accessed by the ECB staff members directly involved in SMA.

Your personal data are stored for as long as your organisation participates in the survey and will be deleted after that. Your personal data will also be deleted as soon as the ECB receives notification that you no longer act as the contact person for your organisation, or if a new contact person has been nominated.

You have the right to access, rectify or (with some limitations) request deletion of your personal data or restriction of the processing of your data in line with Regulation (EU) 2018/1725. You can exercise these rights by sending an email to [ecb-sma@ecb.europa.eu](mailto:ecb-sma@ecb.europa.eu). If you have any further questions, please contact the ECB's Data Protection Officer ([dpo@ecb.europa.eu](mailto:dpo@ecb.europa.eu)).

Furthermore, you have the right to contact the [European Data Protection Supervisor](#) at any time regarding the processing of your personal data.

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<sup>1</sup> Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC.

# 1 Key ECB Interest Rates, Market Rates and Conditions

1.1.1 Please provide your expectations of the most likely timing (i.e. the mode) of the next change in the key ECB interest rates.<sup>2</sup>

|     | Month | Year |
|-----|-------|------|
| DFR |       |      |
| MRO |       |      |
| MLF |       |      |

1.1.2 Please indicate the percent chance you attach to the dates surrounding the timing you specified in your response to Question 1.1.1.<sup>3</sup>

| Dates are centred on your answer to Q1.1.1; step size is at the Governing Council frequency |  |  |  |  |  |  |  |             |
|---|--|--|--|--|--|--|--|-------------|
| DFR   |  |  |  |  |  |  |  | Check       |
| Probability   |  |  |  |  |  |  |  | Sum is 100% |

| Dates are centred on your answer to Q1.1.1; step size is at the Governing Council frequency |  |  |  |  |  |  |  |             |
|---|--|--|--|--|--|--|--|-------------|
| MRO   |  |  |  |  |  |  |  | Check       |
| Probability   |  |  |  |  |  |  |  | Sum is 100% |

1.1.3 Please provide your expectations of the most likely size (i.e. the mode) of the next change in the key ECB interest rates.<sup>4</sup>

|     | Size of the next rate change (in bps) |
|-----|---------------------------------------|
| DFR |                                       |
| MRO |                                       |
| MLF |                                       |

<sup>2</sup> DFR refers to the rate on the deposit facility rate, MRO refers to the rate on main refinancing operations and the MLF refers to the rate on the marginal lending facility.

<sup>3</sup> Responses must add up to 100%. Please omit the % sign when entering the data.

<sup>4</sup> Please include the sign of the rate change (+ for an increase, - for a cut).

1.1.4 Please indicate the percent chance you attach to smaller and larger sizes of the next change in the DFR and MRO rates you have specified in your response to Question 1.1.3.<sup>5</sup>

| Sizes of rate changes are centred on your answer to Q1.1.3; step size is +/- 5 bps |  |  |  |  |  |  |  |             |
|--|--|--|--|--|--|--|--|-------------|
| DFR  |  |  |  |  |  |  |  | Check       |
| Probability  |  |  |  |  |  |  |  | Sum is 100% |

| Sizes of rate changes are centred on your answer to Q1.1.3; step size is +/- 5 bps |  |  |  |  |  |  |  |             |
|--|--|--|--|--|--|--|--|-------------|
| MRO  |  |  |  |  |  |  |  | Check       |
| Probability  |  |  |  |  |  |  |  | Sum is 100% |

If it applies, please explain the factors behind any change in your answers to Question 1.1 since the previous survey.

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1.2 Please indicate the level (in percentage per annum) of the following interest rates<sup>6</sup> that you consider most likely (i.e. the mode) to prevail over the reserve maintenance period<sup>7</sup> after the Governing Council meetings listed below. Also, indicate the level that you consider most likely (i.e. the mode) to prevail at the end of each of the quarters and years listed below, and in the long run.

<sup>5</sup> Responses must add up to 100%. Please omit the % sign when entering the data.

<sup>6</sup> Please omit the % sign when entering the data.

<sup>7</sup> The reserve maintenance period usually starts on the Wednesday of the week following each Governing Council meeting, which is also the date from which any changes to the key ECB interest rates that the Governing Council has decided at that meeting are applied to the respective Eurosystem monetary policy operations.

| Governing Council meetings | DFR   | MRO  | MLF  | EONIA | 3-month EURIBOR |
|----------------------------|-------|------|------|-------|-----------------|
| Jan-19                     | -0.40 | 0.00 | 0.25 | -0.37 | -0.31           |
| Mar-19                     | -0.40 | 0.00 | 0.25 |       |                 |
| Apr-19                     |       |      |      |       |                 |
| Jun-19                     |       |      |      |       |                 |
| Jul-19                     |       |      |      |       |                 |
| Sep-19                     |       |      |      |       |                 |
| Oct-19                     |       |      |      |       |                 |
| Dec-19                     |       |      |      |       |                 |
| Jan-20                     |       |      |      |       |                 |
| Mar-20                     |       |      |      |       |                 |
| Apr-20                     |       |      |      |       |                 |
| Jun-20                     |       |      |      |       |                 |
| Jul-20                     |       |      |      |       |                 |
| Sep-20                     |       |      |      |       |                 |
| Oct-20                     |       |      |      |       |                 |
| Dec-20                     |       |      |      |       |                 |
| Jan-21                     |       |      |      |       |                 |
| Mar-21                     |       |      |      |       |                 |
| Quarters                   |       |      |      |       |                 |
| 2021Q2                     |       |      |      |       |                 |
| 2021Q3                     |       |      |      |       |                 |
| 2021Q4                     |       |      |      |       |                 |
| 2022Q1                     |       |      |      |       |                 |
| Years                      |       |      |      |       |                 |
| 2022                       |       |      |      |       |                 |
| 2023                       |       |      |      |       |                 |
| 2024                       |       |      |      |       |                 |
| Long run <sup>8</sup>      |       |      |      |       |                 |

<sup>8</sup> The long run should be interpreted as the horizon over which the effects of all shocks will vanish. For the purposes of this survey this can be interpreted, for the sake of simplicity, as around ten years.

If it applies, please explain the factors behind any change since the previous survey.

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- 1.3 Please provide your estimate of the most likely outcome (i.e. the mode) for the 2-year and 10-year swap spread (in basis points) at the end of the period listed below for these selected euro area countries.<sup>9</sup>

|                                | DE swap spread | FR swap spread | IT swap spread | ES swap spread | NL swap spread |
|--------------------------------|----------------|----------------|----------------|----------------|----------------|
| <b>2-y swap spread</b>         |                |                |                |                |                |
| Recent value<br>(8 March 2019) | -36            | -30            | 32             | -14            | -39            |
| 2019Q4                         |                |                |                |                |                |
| <b>10-y swap spread</b>        |                |                |                |                |                |
| Recent value<br>(8 March 2019) | -50            | -16            | 194            | 48             | -41            |
| 2019Q4                         |                |                |                |                |                |

If it applies, please explain the factors behind any change since the previous survey.

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- 1.4 What is your estimate of the level that the Governing Council would consider as a lower bound for each of the key interest rates?<sup>10</sup>

| DFR | MRO | MLF |
|-----|-----|-----|
|     |     |     |

<sup>9</sup> Spread between the relevant benchmark sovereign bond and a maturity-matched swap against 6M Euribor (I-Spread), expressed in basis points according to the euro convention (lower numbers denote a more expensive bond).  
DE = Germany, FR = France, IT = Italy, ES = Spain, NL = The Netherlands.

<sup>10</sup> Please omit the % sign when entering the data.

If it applies, please explain the factors behind any change since the previous survey.

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1.5 Please provide your expectations of the most likely level (i.e. the mode) of excess liquidity (in EUR billion) in the euro area banking system that will prevail at the end of the periods indicated in the table.<sup>11</sup>

| Reference period           | Excess liquidity |
|----------------------------|------------------|
| Recent value (10 Mar 2019) | 1916.6           |
| 2019 Q1                    |                  |
| 2019 Q2                    |                  |
| 2019 H2                    |                  |
| 2020 H1                    |                  |
| 2020 H2                    |                  |
| 2021 H1                    |                  |
| 2021 H2                    |                  |
| 2022 H1                    |                  |
| 2022 H2                    |                  |
| 2023 H1                    |                  |
| 2023 H2                    |                  |
| 2024 H1                    |                  |
| 2024 H2                    |                  |

1.6

1.6.1 Please provide your estimate of the most likely level (i.e. the mode) of excess liquidity at which the EONIA would begin increasing above the DFR (towards the MRO).

|             | Level of excess liquidity |
|-------------|---------------------------|
| EUR billion |                           |

<sup>11</sup> Excess liquidity is defined as the holdings of central bank reserves in excess of minimum reserve requirements plus the holdings of equivalent central bank deposits.



1.6.2 Please indicate the percent chance that you attach to higher and lower levels of excess liquidity (at which the EONIA would begin increasing above the DFR) you specified in your response to Question 1.6.1.

| The excess liquidity levels are centred on your answer to Q1.6.1; step size is +/- 50bn |  |  |  |  |  |  |  |             |
|---|--|--|--|--|--|--|--|-------------|
| EUR billion   |  |  |  |  |  |  |  | Check       |
| Probability   |  |  |  |  |  |  |  | Sum is 100% |

If it applies, please explain the factors behind any change since the previous survey.

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1.7 If you expect the Governing Council to announce significant changes to its forward guidance for interest rates, please provide your expectations of the most likely timing of those changes and the specific changes you consider most likely.

| Timing of change       |                        | Changes in forward guidance for key ECB interest rates<br>(please describe type of change below) |
|------------------------|------------------------|--|
| Month<br>(Format: MMM) | Year<br>(Format: YYYY) |  |
|                        |                        |  |

## 2 Asset Purchase Programme and Reinvestment

- 2.1.1 In the Introductory Statement to the March 2019 press conference, the Governing Council states that “we intend to continue reinvesting, in full, the principal payments from maturing securities purchased under the asset purchase programme for an extended period of time past the date when we start raising the key ECB interest rates, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation.” Please provide your expectations of the most likely length (i.e. the mode) of the “extended period”.

| Length of “extended period of time past the date when we start raising the key ECB interest rates” (in months) |
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|  |

- 2.1.2 Please indicate the percent chance you attach to shorter and longer horizons for the length of the “extended period” you specified in your response to Question 2.1.1.<sup>12</sup>

| Numbers of months are centred on your answer to Q2.1.1; step size is +/- 3 months |  |  |  |  |  |  |  |             |
|---|--|--|--|--|--|--|--|-------------|
| Months  |  |  |  |  |  |  |  | Check       |
| Probability   |  |  |  |  |  |  |  | Sum is 100% |

- 2.1.3 Please provide your expectations of the most likely amount (i.e. the mode) of reinvestments of principal payments (in EUR billion) in each quarter until the end of the “extended period” you specified in your response to Question 2.1.1.

| Reference period           | Mar-19 | ... |
|----------------------------|--------|-----|
| Amount<br>(in EUR billion) |        | ... |

<sup>12</sup> Responses must add up to 100%. Please omit the % sign when entering the data.

If it applies, please explain the factors behind any change in your answers to Questions 2.1 since the previous survey.

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2.2 Please indicate how you would *change* your expectations of the length (in months) of the “extended period” during which the Governing Council intends to continue reinvesting, in full, the principal payments, under the following two hypothetical scenarios.

|   | Please indicate <i>the change</i> in your expectations of the length of the “extended period” <sup>13</sup><br>(number of months) |
|---|---|
| You postpone by one quarter the date on which you expect the Governing Council to start raising the key ECB interest rates  |   |
| You bring forward by quarter the date on which you expect the Governing Council to start raising the key ECB interest rates |   |

2.3 Please provide your expectations of the most likely (i.e. the mode) Eurosystem stock of bonds under the APP at the end of each of the years listed below (in book value, EUR billion).

| Year                         | Eurosystem APP stock of bonds |
|------------------------------|-------------------------------|
| Recent value (February 2019) | 2648                          |
| 2019                         |                               |
| 2020                         |                               |
| 2021                         |                               |
| 2022                         |                               |
| 2023                         |                               |
| 2025                         |                               |
| 2030                         |                               |

<sup>13</sup> Please include the sign of the change in the length.

2.4 If you expect the Governing Council to announce significant changes to its forward guidance on reinvestment, please provide your expectations of the most likely timing of those changes and the specific changes you consider most likely.

| Timing of change       |                        |   |
|------------------------|------------------------|---|
| Month<br>(Format: MMM) | Year<br>(Format: YYYY) | Changes in forward guidance on reinvestment<br>(please describe type of change below) |
|                        |                        |   |
|                        |                        |   |

### 3 Targeted Longer-Term Refinancing Operations

3.1 Please provide your estimate of the total repayments (in EUR billion) of the targeted longer-term refinancing operations under TLTRO-II for the dates listed below.

|         | Repayment<br>Total amount repaid (per quarter) |
|---------|--|
| 2019 Q2 |  |
| 2019 Q3 |  |
| 2019 Q4 |  |
| 2020 Q1 |  |
| 2020 Q2 |  |
| 2020 Q3 |  |
| 2020 Q4 |  |
| 2021 Q1 |  |

3.2 What do you expect to be the take-up under TLTRO-III of each operation, and in total (in EUR billion)?

|               | Amount |
|---------------|--------|
| 2019 Q3       |        |
| 2019 Q4       |        |
| 2020 Q1       |        |
| 2020 Q2       |        |
| 2020 Q3       |        |
| 2020 Q4       |        |
| 2021 Q1       |        |
| Total take-up |        |

3.3 Please indicate the further technical details you expect to be announced for the forthcoming TLTRO-III.

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## 4 Macroeconomic Outlook

4.1 For the euro area, please provide your estimates of the most likely outcome<sup>14</sup> (i.e. the mode) for real GDP growth<sup>15</sup>, the unemployment rate<sup>16</sup> and inflation<sup>17</sup>.

| Projection             |                       |                          |                       |                        |
|------------------------|-----------------------|--------------------------|-----------------------|------------------------|
|                        | Real GDP growth       | Unemployment rate        | HICP inflation        | HICP ex. energy & food |
| Quarter                | (q-o-q) <sup>15</sup> | (qtly avg) <sup>16</sup> | (y-o-y) <sup>17</sup> | (y-o-y) <sup>17</sup>  |
| 2018 Q4                | 0.2                   | 7.9                      | 1.9                   | 1.0                    |
| 2019 Q1                |                       |                          |                       |                        |
| 2019 Q2                |                       |                          |                       |                        |
| 2019 Q3                |                       |                          |                       |                        |
| 2019 Q4                |                       |                          |                       |                        |
| 2020 Q1                |                       |                          |                       |                        |
| 2020 Q2                |                       |                          |                       |                        |
| 2020 Q3                |                       |                          |                       |                        |
| 2020 Q4                |                       |                          |                       |                        |
| 2021 Q1                |                       |                          |                       |                        |
| 2021 Q2                |                       |                          |                       |                        |
| 2021 Q3                |                       |                          |                       |                        |
| 2021 Q4                |                       |                          |                       |                        |
|                        | (y-o-y)               | (rate)                   | (y-o-y)               | (y-o-y)                |
| Long run <sup>18</sup> |                       |                          |                       |                        |

If it applies, please explain the factors behind any change since the previous survey.

<sup>14</sup> Please omit the % sign when entering the data.

<sup>15</sup> q-o-q calendar and seasonally adjusted but not annualised.

<sup>16</sup> Seasonally adjusted.

<sup>17</sup> If a projection is available for this variable at a monthly frequency, then the quarterly rate may be obtained by calculating the average of the y-o-y change for each of the three months in the quarter.

<sup>18</sup> The long run should be interpreted as the horizon over which the effects of all shocks will vanish. For the purposes of this survey this can be interpreted, for the sake of simplicity, as around ten years.

4.2 How do you assess the balance of risks surrounding your projections for euro area growth and inflation?<sup>19</sup> In the second table below, please specify any particular risks that you consider important, even beyond this horizon.

|      | Risks surrounding the euro area growth outlook |          |        | Risks surrounding the euro area inflation outlook |          |        |
|------|--|----------|--------|---|----------|--------|
|      | downside                                       | balanced | upside | downside  | balanced | upside |
| 2019 |  |          |        |   |          |        |
| 2020 |  |          |        |   |          |        |
| 2021 |  |          |        |   |          |        |

| Risks surrounding the euro area growth outlook in detail | Risks surrounding the euro area inflation outlook in detail |
|--|---|
|  |   |

4.3 If the interest rate assumptions underlying your projections above are different from those indicated earlier in response to the questions in Section 1, please specify the different assumptions used.

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<sup>19</sup> Please indicate your assessment with an "X".

#### 4.4

- 4.4.1 Assuming that euro area HICP inflation would be expected to be in line with the ECB's inflation aim at the end of the projection horizon in the Eurosystem/ECB staff macroeconomic projection exercise, please indicate the policy action (if any) you would expect the ECB to take under two hypothetical scenarios: (i) a shock occurs that shifts the expected annual inflation rate by the end of the projection horizon up by 50 basis points and leads to a strengthening of the economic outlook; and (ii) a shock occurs that shifts the expected annual inflation rate by the end of the projection horizon down by 50 basis points and leads to a worsening of the economic outlook.

|                              | Policy instruments |
|------------------------------|--------------------|
| (i) Upward shift by 50bps    |                    |
| (ii) Downward shift by 50bps |                    |

- 4.4.2 Based on the policy action indicated in your answer to Question 4.4.1, please provide qualitative and quantitative details (e.g. the size and timing of changes in the level of policy rates and/or the size and timing of non-standard measures).

|                              | Qualitative and quantitative details |
|------------------------------|--------------------------------------|
| (i) Upward shift by 50bps    |                                      |
| (ii) Downward shift by 50bps |                                      |



## 5 Reference Data Annex<sup>20</sup>

All data in percent, unless otherwise stated.

| ECB policy rates                     |       |
|--------------------------------------|-------|
| Deposit facility rate                | -0.40 |
| Marginal refinancing operations rate | 0.00  |
| Marginal lending facility rate       | 0.25  |

| Market interest rates |       |
|-----------------------|-------|
| Eonia                 | -0.37 |
| 3-month Euribor       | -0.31 |

| Swap spread (in basis points) |     |
|-------------------------------|-----|
| German 2-y swap spread        | -36 |
| French 2-y swap spread        | -30 |
| Italian 2-y swap spread       | 32  |
| Spanish 2-y swap spread       | -14 |
| Dutch 2-y swap spread         | -39 |
| German 10-y swap spread       | -50 |
| French 10-y swap spread       | -16 |
| Italian 10-y swap spread      | 194 |
| Spanish 10-y swap spread      | 48  |
| Dutch 10-y swap spread        | -41 |

| Macroeconomic data  |      |
|---|------|
| Annual inflation HICP headline (February 2019)                                  | 1.50 |
| Annual inflation HICP headline (quarterly average rate 2018Q4)                  | 1.90 |
| Annual inflation HICP excluding food and energy (February 2019)                 | 1.00 |
| Annual inflation HICP excluding food and energy (quarterly average rate 2018Q4) | 1.00 |

<sup>20</sup> Cut-off date for the data provided in this annex: 8 March 2019 (unless otherwise stated).  
Sources: Bloomberg, ECB, Eurostat, and Thomson Reuters.

| Macroeconomic data   |      |
|--|------|
| Real GDP growth (q-o-q; calendar and seasonally adjusted) for 2018Q4 (according to ESA2010): | 0.22 |
| Real GDP growth (annual average rate; y-o-y) for 2018  | 1.82 |
| Unemployment rate (monthly rate; seasonally adjusted) (January 2018)                         | 7.82 |
| Unemployment rate (quarterly average rate; seasonally adjusted) (2018Q4)                     | 7.93 |

| Excess liquidity                                   |        |
|--|--------|
| Excess liquidity (in EUR billions) (10 March 2019) | 1916.6 |

### APP redemption amounts

Expected monthly redemption amounts for the APP over a rolling 12-month horizon (in EUR billions)<sup>21</sup>

| Month  | APP    |
|--------|--------|
| Feb-19 | 11.985 |
| Mar-19 | 13.855 |
| Apr-19 | 23.305 |
| May-19 | 16.894 |
| Jun-19 | 11.093 |
| Jul-19 | 21.226 |
| Aug-19 | 5.385  |
| Sep-19 | 15.27  |
| Oct-19 | 31.674 |
| Nov-19 | 16.49  |
| Dec-19 | 10.004 |
| Jan-20 | 31.729 |
| Feb-20 | 6.633  |

<sup>21</sup> Actual redemption, based on month end data. February 2019 values are ECB estimates. Figures may not add up due to rounding. Figures are preliminary and may be subject to revision.  
Note: Realised redemptions may differ from estimated redemptions.  
For more details see here: <https://www.ecb.europa.eu/press/pressconf/2018/html/index.en.html>

## TLTRO-II

All TLTRO-II operations have a maturity of four years from their settlement date; counterparties are able to repay the amounts borrowed under TLTRO-II at a quarterly frequency starting two years from the settlement of each operation. Counterparties are not subject to mandatory early repayments; for further information, see: <https://www.ecb.europa.eu/mopo/implement/omo/tltro/html/index.en.html>.

### TLTRO-II outstanding amounts and maturity dates (as of 10 March 2019)

| TLTRO-II                   | Maturity date | Amount (in EUR billion) |
|----------------------------|---------------|-------------------------|
| 1                          | 24/06/2020    | 379.9                   |
| 2                          | 30/09/2020    | 44.3                    |
| 3                          | 16/12/2020    | 61.4                    |
| 4                          | 24/03/2021    | 233.2                   |
| <b>TOTAL</b> <sup>22</sup> |               | 718.8                   |

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<sup>22</sup> Total may not add up due to rounding.