

# ECB Survey of Monetary Analysts (SMA)

April 2022

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 18:00 CET on Thursday, 31 March 2022.**

**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 by ECB staff, in accordance with applicable Union law, and used for the purpose of the survey only. The results of the survey will be published in aggregate form on the ECB website. 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 Market Conditions;
2. Asset Purchases and Reinvestment;
3. 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.

An additional section is included at the end of the questionnaire should you wish to provide any further information or feedback.

## 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 you to express the answer in basis points, always omit “bps”.

If a date is required as input, always provide it in the format MMM YYYY (e.g. Apr 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

Please note that this survey asks for the level of the euro short-term rate (€STR). The €STR reflects the wholesale euro unsecured overnight borrowing costs of euro area banks and complements existing benchmark rates.

For the sake of brevity, the questionnaire focuses on the €STR. However, 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.

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) or annual average terms. If your institution constructs projections at a monthly frequency for these variables, then a quarterly value of the y-o-y rates may be calculated by taking the average of the y-o-y changes in the three months in the quarter. An annual average can be calculated by taking the average of y-o-y changes in the 12 months, or four quarters of the year.

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

## Administration and 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 who 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 the 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. For more details see: <https://eur-lex.europa.eu/eli/reg/2018/1725/oj>

# 1 Key ECB Interest Rates, Market Rates and Market Conditions

1.1 Please indicate the percentage chance you attach to the next rate *change* being an increase or a decrease, the most likely timing of such a change and the size of the change you expect.<sup>2</sup>

DFR				
Direction	Probability	Month	Year	Size
Increase				
Decrease				

MRO				
Direction	Probability	Month	Year	Size
Increase				
Decrease				

MLF				
Direction	Probability	Month	Year	Size
Increase				
Decrease				

1.2 Please indicate the percentage chance you attach to a change at the dates surrounding the timing of the next rate *change* (*increase or decrease*) that you specified in your response to Question 1.1.<sup>3</sup>

DFR	Dates are centred on your answer to Q1.1; step size is at the Governing Council frequency								
Increase									
Probability									Check sum is 100%

<sup>2</sup> The probabilities of an increase or decrease must add up to 100%. DFR refers to the rate on the deposit facility, MRO refers to the rate on main refinancing operations and MLF refers to the rate on the marginal lending facility. Please include the sign of the rate change (+ for an increase, - for a decrease).

<sup>3</sup> Responses must add up to 100%.

DFR	Dates are centred on your answer to Q1.1; step size is at the Governing Council frequency								
Decrease Probability									Check sum is 100%

MRO	Dates are centred on your answer to Q1.1; step size is at the Governing Council frequency								
Increase Probability									Check sum is 100%

MRO	Dates are centred on your answer to Q1.1; step size is at the Governing Council frequency								
Decrease Probability									Check sum is 100%

1.3 Please indicate the percentage chance you attach to larger and smaller sizes of the next *change (increase or decrease)* in the DFR and MRO that you specified in your response to Question 1.1.<sup>4</sup>

Size of change for a rate decrease (in bps)												
	<-50	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	Check
DFR												
MRO												

Size of change for a rate increase (in bps)												
	5	10	15	20	25	30	35	40	45	50	>50	Check
DFR												
MRO												

<sup>4</sup> Responses must add up to 100%. Please omit the “%” sign when entering the data.

If applicable, please state the factors behind any change in your answers to Questions 1.1 to 1.3 since the previous survey and explain your answer in more detail.

1.4 Please indicate the level (in percentage per annum) of the following interest rates<sup>5</sup> that you consider most likely (i.e. the mode) to prevail over the reserve maintenance period<sup>6</sup> after the Governing Council monetary policy 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.

Governing Council meetings	DFR	MRO	MLF	€STR	3-month EURIBOR
Feb-22	-0.50	0.00	0.25	0.58	0.52
Mar-22	-0.50	0.00	0.25		
Apr-22					
Jun-22					
Jul-22					
Sep-22					
Oct-22					
Dec-22					
Jan-23					
Mar-23					
Apr-23					
Jun-23					
Jul-23					
Sep-23					
Oct-23					
Dec-23					
Jan-24					
Mar-24					

<sup>5</sup> Please omit the “%” sign when entering the data.

<sup>6</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	€STR	3-month EURIBOR
<b>Quarters</b>					
2024 Q2					
2024 Q3					
2024 Q4					
2025 Q1					
2025 Q2					
2025 Q3					
2025 Q4					
2026 Q1					
2026 Q2					
<b>Years</b>					
2026					
2027					
2028					
2029					
Long run <sup>7</sup>					

1.5 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>8</sup>

DFR	MRO	MLF

If applicable, please state the factors behind any change since the previous survey and explain your answer in more detail.

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<sup>7</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.

<sup>8</sup> Please omit the % sign when entering the data.

- 1.6 Please indicate whether you expect any changes to the two-tier system for reserve remuneration, and – if you do – please provide details in the table.<sup>9</sup>

No	Yes

If you indicated “yes”, please provide the date(s) when you expect the change(s) to occur and your numerical expectation(s) for the multiplier of the two-tier system.

Multiplier after expected change	Month	Year

- 1.7 In the March 2022 Monetary Policy Decisions,<sup>10</sup> the Governing Council stated that it expects the key ECB interest rates “to remain at their present levels until it sees inflation reaching 2% well ahead of the end of its projection horizon and durably for the rest of the projection horizon, and it judges that realised progress in underlying inflation is sufficiently advanced to be consistent with inflation stabilising at 2% over the medium term”.

Please provide your expectation of the most likely time interval (i.e. the mode) referred to by “well ahead of the end of its projection horizon”.

Length referred to by “well ahead of the end of its projection horizon” (in quarters)

<sup>9</sup> Please indicate your assessment with an “X”. For more details, see [https://www.ecb.europa.eu/press/pr/date/2019/html/ecb.pr190912\\_2~a0b47cd62a.en.html](https://www.ecb.europa.eu/press/pr/date/2019/html/ecb.pr190912_2~a0b47cd62a.en.html).

<sup>10</sup> See <https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.mp220310~2d19f8ba60.en.html>.



Please provide your expectation of the most likely value of underlying inflation (i.e. the mode) referred to by “realised progress in underlying inflation is sufficiently advanced”.

Value of underlying inflation referred to by “realised progress in underlying inflation is sufficiently advanced” (y-o-y) <sup>11</sup>

Please indicate whether you expect any change in the forward guidance on policy rates.<sup>12</sup>

No	Yes

If you indicated “yes”, please provide the date when you expect this change to occur.

Month	Year

<sup>11</sup> Quarterly rate of inflation. Please omit the “%” sign when entering the data.

<sup>12</sup> Please indicate your assessment with an “X”.

## 2 Asset Purchases and Reinvestment

2.1 In the March 2022 Monetary Policy Decisions, the Governing Council stated that (i) the “calibration of net purchases for the third quarter [of 2022] will be data-dependent and reflect its evolving assessment of the outlook. If the incoming data support the expectation that the medium-term inflation outlook will not weaken even after the end of its net asset purchases, the Governing Council will conclude net purchases under the APP in the third quarter. If the medium-term inflation outlook changes and if financing conditions become inconsistent with further progress towards the 2% target, the Governing Council stands ready to revise its schedule for net asset purchases in terms of size and/or duration”. (ii) “adjustments to the key ECB interest rates will take place some time after the end of the Governing Council’s net purchases under the APP”.

Please provide your expectations of the most likely date (i.e. the mode) of the end of APP net purchases.

Date of the end of net purchases under the APP	
Month	Year

2.2 In the March 2022 Monetary Policy Decisions, the Governing Council stated that it intends “to continue reinvesting, in full, the principal payments from maturing securities purchased under the APP for an extended period of time past the date when it starts 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 date (i.e. the mode) of the end of the reinvestment of the principal payments from maturing securities purchased under the APP.

Date of the end of the reinvestment of the principal payments from maturing securities purchased under the APP	
Month	Year

2.3 Please provide your expectations of the most likely (i.e. the mode) Eurosystem stock of bonds under the APP and the pandemic emergency purchase programme (PEPP) (cumulative net purchases) at the end of each of the periods listed below (book value, EUR billions).

Year	Eurosystem APP stock of bonds (cumulative net purchases)	Eurosystem PEPP stock of bonds (cumulative net purchases)
Recent value (end of 2021 Q4)	3287.4	1597.6
Recent value (end of February 2022)	3326.9	1687.9
2022 Q1		
2022 Q2		
2022 Q3		
2022 Q4		
2023 Q1		
2023 Q2		
2023 Q3		
2023 Q4		
2024 Q1		
2024 Q2		
2024 Q3		
2024 Q4		
2025 Q1		
2025 Q2		
2025 Q3		
2025 Q4		
2026 Q1		
2026 Q2		
2026 H2		
2027 H1		
2031		

If applicable, please state the factors behind any change since the previous survey and explain your answer in more detail.

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2.4 Please indicate whether you expect any changes to the forward guidance on the APP net purchases and reinvestments.<sup>13</sup>

No	Yes

If you answered “yes”, please provide details in the table below.

Changes in forward guidance on the APP net purchases and reinvestments (please describe below)	Probability you attach to the announcement <sup>14</sup>	Timing of announcement		Timing of implementation	
		Month (Format: MMM)	Year (Format: YYYY)	Month (Format: MMM)	Year (Format: YYYY)

2.5 In the March 2022 Monetary Policy Decisions, the Governing Council stated that it “intends to reinvest the principal payments from maturing securities purchased under the PEPP until at least the end of 2024. In any case, the future roll-off of the PEPP portfolio will be managed to avoid interference with the appropriate monetary policy stance”.

Please provide your expectations of the most likely date (i.e. the mode) of the end of PEPP reinvestments of principal payments.

Date of the end of PEPP reinvestments of principal payments	
Month	Year

<sup>13</sup> Please indicate your assessment with an “X”.

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

2.6 Please indicate whether you expect any changes to the forward guidance on the PEPP reinvestments.<sup>15</sup>

No	Yes

If you answered “yes”, please provide details in the table below.

Change in forward guidance on PEPP reinvestments (please describe below)	Timing of announcement	
	Month (Format: MMM)	Year (Format: YYYY)

<sup>15</sup> Please indicate your assessment with an “X”.

### 3 Refinancing Operations

3.1 Please provide your estimate of the total repayments (EUR billions) of the operations under TLTRO III for the dates listed below.<sup>16</sup>

	Amount
2021 Q3	79.24
2021 Q4	60.21
2022 Q1	1.80
2022 Q2	
2022 Q3	
2022 Q4	
2023 Q1	
2023 Q2	
2023 Q3	
2023 Q4	
2024 Q1	
2024 Q2	
2024 Q3	
2024 Q4	
<b>Total repaid amount (including all operations)</b>	

3.2 If applicable, please state the factors behind any change in your expectations about TLTROs since the previous survey and explain your answer in more detail.

<sup>16</sup> For the settlement date of the first voluntary early repayment per operation see the [Indicative calendar for the third series of targeted longer-term refinancing operations \(TLTROs-III\)](#).

## 4 Macroeconomic Outlook

4.1 For the euro area, please provide your estimates of the most likely outcome<sup>17</sup> (i.e. the mode) for real GDP growth,<sup>18</sup> the unemployment rate<sup>19</sup> and inflation.<sup>20</sup>

Please make sure that the figures reported below for projected HICP and HICP inflation excluding energy and food are consistent with your estimate of the date on which the ECB will raise its policy interest rates for the first time, given your understanding of the ECB's forward guidance.

Projection				
	Real GDP growth	Unemployment rate	HICP inflation	HICP excluding energy and food
Quarter	(q-o-q) <sup>18</sup>	(qly avg) <sup>19</sup>	(y-o-y) <sup>20</sup>	(y-o-y) <sup>20</sup>
2021 Q4	0.26	7.10	4.67	2.40
2022 Q1				
2022 Q2				
2022 Q3				
2022 Q4				
2023 Q1				
2023 Q2				
2023 Q3				
2023 Q4				
2024 Q1				
2024 Q2				
2024 Q3				
2024 Q4				
2025 Q1				
2025 Q2				
2025 Q3				
2025 Q4				
2026 Q1				
2026 Q2				

<sup>17</sup> Please omit the "%" sign when entering the data.

<sup>18</sup> q-o-q calendar and seasonally adjusted but not annualised.

<sup>19</sup> Seasonally adjusted.

<sup>20</sup> If a projection is available for this variable at a monthly frequency, 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.

Projection				
	Real GDP growth	Unemployment rate	HICP inflation	HICP excluding energy and food
2026 Q3				
2026 Q4				
2027 Q1				
2027 Q2				
2027 Q3				
2027 Q4				
2028 Q1				
2028 Q2				
2028 Q3				
2028 Q4				
	(y-o-y)	(rate)	(y-o-y)	(y-o-y)
Long run <sup>21</sup>				

If applicable, please state the factors behind any change since the previous survey and explain your answer in more detail.

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4.2 Please indicate the percentage chance that you attach to average annual HICP inflation being below or above 2% in the following years.<sup>22</sup>

	Probability HICP inflation (y-on-y)	
	below 2%	above 2%
2022		
2023		
2024		

<sup>21</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 and, for the sake of simplicity, this can be interpreted as around ten years.

<sup>22</sup> For each year, the probabilities must add up to 100% under the assumption of a continuous probability distribution around the forecast. The likelihood of observing any exact value in that case is zero, given a continuous set of possible values. For instance, if annual inflation is expected to be 2%, and the distribution around it is symmetric, then the probabilities will be 50% in both below- and above-2% cells.



4.3 Please indicate the percentage chance that you attach to the following levels of long-run HICP inflation.

Long-run HICP inflation	Probability
< 0.1%	
0.1 - 0.3%	
0.4 - 0.6%	
0.7 - 0.9%	
1.0 - 1.2%	
1.3 - 1.5%	
1.6 - 1.8%	
1.9 - 2.1%	
2.2 - 2.4%	
2.5 - 2.7%	
2.8 - 3.0%	
3.1 - 3.3%	
3.4 - 3.6%	
3.7 - 3.9%	
≥ 4.0%	
Checksum is 100%	

4.4 How do you assess the balance of risks surrounding your projections for euro area growth and inflation?<sup>23</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
2022						
2023						
2024						

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

<sup>23</sup> Please indicate your assessment with an "X".

5 Please provide any additional information or feedback.

## 6 Reference Data Annex<sup>24</sup>

All data in percent, unless otherwise stated.

ECB policy rates	
Deposit facility rate	-0.50
Main refinancing operations rate	0.00
Marginal lending facility rate	0.25

Market interest rates	
€STR	-0.58
3-month EURIBOR	-0.50

Macroeconomic data <sup>25</sup>	
Annual HICP inflation (February 2022)	5.90
Annual HICP inflation (quarterly average rate, 2021 Q4)	4.67
Annual HICP inflation excluding energy and food (February 2022)	2.70
Annual HICP inflation excluding energy and food (quarterly average rate, 2021 Q4)	2.40
Real GDP growth (q-o-q; calendar and seasonally adjusted) for 2021 Q4 (according to ESA2010)	0.26
Real GDP growth (annual average rate; y-o-y) for 2021	5.59
Unemployment rate (monthly rate; seasonally adjusted) for January 2022	6.83
Unemployment rate (quarterly average rate; seasonally adjusted) for 2021 Q4	7.10

<sup>24</sup> Cut-off date for the data provided in this annex: 22 March 2022 (unless otherwise stated). Sources: Bloomberg, ECB, Eurostat, and Thomson Reuters.

<sup>25</sup> Cut-off date for HICP inflation and HICP inflation excluding energy and food: 18 March 2022.

## APP redemption amounts

Expected monthly redemption amounts for the APP over a rolling 12-month horizon (EUR billions)<sup>26</sup>

Month	APP
Feb-22	8.8
Mar-22	21.2
Apr-22	42.7
May-22	23.6
Jun-22	16.2
Jul-22	26.0
Aug-22	7.8
Sep-22	44.3
Oct-22	36.9
Nov-22	18.6
Dec-22	15.5
Jan-23	28.8
Feb-23	22.8

## TLTRO III

All TLTRO III operations have a maturity of three years from their settlement date; counterparties are able to repay the amounts borrowed under TLTRO III at a quarterly frequency starting two years from the settlement of each operation. For further information, see

<https://www.ecb.europa.eu/mopo/implement/omo/tltro/html/index.en.html>.

## TLTRO III outstanding amounts and maturity dates

TLTRO III	Maturity date	Amount (EUR billions)
1	28/09/2022	1.96
2	21/12/2022	83.90
3	29/03/2023	95.19
4	28/06/2023	1,216.48
5	27/09/2023	161.73

<sup>26</sup> Actual redemptions for February 2022, based on month-end data. Remaining 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 <https://www.ecb.europa.eu/mopo/implement/omt/html/index.en.html>.

<b>TLTRO III</b>	<b>Maturity date</b>	<b>Amount (EUR billions)</b>
<b>6</b>	20/12/2023	49.26
<b>7</b>	27/03/2024	330.08
<b>8</b>	26/06/2024	109.57
<b>9</b>	25/09/2024	97.49
<b>10</b>	18/12/2024	51.98
<b>TOTAL</b>		2,197.64

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