



EUROPEAN CENTRAL BANK

EUROSYSTEM

# The ECB Survey of Monetary Analysts

Aggregated Results

February 2023



# Contents

<b>1</b>	<b>Key ECB Interest Rates, Market Rates and Market Conditions</b>	<b>2</b>
<b>2</b>	<b>Asset Purchases and Reinvestment</b>	<b>11</b>
<b>3</b>	<b>Refinancing Operations</b>	<b>15</b>
<b>4</b>	<b>Macroeconomic Outlook</b>	<b>16</b>

## Summary Report

This report summarises the aggregated results of the Survey of Monetary Analysts (SMA) of **February 2023**. The survey period was from 16 to 19 January 2023 and 41 respondents participated.

For questions that received responses from fewer than six respondents no aggregate statistics are reported.

Throughout the document, the cross-sectional distribution is defined as the distribution of the modal answers, and the average probability distribution is defined as the average of the probabilities assigned by respondents to different ranges of the measure in question.

This report uses abbreviations for key monetary policy parameters. For additional specific terminology please refer to the [ECB glossary](#).

The survey questionnaire and more information is available at:  
[https://www.ecb.europa.eu/stats/ecb\\_surveys/sma/html/index.en.html](https://www.ecb.europa.eu/stats/ecb_surveys/sma/html/index.en.html)

# 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.

### Percentage chance of next rate change being an increase

(percentages)

Interest rate	25th percentile	Median	75th percentile
<b>DFR</b>	99.0	100.0	100.0
<b>MRO</b>	99.0	100.0	100.0
<b>MLF</b>	99.0	100.0	100.0

Note: Cross-sectional distribution.

Series key: SMA.FEB23.MEDIAN\_Z\_Z.U2.INCREASE.DFR\_PR\_DIRECTION, SMA.FEB23.MEDIAN\_Z\_Z.U2.INCREASE.MRO\_PR\_DIRECTION,

SMA.FEB23.MEDIAN\_Z\_Z.U2.INCREASE.MLF\_PR\_DIRECTION. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.

Number of responses:

DFR: 41.

MLF: 41.

MRO: 41.

### Percentage chance of next rate change being a decrease

(percentages)

Interest rate	25th percentile	Median	75th percentile
<b>DFR</b>	0.0	0.0	1.0
<b>MRO</b>	0.0	0.0	1.0
<b>MLF</b>	0.0	0.0	1.0

Note: Cross-sectional distribution.

Series key: SMA.FEB23.MEDIAN\_Z\_Z.U2.DECREASE.DFR\_PR\_DIRECTION, SMA.FEB23.MEDIAN\_Z\_Z.U2.DECREASE.MRO\_PR\_DIRECTION,

SMA.FEB23.MEDIAN\_Z\_Z.U2.DECREASE.MLF\_PR\_DIRECTION. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.

Number of responses:

DFR: 41.

MLF: 41.

MRO: 41.

### Expected timing of the next rate increase

(date)

Interest rate	25th percentile	Median	75th percentile
<b>DFR</b>	Feb-23	Feb-23	Feb-23
<b>MRO</b>	Feb-23	Feb-23	Feb-23
<b>MLF</b>	Feb-23	Feb-23	Feb-23

Note: Cross-sectional distribution.

Series key: SMA.FEB23.MEDIAN.GC.\_Z.U2.\_Z.DFR\_CHANGE\_DATE\_INCREASE,

SMA.FEB23.MEDIAN.GC.\_Z.U2.\_Z.MRO\_CHANGE\_DATE\_INCREASE,

SMA.FEB23.MEDIAN.GC.\_Z.U2.\_Z.MLF\_CHANGE\_DATE\_INCREASE. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.

Number of responses:

DFR: 41.

MLF: 41.

MRO: 41.

## Expected timing of the next rate decrease

(date)

Interest rate	25th percentile	Median	75th percentile
DFR	Jun-23	Jan-24	Mar-24
MRO	Jun-23	Jan-24	Mar-24
MLF	Jun-23	Jan-24	Mar-24

Note: Cross-sectional distribution.

Series key: SMA.FEB23.MEDIAN.GC.\_Z.U2.\_Z.DFR\_CHANGE\_DATE\_DECREASE,

SMA.FEB23.MEDIAN.GC.\_Z.U2.\_Z.MRO\_CHANGE\_DATE\_DECREASE,

SMA.FEB23.MEDIAN.GC.\_Z.U2.\_Z.MLF\_CHANGE\_DATE\_DECREASE. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.

Number of responses:

DFR: 10.

MLF: 10.

MRO: 10.

## Expected size of the next rate increase

(basis points)

Interest rate	25th percentile	Median	75th percentile
DFR	50	50	50
MRO	50	50	50
MLF	50	50	50

Note: Cross-sectional distribution.

Series key: SMA.FEB23.MEDIAN.\_Z.BP.U2.\_Z.DFR\_CHANGE\_SIZE\_INCREASE,

SMA.FEB23.MEDIAN.\_Z.BP.U2.\_Z.MRO\_CHANGE\_SIZE\_INCREASE,

SMA.FEB23.MEDIAN.\_Z.BP.U2.\_Z.MLF\_CHANGE\_SIZE\_INCREASE. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.

Number of responses:

DFR: 41.

MLF: 41.

MRO: 41.

## Expected size of the next rate decrease

(basis points)

Interest rate	25th percentile	Median	75th percentile
DFR	-25	-25	-25
MRO	-25	-25	-25
MLF	-25	-25	-25

Note: Cross-sectional distribution.

Series key: SMA.FEB23.MEDIAN.\_Z.BP.U2.\_Z.DFR\_CHANGE\_SIZE\_DECREASE,

SMA.FEB23.MEDIAN.\_Z.BP.U2.\_Z.MRO\_CHANGE\_SIZE\_DECREASE,

SMA.FEB23.MEDIAN.\_Z.BP.U2.\_Z.MLF\_CHANGE\_SIZE\_DECREASE. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.

Number of responses:

DFR: 10.

MLF: 10.

MRO: 10.

1.2 Please indicate the percentage chance you attach to changes on the dates surrounding the timing of the next rate change (increase or decrease) that you specified in your response to Question 1.1.

Expected timing of the next change, conditional on it being an increase

(date)

	25th percentile	Median	75th percentile
<b>DFR</b>	Feb-23	Feb-23	Feb-23
<b>MRO</b>	Feb-23	Feb-23	Feb-23

Note: Average probability distribution.  
 Series key: SMA.FEB23.MEDIAN.GC.\_Z.U2.\_Z.DFR\_CHANGE\_DATE\_INCREASE\_UNWEIGHTED,  
 SMA.FEB23.MEDIAN.GC.\_Z.U2.\_Z.MRO\_CHANGE\_DATE\_INCREASE\_UNWEIGHTED. Replace "MEDIAN" with "P25" or "P75" to  
 obtain the 25th and 75th percentile, respectively.  
 Number of responses:  
 DFR: 41.  
 MRO: 41.

Expected timing of the next change, conditional on it being a decrease

(date)

	25th percentile	Median	75th percentile
<b>DFR</b>	Jul-23	Dec-23	Mar-24
<b>MRO</b>	Jul-23	Dec-23	Mar-24

Note: Average probability distribution.  
 Series key: SMA.FEB23.MEDIAN.GC.\_Z.U2.\_Z.DFR\_CHANGE\_DATE\_DECREASE\_UNWEIGHTED,  
 SMA.FEB23.MEDIAN.GC.\_Z.U2.\_Z.MRO\_CHANGE\_DATE\_DECREASE\_UNWEIGHTED. Replace "MEDIAN" with "P25" or "P75" to  
 obtain the 25th and 75th percentile, respectively.  
 Number of responses:  
 DFR: 10.  
 MRO: 10.

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.

Expected size of the next change

(percentages)

	DFR	MRO
<b>&lt;-75</b>	1.0	1.0
<b>-75</b>	2.0	2.0
<b>-70</b>	0.0	0.0
<b>-65</b>	0.0	0.0
<b>-60</b>	0.0	0.0
<b>-55</b>	0.0	0.0
<b>-50</b>	23.5	23.5

-45	0.0	0.0
-40	0.0	0.0
-35	0.0	0.0
-30	0.5	0.5
-25	61.0	61.0
-20	2.0	2.0
-15	1.0	1.0
-10	7.5	7.5
-5	1.5	1.5
5	0.0	0.0
10	0.0	0.0
15	0.0	0.0
20	0.2	0.2
25	9.3	9.5
30	0.0	0.0
35	0.0	0.0
40	0.0	0.0
45	0.0	0.0
50	85.7	85.6
55	0.0	0.0
60	0.0	0.0
65	0.0	0.0
70	0.0	0.0
75	4.2	4.5
>75	0.2	0.2

Note: Average probability distribution. Percentages add up to 200 as probabilities for both decrease and increase in interest rate are included. They may not add up exactly due to rounding.  
Series key: SMA.FEB23.MEAN.M.PR.U2.BIN.DFR\_CHANGE\_SIZE\_DECREASE\_UNWEIGHTED,  
SMA.FEB23.MEAN.M.PR.U2.BIN.DFR\_CHANGE\_SIZE\_INCREASE\_UNWEIGHTED. "BIN" is a placeholder to be replaced with the centre of each bin [-80, -75, -70, -65, -60, -55, -50, -45, -40, -35, -30, -25, -20, -15, -10, -5, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80]. Choose between "DFR" and "MRO".  
Number of responses:  
DFR: 41.  
MRO: 39.

1.4 Please indicate the level (in percentage per annum) of the following interest rates that you consider most likely (i.e. the mode) to prevail over the reserve maintenance period 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 months and quarters listed below, and in the long run.

#### Expectations for the DFR

(percentages per annum)

	25th percentile	Median	75th percentile
--	-----------------	--------	-----------------

Feb-2023	2.50	2.50	2.50
Mar-2023	3.00	3.00	3.00
May-2023	3.00	3.25	3.25
Jun-2023	3.25	3.25	3.50
Jul-2023	3.25	3.25	3.50
Sep-2023	3.19	3.25	3.50
Oct-2023	3.25	3.25	3.50
Dec-2023	3.25	3.25	3.50
2024Q1	3.00	3.25	3.44
2024Q2	2.81	3.00	3.25
2024Q3	2.75	3.00	3.19
2024Q4	2.50	2.75	3.00
2025Q1	2.00	2.50	2.81
2025Q2	2.00	2.25	2.56
2025Q3	2.00	2.00	2.50
2025Q4	1.94	2.00	2.31
2026Q1	1.75	2.00	2.25
2026Q2	1.63	2.00	2.25
2026Q3	1.63	2.00	2.25
2026Q4	1.63	2.00	2.25
long run	1.50	2.00	2.06

Note: Cross-sectional distribution. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.

Series key: SMA.FEB23.MEDIAN.A.1.U2.\_Z.DFR. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively. Choose "GC", "Q" or "A" for Governing Council, quarterly or annual frequency, respectively.  
Number of responses: 41.

## Expectations for the MRO

(percentages per annum)

	25th percentile	Median	75th percentile
Feb-2023	3.00	3.00	3.00
Mar-2023	3.50	3.50	3.50
May-2023	3.50	3.75	3.75
Jun-2023	3.50	3.75	4.00
Jul-2023	3.69	3.75	4.00
Sep-2023	3.50	3.75	4.00
Oct-2023	3.69	3.75	4.00
Dec-2023	3.69	3.75	4.00
2024Q1	3.50	3.75	3.75
2024Q2	3.25	3.50	3.75
2024Q3	3.25	3.50	3.69
2024Q4	3.00	3.00	3.50
2025Q1	2.50	3.00	3.31
2025Q2	2.50	2.75	3.06
2025Q3	2.50	2.50	3.00
2025Q4	2.44	2.50	2.75
2026Q1	2.25	2.50	2.75

2026Q2	2.00	2.50	2.75
2026Q3	2.13	2.50	2.75
2026Q4	2.13	2.50	2.50
long run	2.00	2.50	2.50

Note: Cross-sectional distribution. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.  
Series key: SMA.FEB23.MEDIAN.A.I.U2.\_Z.MRO. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively. Choose "GC", "Q" or "A" for Governing Council, quarterly or annual frequency, respectively.  
Number of responses: 41.

## Expectations for the MLF

(percentages per annum)

	25th percentile	Median	75th percentile
Feb-2023	3.25	3.25	3.25
Mar-2023	3.75	3.75	3.75
May-2023	3.75	4.00	4.00
Jun-2023	3.94	4.00	4.25
Jul-2023	4.00	4.00	4.25
Sep-2023	3.94	4.00	4.25
Oct-2023	4.00	4.00	4.25
Dec-2023	4.00	4.00	4.25
2024Q1	3.75	4.00	4.00
2024Q2	3.50	3.75	4.00
2024Q3	3.50	3.75	4.00
2024Q4	3.25	3.50	3.75
2025Q1	2.94	3.25	3.56
2025Q2	2.75	3.00	3.50
2025Q3	2.75	2.75	3.25
2025Q4	2.69	2.75	3.25
2026Q1	2.50	2.75	3.25
2026Q2	2.38	2.75	3.13
2026Q3	2.38	2.75	3.13
2026Q4	2.38	2.75	3.00
long run	2.25	2.75	3.00

Note: Cross-sectional distribution. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.  
Series key: SMA.FEB23.MEDIAN.A.I.U2.\_Z.MLF. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively. Choose "GC", "Q" or "A" for Governing Council, quarterly or annual frequency, respectively.  
Number of responses: 41.

## Expectations for the €STR

(percentages per annum)

	25th percentile	Median	75th percentile
Dec-2022	1.89	1.90	1.90
Feb-2023	2.40	2.40	2.41
Mar-2023	2.68	2.90	2.91
May-2023	2.90	3.15	3.17
Jun-2023	2.95	3.15	3.40



Jul-2023	3.10	3.17	3.41
Sep-2023	3.15	3.18	3.41
Oct-2023	3.15	3.18	3.41
Dec-2023	3.15	3.18	3.41
2024Q1	2.95	3.18	3.40
2024Q2	2.90	2.96	3.26
2024Q3	2.69	2.92	3.10
2024Q4	2.40	2.70	2.94
2025Q1	2.16	2.52	2.91
2025Q2	1.95	2.30	2.70
2025Q3	1.90	2.20	2.68
2025Q4	1.90	2.20	2.55
2026Q1	1.90	2.08	2.45
2026Q2	1.90	2.08	2.60
2026Q3	1.90	1.98	2.60
2026Q4	1.90	1.96	2.45
long run	1.75	1.97	2.20

Note: Cross-sectional distribution. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.  
Series key: SMA.FEB23.MEDIAN.A.I.U2.\_Z.ESTR. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively. Choose "GC", "Q" or "A" for Governing Council, quarterly or annual frequency, respectively.  
Number of responses: 34.

## Expectations for the 3-month Euribor

(percentages per annum)

	25th percentile	Median	75th percentile
Dec-2022	2.10	2.13	2.30
Feb-2023	2.60	2.75	3.00
Mar-2023	2.90	3.10	3.27
May-2023	3.17	3.30	3.42
Jun-2023	3.21	3.35	3.55
Jul-2023	3.24	3.37	3.56
Sep-2023	3.24	3.37	3.56
Oct-2023	3.24	3.37	3.56
Dec-2023	3.24	3.35	3.56
2024Q1	3.09	3.29	3.46
2024Q2	2.90	3.13	3.31
2024Q3	2.79	3.00	3.20
2024Q4	2.47	2.80	2.99
2025Q1	2.23	2.58	2.80
2025Q2	2.11	2.38	2.75
2025Q3	2.00	2.30	2.70
2025Q4	2.00	2.28	2.59
2026Q1	1.91	2.29	2.55
2026Q2	1.92	2.26	2.55
2026Q3	1.92	2.21	2.55
2026Q4	1.92	2.20	2.55
long run	1.84	2.15	2.35

Note: Cross-sectional distribution. The number of respondents is the maximum number of respondents for a given date, which is not necessarily the same for each date.  
 Series key: SMA.FEB23.MEDIAN.A.I.U2.\_Z.EURIBOR\_3M. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively. Choose "GC", "Q" or "A" for Governing Council, quarterly or annual frequency, respectively.  
 Number of responses: 33.

## 1.5 Please indicate the level of the swap rate or bond yield (in percentage per annum) of the following financial instruments that you consider most likely (i.e. the mode) to prevail at the end of the time horizon listed below.

### Expectations for the 10-year OIS (based on €STR)

(percentages per annum)

	25th percentile	Median	75th percentile
<b>1-year ahead</b>	2.40	2.70	3.00
<b>2-years ahead</b>	2.37	2.49	2.67

Note: Cross-sectional distribution. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.  
 Series key: SMA.FEB23.MEDIAN.M.I.U2.\_Z.OIS\_10Y. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.  
 Number of responses: 27.

### Expectations for the German 10-year government bond

(percentages per annum)

	25th percentile	Median	75th percentile
<b>12 months ahead</b>	1.94	2.29	2.60
<b>24 months ahead</b>	1.83	2.10	2.44

Note: Cross-sectional distribution. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.  
 Series key: SMA.FEB23.MEDIAN.M.I.U2.\_Z.GERMAN\_10Y. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.  
 Number of responses: 36.

### Expectations for the French 10-year government bond

(percentages per annum)

	25th percentile	Median	75th percentile
<b>12 months ahead</b>	2.35	2.70	3.15
<b>24 months ahead</b>	2.30	2.58	2.95

Note: Cross-sectional distribution. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.  
 Series key: SMA.FEB23.MEDIAN.M.I.U2.\_Z.FRENCH\_10Y. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.  
 Number of responses: 30.

### Expectations for the Italian 10-year government bond

(percentages per annum)

	25th percentile	Median	75th percentile
--	-----------------	--------	-----------------

<b>12 months ahead</b>	3.82	4.25	4.88
<b>24 months ahead</b>	3.56	4.00	4.49

Note: Cross-sectional distribution. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.

Series key: SMA.FEB23.MEDIAN.M.I.U2.\_Z.ITALIAN\_10Y. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.

Number of responses: 31.

## Expectations for the Spanish 10-year government bond

(percentages per annum)

	<b>25th percentile</b>	<b>Median</b>	<b>75th percentile</b>
<b>12 months ahead</b>	2.95	3.32	3.72
<b>24 months ahead</b>	2.80	3.11	3.66

Note: Cross-sectional distribution. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.

Series key: SMA.FEB23.MEDIAN.M.I.U2.\_Z.SPANISH\_10Y. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.

Number of responses: 32.

## 2 Asset Purchases and Reinvestment

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

### Expectations for the Eurosystem stock of bonds under the APP

(EUR billion)

	25th percentile	Median	75th percentile
2023Q1	3419	3419	3419
2023Q2	3374	3374	3374
2023Q3	3304	3314	3329
2023Q4	3226	3254	3284
2024Q1	3137	3173	3201
2024Q2	3050	3097	3141
2024Q3	2980	3014	3087
2024Q4	2903	2939	3037
2025Q1	2810	2879	3006
2025Q2	2726	2804	2947
2025Q3	2652	2729	2868
2025Q4	2564	2654	2793
2026Q1	2474	2584	2726
2026Q2	2384	2504	2666
2026Q3	2308	2429	2599
2026Q4	2204	2354	2541

Note: Cross-sectional distribution. The number of respondents is the maximum number of respondents for a given date, which is not necessarily the same for each date.

Series key: SMA.FEB23.MEDIAN.Q.EUR.U2\_Z.EUROSYSYSTEM\_APP\_HOLDINGS. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.

Number of responses: 40.

### Expectations for the Eurosystem stock of bonds under the PEPP

(EUR billion)

	25th percentile	Median	75th percentile
2023Q1	1714	1714	1714
2023Q2	1714	1714	1714
2023Q3	1714	1714	1714
2023Q4	1714	1714	1714
2024Q1	1714	1714	1714
2024Q2	1714	1714	1714
2024Q3	1714	1714	1714
2024Q4	1714	1714	1714

2025Q1	1661	1683	1699
2025Q2	1609	1652	1676
2025Q3	1564	1605	1644
2025Q4	1514	1558	1614
2026Q1	1464	1534	1581
2026Q2	1414	1491	1549
2026Q3	1379	1449	1521
2026Q4	1339	1416	1496

Note: Cross-sectional distribution. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.

Series key: SMA.FEB23.MEDIAN.Q.EUR.U2.\_Z.EUROSYSYSTEM\_PEPP\_HOLDINGS. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.

Number of responses: 40.

2.2 In its December 2022 monetary policy decisions, the Governing Council stated that “at its February meeting the Governing Council will announce the detailed parameters for reducing the APP holdings”. Please provide details of your expectations in this regard.

\*Open-ended text questions are not summarised.

2.3 In its December 2022 monetary policy decisions, the Governing Council stated, as concerns the PEPP, that it “intends to reinvest the principal payments from maturing securities purchased under the programme 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) on which the Governing Council will cease reinvesting the principal payments from maturing securities purchased under the PEPP.

(date)

	25th percentile	Median	75th percentile
End date of PEPP full reinvestments	Dec-24	Dec-24	Dec-24

Note: Cross-sectional distribution.

Series key: SMA.FEB23.MEDIAN.M.\_Z.U2.\_Z.PEPP\_REINVESTMENTS\_END. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.

Number of responses: 40.

## 2.4 Please indicate whether you expect any changes to the forward guidance on the PEPP reinvestments.

(percentages)

	No	Yes
Share of respondents	79.5	20.5

Note: Percentage of respondents.

Series key: SMA.FEB23.PC\_Z\_U2.NO.CHANGES\_FORWARD\_GUIDANCE\_PEPP, SMA.FEB23.PC\_Z\_U2.YES.CHANGES\_FORWARD\_GUIDANCE\_PEPP.

Number of responses: 31.

## 2.5 In its December 2022 monetary policy decisions, the Governing Council stated that it “will continue applying flexibility in reinvesting redemptions coming due in the PEPP portfolio, with a view to countering risks to the transmission mechanism related to the pandemic”. For how many months do you expect redemptions coming due in the PEPP portfolio to be reinvested flexibly?

Expectations for the number of months of PEPP flexibility

(number of months)

	25th percentile	Median	75th percentile
2023	9	12	12
2024	7	12	12
Beyond 2024	0	0	7

Note: Cross-sectional distribution. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.

Series key: SMA.FEB23.MEDIAN.A\_Z\_U2\_Z\_PEPP\_FLEXIBILITY. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.

Number of responses: 41.

## 2.6 Please indicate the percentage chance you attach to the Transmission Protection Instrument (TPI) being activated within the horizon specified below.

Expectations for the probability of TPI being activated

(percentages)

	25th percentile	Median	75th percentile
Within the next 6 months	5.0	10.0	25.0
Within the next 12 months	10.0	25.0	33.5

<b>Within the next 24 months</b>	20.0	30.0	44.5
----------------------------------	------	------	------

Note: Median probability. The number of respondents is the maximum number of respondents for a given date, which is not necessarily the same for each date.  
Series key: SMA.FEB23.MEDIAN.M\_Z.U2\_Z.TPI\_ACTIVATION. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.  
Number of responses: 40.

## 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.

#### Expected repayments under TLTRO III

(EUR billion)

	25th percentile	Median	75th percentile
2023-02	50	75	106
2023-03	90	125	218
2023-06	327	500	559
2023-09	88	102	150
2023-12	46	64	148
2024-03	122	171	254
2024-06	42	68	83
2024-09	38	61	80
2024-12	9	26	42

Note: Cross-sectional distribution. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.

Series key: SMA.FEB23.MEDIAN\_Z.EUR.U2.DATE.REPAYMENTS\_INDIVIDUAL\_OPERATION. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively. And replace "DATE" with the corresponding repayment date in the format YYYY-MM.

Number of responses: 36.



## 4 Macroeconomic Outlook

### 4.1 For the euro area, please provide your estimates of the most likely outcome (i.e. the mode) for real GDP growth, the unemployment rate and inflation

#### Expectations for real GDP growth

(percentage change)

	25th percentile	Median	75th percentile
2022Q4	-0.3	-0.1	0.0
2023Q1	-0.4	-0.3	-0.2
2023Q2	0.0	0.1	0.2
2023Q3	0.2	0.2	0.3
2023Q4	0.2	0.2	0.3
2024Q1	0.2	0.3	0.4
2024Q2	0.3	0.3	0.4
2024Q3	0.3	0.4	0.5
2024Q4	0.3	0.4	0.5
2025Q1	0.3	0.4	0.4
2025Q2	0.3	0.4	0.4
2025Q3	0.3	0.4	0.4
2025Q4	0.3	0.3	0.4
2026Q1	0.3	0.3	0.4
2026Q2	0.3	0.3	0.4
2026Q3	0.3	0.3	0.4
2026Q4	0.3	0.3	0.4
long run	1.0	1.3	1.5

Note: Cross-sectional distribution. Quarter-on-quarter change, calendar and seasonally adjusted but not annualised for quarterly values; and year-on-year for long run values. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.

Series key: SMA.FEB23.MEDIAN.Q.Q.U2\_Z.YER (quarterly data) and SMA.FEB23.MEDIAN.A.Y.U2\_Z.YER (long run). In addition, select in the date\_descr column the value "long run". Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.

Number of responses: 41.

#### Expectations for unemployment rate

(percentage rate)

	25th percentile	Median	75th percentile
2022Q4	6.6	6.6	6.7
2023Q1	6.7	6.8	6.9
2023Q2	6.8	6.9	7.1
2023Q3	6.8	7.0	7.2
2023Q4	6.8	7.1	7.2
2024Q1	6.8	7.0	7.2
2024Q2	6.8	7.0	7.2

2024Q3	6.8	7.0	7.2
2024Q4	6.8	7.0	7.2
2025Q1	6.7	6.9	7.1
2025Q2	6.7	6.9	7.0
2025Q3	6.6	6.8	7.0
2025Q4	6.6	6.8	7.0
2026Q1	6.5	6.8	7.0
2026Q2	6.5	6.8	6.9
2026Q3	6.5	6.8	6.9
2026Q4	6.5	6.8	6.9
long run	6.5	6.8	7.0

Note: Cross-sectional distribution. Quarterly average and seasonally adjusted. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.  
Series key: SMA.FEB23.MEDIAN.Q.PC.U2\_Z.URX (quarterly data) and SMA.FEB23.MEDIAN.A.PC.U2\_Z.URX (long run). In addition, select in the date\_desc column the value "long run". Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.  
Number of responses: 41.

### Median expected HICP inflation rates

(percentage change)

	25th percentile	Median	75th percentile
2023Q1	7.7	8.2	8.9
2023Q2	5.9	6.5	7.0
2023Q3	4.4	4.9	5.9
2023Q4	2.6	3.2	4.4
2024Q1	2.3	2.8	3.5
2024Q2	2.1	2.6	3.0
2024Q3	2.1	2.4	2.8
2024Q4	1.8	2.1	2.7
2025Q1	1.8	2.0	2.4
2025Q2	1.8	2.0	2.3
2025Q3	1.9	2.0	2.2
2025Q4	1.8	2.0	2.2
2026Q1	1.8	2.0	2.1
2026Q2	1.8	2.0	2.1
2026Q3	1.9	2.0	2.1
2026Q4	1.9	2.0	2.0
long run	2.0	2.0	2.0

Note: Cross-sectional distribution. Year-on-year change. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.  
Series key: SMA.FEB23.MEDIAN.Q.Y.U2\_Z.HIC (quarterly data) and SMA.FEB23.MEDIAN.A.Y.U2\_Z.HIC (long run). In addition, select in the date\_desc column the value "long run". Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.  
Number of responses: 41.

### Median expected HICP excluding food and energy inflation rates

(percentage change)

	25th percentile	Median	75th percentile
2023Q1	4.8	5.0	5.2

2023Q2	4.3	4.7	5.0
2023Q3	3.5	4.1	4.6
2023Q4	2.9	3.4	3.8
2024Q1	2.4	2.8	3.2
2024Q2	2.3	2.5	2.9
2024Q3	2.1	2.4	2.7
2024Q4	2.0	2.3	2.7
2025Q1	1.9	2.1	2.4
2025Q2	2.0	2.0	2.2
2025Q3	2.0	2.0	2.2
2025Q4	1.9	2.0	2.2
2026Q1	1.9	2.0	2.1
2026Q2	1.9	2.0	2.1
2026Q3	1.8	2.0	2.1
2026Q4	1.8	2.0	2.1
long run	1.8	2.0	2.0

Note: Cross-sectional distribution. Year-on-year change. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.  
Series key: SMA.FEB23.MEDIAN.Q.Y.U2.\_Z.HEF (quarterly data) and SMA.FEB23.MEDIAN.A.Y.U2.\_Z.HEF (long run). In addition, select in the date\_descr column the value "long run". Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.  
Number of responses: 41.

## 4.2 Please indicate the percentage chance you attach to average annual HICP inflation being below or above 2% in the following years.

(percentages)

Date	Below 2%	Above 2%
2023	5.0	95.0
2024	40.0	60.0
2025	50.0	50.0

Note: Median probability. The number of respondents is the maximum number of respondents for a given date, which is not necessarily the same for each date.  
Series key: SMA.FEB23.MEDIAN.A.\_Z.U2.ABOVE\_2.HIC\_TARGET\_DISTRIBUTION, SMA.FEB23.MEDIAN.A.\_Z.U2.BELOW\_2.HIC\_TARGET\_DISTRIBUTION.  
Number of responses: 29.

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

Percentage chance of next rate change being an increase

(percentages)

	<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
--	------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------

<b>Average probability</b>	0.3	0.4	0.7	1.5	2.7	7.2	15.8	35.3	20.3	8.1	3.8	2.1	0.9	0.5	0.4
----------------------------	-----	-----	-----	-----	-----	-----	------	------	------	-----	-----	-----	-----	-----	-----

Note: Cross-sectional distribution.  
SMA.FEB23.MEAN.M.PR.U2.BIN.HIC\_LR\_DISTRIBUTION. "BIN" is a placeholder to be replaced with the centre of each bin [-0.1, 0.2, 0.5, 0.8, 1.1, 1.4, 1.7, 2, 2.3, 2.6, 2.9, 3.2, 3.5, 3.8, 4.1].  
Number of responses: 40.

## 4.4 How do you assess the balance of risks surrounding your projections for euro area growth and inflation? In the second table below, please specify any particular risks that you consider important, including beyond this horizon.

### Risks surrounding the euro area growth outlook

(percentages)

Date	Downside	Balanced	Upside
2023	37.5	25.0	37.5
2024	32.5	50.0	17.5
2025	6.1	87.9	6.1

Note: Percentage of respondents. Percentages may not add up to 100 due to rounding. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.  
Series key: SMA.FEB23.PC.A\_Z.U2.DOWNSIDE.YER\_RISKS, Replace "DOWNSIDE" with "BALANCED" or "UPSIDE".  
Number of responses: 40.

### Risks surrounding the euro area inflation outlook

(percentages)

Date	Downside	Balanced	Upside
2023	32.5	32.5	35.0
2024	12.5	62.5	25.0
2025	12.1	69.7	18.2

Note: Percentage of respondents. Percentages may not add up to 100 due to rounding. The number of respondents refers to the number of respondents of the date with the highest number of respondents; it is not necessarily the same for each date.  
Series key: SMA.FEB23.PC.A\_Z.U2.DOWNSIDE.HIC\_RISKS, Replace "DOWNSIDE" with "BALANCED" or "UPSIDE".  
Number of responses: 40.

© **European Central Bank, 2023**

Postal address 60640 Frankfurt am Main, Germany  
Telephone +49 69 1344 0  
Website [www.ecb.europa.eu](http://www.ecb.europa.eu)

Copyright for the entire content of this document is held by the ECB. No content may be copied, reproduced or reduced, except with the ECB's prior written consent. Any copies, reproductions or reductions to the writing shall be the property of the ECB. This document shall only be used for the purpose of the Survey of Monetary Analysts and shall not be used or exploited for own benefit, or for the benefit of any other person or party. For specific terminology please refer to the [ECB glossary](#) (available in English only).