



EUROPEAN CENTRAL BANK
EUROSYSTEM

The ECB Survey of Monetary Analysts

Aggregated Results

July 2022



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Summary Report

This report summarises the aggregated results of the Survey of Monetary Analysts (SMA) of **July 2022**. The survey period was from 4 to 7 July 2022 and 29 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

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
DFR	99.0	100.0	100.0
MRO	99.0	100.0	100.0
MLF	99.0	100.0	100.0

Note: Cross-sectional distribution.

Series key: SMA.JUL22.MEDIAN_Z_Z.U2.INCREASE.DFR_PR_DIRECTION,
SMA.JUL22.MEDIAN_Z_Z.U2.INCREASE.MRO_PR_DIRECTION,
SMA.JUL22.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: 28.

MLF: 28.

MRO: 28.

Percentage chance of next rate change being a decrease

(percentages)

Interest rate	25th percentile	Median	75th percentile
DFR	0.0	0.0	1.0
MRO	0.0	0.0	1.0
MLF	0.0	0.0	1.0

Note: Cross-sectional distribution.

Series key: SMA.JUL22.MEDIAN_Z_Z.U2.DECREASE.DFR_PR_DIRECTION,
SMA.JUL22.MEDIAN_Z_Z.U2.DECREASE.MRO_PR_DIRECTION,
SMA.JUL22.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: 11.

MLF: 7.

MRO: 10.

Expected timing of the next rate increase

(date)

Interest rate	25th percentile	Median	75th percentile
DFR	Jul-22	Jul-22	Jul-22
MRO	Jul-22	Jul-22	Jul-22
MLF	Jul-22	Jul-22	Jul-22

Note: Cross-sectional distribution.

Series key: SMA.JUL22.MEDIAN.GC_Z.U2_Z.DFR_CHANGE_DATE_INCREASE,

SMA.JUL22.MEDIAN.GC_Z.U2_Z.MRO_CHANGE_DATE_INCREASE,

SMA.JUL22.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: 28.

MLF: 28.

MRO: 28.

Expected timing of the next rate decrease

(percentages)

Interest rate	25th percentile	Median	75th percentile
DFR	Dec-22	Dec-22	Aug-23
MRO	Dec-22	Dec-22	Oct-23
MLF	Dec-22	Dec-22	Oct-23

Note: Cross-sectional distribution.

Series key: SMA.JUL22.MEDIAN.GC_Z.U2_Z.DFR_CHANGE_DATE_DECREASE,

SMA.JUL22.MEDIAN.GC_Z.U2_Z.MRO_CHANGE_DATE_DECREASE,

SMA.JUL22.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: 8.

MLF: 7.

MRO: 7.

Expected size of the next rate increase

(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.JUL22.MEDIAN_Z.BP.U2_Z.DFR_CHANGE_SIZE_INCREASE,

SMA.JUL22.MEDIAN_Z.BP.U2_Z.MRO_CHANGE_SIZE_INCREASE,

SMA.JUL22.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: 28.

MLF: 28.

MRO: 28.

Expected size of the next rate decrease

(percentages)

Interest rate	25th percentile	Median	75th percentile
DFR	-10	-10	-10
MRO	-10	-10	-5
MLF	-10	-10	-6

Note: Cross-sectional distribution.

Series key: SMA.JUL22.MEDIAN_Z.BP.U2_Z.DFR_CHANGE_SIZE_DECREASE,

SMA.JUL22.MEDIAN_Z.BP.U2_Z.MRO_CHANGE_SIZE_DECREASE,

SMA.JUL22.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: 11.

MLF: 7.

MRO: 10.

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.

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

(date)

	25th percentile	Median	75th percentile
DFR	Jul-22	Jul-22	Jul-22
MRO	Jul-22	Jul-22	Jul-22

Note: Average probability distribution.
 Series key: SMA.JUL22.MEDIAN.GC._Z.U2._Z.DFR_CHANGE_DATE_INCREASE_UNWEIGHTED,
 SMA.JUL22.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: 28.
 MRO: 28.

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

(date)

	25th percentile	Median	75th percentile
DFR	Dec-22	Mar-23	Jul-23
MRO	Dec-22	Mar-23	Dec-23

Note: Average probability distribution.
 Series key: SMA.JUL22.MEDIAN.GC._Z.U2._Z.DFR_CHANGE_DATE_DECREASE_UNWEIGHTED,
 SMA.JUL22.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: 8.
 MRO: 7.

1.3 For the next two changes (increases or decreases) in the DFR and the MRO rate please indicate the percentage chances that you attach to changes which are larger or smaller than your modal expectations.

Expected size of the next change

(percentages)

	DFR	MRO
<-50	0.0	0.0
-50	0.0	0.0
-45	0.0	0.0
-40	0.0	0.0
-35	0.0	0.0
-30	0.9	0.0
-25	15.5	11.1

-20	3.6	1.1
-15	2.3	1.7
-10	75.0	70.0
-5	2.7	16.1
5	0.0	0.4
10	0.3	0.5
15	0.0	0.4
20	0.0	0.0
25	81.8	78.9
30	0.0	0.0
35	0.0	0.0
40	0.0	0.0
45	0.0	0.0
50	17.1	19.1
>50	0.5	0.5

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.JUL22.MEAN.M.PR.U2.BIN.DFR_CHANGE_SIZE_DECREASE_UNWEIGHTED, SMA.JUL22.MEAN.M.PR.U2.BIN.DFR_CHANGE_SIZE_INCREASE_UNWEIGHTED. "BIN" is a placeholder to be replaced with the centre of each bin [-55, -50, -45, -40, -35, -30, -25, -20, -15, -10, -5, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55]. Choose between "DFR" and "MRO"

Number of responses:

DFR: 28.

MRO: 28.

Expected size of the second change

(percentages)

	DFR	MRO
<-50	0.0	0.0
-50	0.0	0.0
-45	0.0	0.0
-40	0.0	0.0
-35	0.0	0.0
-30	0.5	0.0
-25	13.2	13.9
-20	2.7	1.1
-15	2.3	1.7
-10	77.7	70.0
-5	3.6	13.3
5	0.0	0.0
10	0.3	0.3
15	0.0	0.0
20	0.0	0.0
25	20.2	31.0
30	0.0	0.0
35	0.2	0.0
40	0.2	0.0
45	0.0	0.0
50	73.7	63.5
>50	5.2	5.0

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.JUL22.MEAN.M.PR.U2.BIN.DFR_CHANGE_SIZE_2_DECREASE_UNWEIGHTED,
 SMA.JUL22.MEAN.M.PR.U2.BIN.DFR_CHANGE_SIZE_2_INCREASE_UNWEIGHTED. "BIN" is a placeholder to be replaced with the centre of each bin [-55, -50, -45, -40, -35, -30, -25, -20, -15, -10, -5, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55]. Choose between "DFR" and "MRO"
 Number of responses:
 DFR: 28.
 MRO: 28.

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 quarters and years listed below and in the long run.

Expectations for the DFR

(percentages per annum)

	25th percentile	Median	75th percentile
Jul-2022	-0.25	-0.25	-0.25
Sep-2022	0.25	0.25	0.25
Oct-2022	0.50	0.50	0.75
Dec-2022	0.75	0.75	1.00
Feb-2023	0.75	1.00	1.13
Mar-2023	0.88	1.13	1.25
Apr-2023	0.88	1.13	1.50
Jun-2023	1.00	1.25	1.63
Jul-2023	1.00	1.25	1.63
Sep-2023	1.00	1.25	1.75
Oct-2023	1.00	1.25	1.75
Dec-2023	1.25	1.50	1.75
Feb-2024	1.25	1.50	1.75
Mar-2024	1.25	1.50	1.75
Apr-2024	1.25	1.50	1.75
Jun-2024	1.25	1.50	1.75
2024Q3	1.25	1.50	1.75
2024Q4	1.25	1.38	1.75
2025Q1	1.25	1.50	1.75
2025Q2	1.25	1.50	1.75
2025Q3	1.25	1.50	1.75
2025Q4	1.25	1.50	1.75
2026Q1	1.25	1.38	1.50
2026Q2	1.00	1.38	1.50
2026Q3	1.00	1.25	1.50

2026	1.19	1.25	1.50
2027	1.25	1.50	1.50
2028	1.13	1.25	1.50
2029	1.13	1.25	1.50
long run	1.00	1.25	1.50

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.JUL22.MEDIAN.A.I.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: 28.

Expectations for the MRO

(percentages per annum)

	25th percentile	Median	75th percentile
Jul-2022	0.25	0.25	0.25
Sep-2022	0.63	0.75	0.75
Oct-2022	0.75	1.00	1.00
Dec-2022	1.25	1.25	1.25
Feb-2023	1.25	1.50	1.50
Mar-2023	1.38	1.50	1.75
Apr-2023	1.38	1.50	1.88
Jun-2023	1.50	1.75	2.00
Jul-2023	1.50	1.75	2.00
Sep-2023	1.50	1.75	2.00
Oct-2023	1.50	1.75	2.00
Dec-2023	1.50	1.88	2.00
Feb-2024	1.50	1.88	2.00
Mar-2024	1.50	1.75	2.13
Apr-2024	1.50	1.75	2.13
Jun-2024	1.50	1.75	2.00
2024Q3	1.50	1.75	2.00
2024Q4	1.50	1.75	2.25
2025Q1	1.75	1.75	2.25
2025Q2	1.50	1.75	2.25
2025Q3	1.50	1.75	2.25
2025Q4	1.50	1.75	2.00
2026Q1	1.50	1.75	2.00
2026Q2	1.50	1.75	2.00
2026Q3	1.50	1.75	2.00
2026	1.50	1.75	2.00
2027	1.75	1.88	2.00
2028	1.50	1.75	2.00
2029	1.50	1.75	2.00
long run	1.50	1.75	2.00

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.JUL22.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: 28.

Expectations for the MLF

(percentages per annum)

	25th percentile	Median	75th percentile
Jul-2022	0.50	0.50	0.50
Sep-2022	0.75	1.00	1.00
Oct-2022	1.13	1.25	1.50
Dec-2022	1.50	1.50	1.75
Feb-2023	1.50	1.75	2.00
Mar-2023	1.75	1.88	2.25
Apr-2023	1.75	1.88	2.25
Jun-2023	1.75	2.00	2.38
Jul-2023	1.75	2.00	2.50
Sep-2023	1.75	2.13	2.50
Oct-2023	1.75	2.13	2.50
Dec-2023	1.75	2.25	2.50
Feb-2024	1.75	2.25	2.50
Mar-2024	1.75	2.25	2.50
Apr-2024	1.75	2.25	2.50
Jun-2024	1.75	2.25	2.50
2024Q3	1.75	2.25	2.50
2024Q4	1.75	2.25	2.50
2025Q1	2.00	2.25	2.50
2025Q2	2.00	2.25	2.50
2025Q3	2.00	2.25	2.50
2025Q4	2.00	2.25	2.50
2026Q1	1.75	2.25	2.50
2026Q2	1.75	2.25	2.50
2026Q3	1.75	2.25	2.50
2026	1.75	2.25	2.50
2027	2.00	2.25	2.50
2028	1.75	2.25	2.50
2029	1.75	2.25	2.50
long run	2.00	2.25	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.JUL22.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: 28.

Expectations for the €STR

(percentages per annum)

	25th percentile	Median	75th percentile
Jun-2022	-0.58	-0.58	-0.58
Jul-2022	-0.33	-0.32	-0.31
Sep-2022	0.17	0.17	0.20
Oct-2022	0.42	0.43	0.47
Dec-2022	0.67	0.69	0.81

Feb-2023	0.68	0.88	1.17
Mar-2023	0.72	0.95	1.41
Apr-2023	0.72	0.95	1.45
Jun-2023	0.92	1.20	1.67
Jul-2023	0.92	1.20	1.67
Sep-2023	0.93	1.23	1.67
Oct-2023	0.93	1.23	1.67
Dec-2023	1.17	1.42	1.67
Feb-2024	1.18	1.42	1.67
Mar-2024	1.22	1.44	1.67
Apr-2024	1.22	1.44	1.67
Jun-2024	1.22	1.44	1.67
2024Q3	1.21	1.44	1.90
2024Q4	1.21	1.45	1.84
2025Q1	1.23	1.45	1.82
2025Q2	1.23	1.45	1.71
2025Q3	1.23	1.45	1.73
2025Q4	1.23	1.45	1.64
2026Q1	1.25	1.45	1.54
2026Q2	1.21	1.45	1.55
2026Q3	1.15	1.45	1.56
2026	1.04	1.44	1.63
2027	1.24	1.47	1.75
2028	1.04	1.45	1.80
2029	1.04	1.45	1.84
long run	1.20	1.49	1.83

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.JUL22.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: 22.

Expectations for the 3-month Euribor

(percentages per annum)

	25th percentile	Median	75th percentile
Jun-2022	-0.24	-0.20	-0.18
Jul-2022	-0.05	0.00	0.15
Sep-2022	0.40	0.48	0.50
Oct-2022	0.59	0.68	0.75
Dec-2022	0.82	0.90	1.08
Feb-2023	0.87	1.12	1.37
Mar-2023	0.89	1.25	1.54
Apr-2023	0.87	1.26	1.62
Jun-2023	1.03	1.34	1.66
Jul-2023	1.04	1.35	1.66
Sep-2023	1.22	1.35	1.67
Oct-2023	1.22	1.35	1.68
Dec-2023	1.29	1.49	1.69

Feb-2024	1.29	1.55	1.69
Mar-2024	1.29	1.60	1.78
Apr-2024	1.29	1.60	1.78
Jun-2024	1.29	1.60	1.84
2024Q3	1.30	1.60	2.06
2024Q4	1.35	1.60	1.93
2025Q1	1.39	1.60	1.89
2025Q2	1.42	1.60	1.78
2025Q3	1.44	1.58	1.74
2025Q4	1.44	1.58	1.70
2026Q1	1.35	1.57	1.65
2026Q2	1.29	1.57	1.65
2026Q3	1.29	1.58	1.68
2026	1.23	1.54	1.71
2027	1.47	1.61	1.80
2028	1.17	1.61	1.94
2029	1.17	1.61	2.02
long run	1.41	1.61	2.06

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.JUL22.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: 21.

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?

Estimated lower bound for each of the key interest rates

(percentages per annum)

	25th percentile	Median	75th percentile
DFR	-1.00	-0.73	-0.50
MRO	0.00	0.00	0.00
MLF	0.05	0.25	0.25

Note: Cross-sectional distribution.
Series key: SMA.JUL22.MEDIAN_Z.I.U2.DFR.RATES_MIN,
SMA.JUL22.MEDIAN_Z.I.U2.MRO.RATES_MIN,
SMA.JUL22.MEDIAN_Z.I.U2.MLF.RATES_MIN. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.
Number of responses:
DFR: 26.
MLF: 24.
MRO: 24.

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.

(percentages)

	No	Yes
Share of respondents	67.9	32.1

Note: Percentage of respondents.
Series key: SMA.JUL22.PC_Z_Z.U2.NO.CHANGES_TIERING,
SMA.JUL22.PC_Z_Z.U2.YES.CHANGES_TIERING.
Number of responses: 19.

1.7 In the June 2022 Monetary Policy Decisions, the Governing Council stated that it “expects to raise the key ECB interest rates again in September. The calibration of this rate increase will depend on the updated medium-term inflation outlook. If the medium-term inflation outlook persists or deteriorates a larger increment will be appropriate at the September meeting.”

Please indicate whether you expect any change in the forward guidance on policy rates changes at the Governing Council meeting in September 2022.

(percentages)

	No	Yes
Share of respondents	72.0	28.0

Note: Percentage of respondents.
Series key: SMA.JUL22.PC_Z_Z.U2.NO.CHANGES_FORWARD_GUIDANCE_RATES_NEXT_GC,
SMA.JUL22.PC_Z_Z.U2.YES.CHANGES_FORWARD_GUIDANCE_RATES_NEXT_GC.
Number of responses: 18.

In the June 2022 Monetary Policy Decisions the Governing Council stated: “Beyond September based on its current assessment the Governing Council anticipates that a gradual but sustained path of further increases in interest rates will be appropriate.” Please indicate whether you expect any change in the forward guidance on policy rates beyond the Governing Council meeting in September 2022.

(percentages)

	No	Yes
Share of respondents	56.0	44.0

Note: Percentage of respondents.

Series key: SMA.JUL22.PC_Z_U2.NO.CHANGES_FORWARD_GUIDANCE_RATES, SMA.JUL22.PC_Z_U2.YES.CHANGES_FORWARD_GUIDANCE_RATES.

Number of responses: 14.

If you answered “yes” please indicate the date when you expect this change to occur.

(date)

	25th percentile	Median	75th percentile
Share of respondents	Sep-22	Sep-22	Sep-22

Note: Cross-sectional distribution.

Series key: SMA.JUL22.MEDIAN.M_Z_U2_Z.CHANGES_FORWARD_GUIDANCE_RATES_DATE. Replace “MEDIAN” with “P25” or “P75” to obtain the 25th and 75th percentile, respectively.

Number of responses: 10.

2 Asset Purchases and Reinvestment

- 2.1 In the June 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 ample liquidity conditions and an appropriate monetary policy stance.” 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)

	25th percentile	Median	75th percentile
End date of APP full reinvestments	Jun-24	Dec-24	May-25

Note: Cross-sectional distribution.

Series key: SMA.JUL22.MEDIAN.M_Z.U2_Z.APP_REINVESTMENTS_END. Replace “MEDIAN” with “P25” or “P75” to obtain the 25th and 75th percentile, respectively.

Number of responses: 27.

- 2.2 In the June 2022 Monetary Policy Decisions, the Governing Council stated as regards 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) of the end of PEPP reinvestments of principal payments.

(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.JUL22.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: 28.

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 billion).

Expectations for the Eurosystem stock of bonds under the APP

(EUR billion)

	25th percentile	Median	75th percentile
2022Q2	3438	3438	3439
2022Q3	3438	3438	3439
2022Q4	3438	3438	3439
2023Q1	3438	3438	3439
2023Q2	3438	3438	3439
2023Q3	3435	3438	3439
2023Q4	3424	3438	3439
2024Q1	3418	3438	3439
2024Q2	3415	3438	3439
2024Q3	3386	3436	3438
2024Q4	3349	3436	3438
2025Q1	3274	3379	3418
2025Q2	3237	3320	3418
2025Q3	3192	3288	3413
2025Q4	3121	3238	3399
2026Q1	3019	3179	3332
2026Q2	2934	3152	3307
2026Q3	2805	3088	3229
2026Q4	2764	3038	3199
2027	2546	2838	3102
2028	2236	2701	3017
2029	1974	2554	2867
2030	1699	2379	2726

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. The results for this question were amended on 3 August 2022 to correct for inconsistent reference values for 2022Q1 and May 2022 in the questionnaire.

Series key: SMA.JUL22.MEDIAN.Q.EUR.U2._Z.EUROSYSTEM_APP_HOLDINGS. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively. Choose "Q" or "A" for quarterly or annual frequency, respectively.

Number of responses: 28.

Expectations for the Eurosystem stock of bonds under the PEPP

(EUR billion)

	25th percentile	Median	75th percentile
2022Q2	1718	1718	1718
2022Q3	1718	1718	1718
2022Q4	1718	1718	1718
2023Q1	1718	1718	1718
2023Q2	1718	1718	1718
2023Q3	1718	1718	1718
2023Q4	1718	1718	1718
2024Q1	1718	1718	1718
2024Q2	1718	1718	1718
2024Q3	1718	1718	1718
2024Q4	1718	1718	1718
2025Q1	1667	1683	1700
2025Q2	1618	1648	1677
2025Q3	1552	1598	1645
2025Q4	1497	1558	1614
2026Q1	1448	1531	1569
2026Q2	1418	1488	1538
2026Q3	1368	1453	1508
2026Q4	1318	1418	1478
2027	1109	1243	1388
2028	938	1118	1283
2029	743	989	1163
2030	548	878	1044

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.JUL22.MEDIAN.Q.EUR.U2._Z.EUROSYSYEM_PEPP_HOLDINGS. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively. Choose "Q" or "A" for quarterly or annual frequency, respectively.
 Number of responses: 28.

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

(percentages)

	No	Yes
Share of respondents	78.6	21.4

Note: Percentage of respondents.
 Series key: SMA.JUL22.PC._Z._Z.U2.NO.CHANGES_FORWARD_GUIDANCE_REINVESTMENTS, SMA.JUL22.PC._Z._Z.U2.YES.CHANGES_FORWARD_GUIDANCE_REINVESTMENTS.
 Number of responses: 22.

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

(date)

* Insufficient number of respondents.

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

(percentages)

	No	Yes
Share of respondents	77.8	22.2

Note: Percentage of respondents.

Series key: SMA.JUL22.PC_Z_Z.U2.NO.CHANGES_FORWARD_GUIDANCE_PEPP,

SMA.JUL22.PC_Z_Z.U2.YES.CHANGES_FORWARD_GUIDANCE_PEPP.

Number of responses: 21.

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

(date)

* Insufficient number of respondents.

3 Refinancing Operations

3.1 Please provide your estimate of the total repayments (EUR billion) of the operations under TLTRO III for the dates listed below.

Expected repayments under TLTRO III

(EUR billion)

	25th percentile	Median	75th percentile
2022Q3	13	62	102
2022Q4	98	100	154
2023Q1	103	129	200
2023Q2	1000	1149	1200
2023Q3	150	162	180
2023Q4	50	50	69
2024Q1	200	289	331
2024Q2	75	98	102
2024Q3	52	77	98
2024Q4	14	35	42

Note: Cross-sectional distribution.

Series key: SMA.JUL22.MEDIAN.Q.EUR.U2_Z.REPAYMENTS_INDIVIDUAL_OPERATION. Replace "MEDIAN" with "P25" or "P75" to obtain the 25th and 75th percentile, respectively.

Number of responses: 26.

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. 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 ECBs forward guidance.

Expectations for real GDP growth

(percentage change)

	25th percentile	Median	75th percentile
2022Q2	-0.1	0.2	0.2
2022Q3	0.1	0.3	0.4
2022Q4	-0.1	0.1	0.3
2023Q1	0.0	0.3	0.5
2023Q2	0.3	0.4	0.6
2023Q3	0.4	0.4	0.5
2023Q4	0.4	0.5	0.6
2024Q1	0.3	0.4	0.5
2024Q2	0.3	0.4	0.5
2024Q3	0.3	0.4	0.4
2024Q4	0.3	0.4	0.4
2025Q1	0.3	0.4	0.4
2025Q2	0.3	0.3	0.4
2025Q3	0.3	0.3	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
2027Q1	0.3	0.3	0.3
2027Q2	0.3	0.3	0.3
2027Q3	0.3	0.3	0.3
2027Q4	0.3	0.3	0.3
2028Q1	0.3	0.3	0.4
2028Q2	0.3	0.3	0.4
2028Q3	0.3	0.3	0.4
2028Q4	0.3	0.3	0.4
long run	1.2	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.JUL22.MEDIAN.Q.Q.U2._Z.YER (quarterly data) and SMA.JUL22.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: 28.

Expectations for unemployment rate

(percentage change)

	25th percentile	Median	75th percentile
2022Q2	6.6	6.8	6.9
2022Q3	6.6	6.8	6.9
2022Q4	6.7	6.8	6.9
2023Q1	6.7	6.8	7.0
2023Q2	6.7	6.8	7.0
2023Q3	6.6	6.8	7.0
2023Q4	6.5	6.8	7.0
2024Q1	6.4	6.7	6.9
2024Q2	6.4	6.7	6.9
2024Q3	6.3	6.7	6.8
2024Q4	6.3	6.7	6.8
2025Q1	6.3	6.8	6.8
2025Q2	6.3	6.8	6.9
2025Q3	6.3	6.8	6.9
2025Q4	6.3	6.8	6.9
2026Q1	6.3	6.8	6.9
2026Q2	6.3	6.8	6.9
2026Q3	6.3	6.8	6.9
2026Q4	6.3	6.8	6.9
2027Q1	6.4	6.8	6.9
2027Q2	6.4	6.8	6.9
2027Q3	6.4	6.8	6.9
2027Q4	6.4	6.8	6.9
2028Q1	6.5	6.8	6.9
2028Q2	6.5	6.8	6.9
2028Q3	6.5	6.8	6.9
2028Q4	6.5	6.8	6.9
long run	6.5	6.8	7.1

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.JUL22.MEDIAN.Q.PC.U2._Z.URX (quarterly data) and SMA.JUL22.MEDIAN.A.PC.U2._Z.URX (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: 28.

Median expected HICP inflation rates

(percentage change)

	25th percentile	Median	75th percentile
2022Q3	8.0	8.4	8.9

2022Q4	7.0	7.5	8.2
2023Q1	4.8	5.6	6.1
2023Q2	3.3	4.0	4.4
2023Q3	2.6	3.0	3.5
2023Q4	2.0	2.4	2.8
2024Q1	1.7	2.0	2.5
2024Q2	1.8	2.0	2.2
2024Q3	1.8	2.1	2.2
2024Q4	1.9	2.0	2.1
2025Q1	1.8	2.0	2.2
2025Q2	1.8	2.0	2.1
2025Q3	1.9	2.0	2.1
2025Q4	1.9	2.0	2.1
2026Q1	2.0	2.0	2.1
2026Q2	1.9	2.0	2.1
2026Q3	1.9	2.0	2.1
2026Q4	1.9	2.0	2.1
2027Q1	2.0	2.0	2.1
2027Q2	2.0	2.0	2.1
2027Q3	2.0	2.0	2.1
2027Q4	2.0	2.0	2.1
2028Q1	2.0	2.0	2.1
2028Q2	2.0	2.0	2.1
2028Q3	2.0	2.0	2.1
2028Q4	2.0	2.0	2.1
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.JUL22.MEDIAN.Q.Y.U2._Z.HIC (quarterly data) and SMA.JUL22.MEDIAN.A.Y.U2._Z.HIC (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: 28.

Median expected HICP excluding food and energy inflation rates

(percentage change)

	25th percentile	Median	75th percentile
2022Q3	3.7	4.0	4.2
2022Q4	3.4	3.9	4.3
2023Q1	3.0	3.5	4.0
2023Q2	2.6	2.8	3.6
2023Q3	2.3	2.6	3.3
2023Q4	2.1	2.5	2.7
2024Q1	2.1	2.3	2.5
2024Q2	2.0	2.2	2.3
2024Q3	2.0	2.2	2.3
2024Q4	1.9	2.0	2.1
2025Q1	1.8	2.0	2.1
2025Q2	1.8	2.0	2.1

2025Q3	1.8	2.0	2.1
2025Q4	1.8	2.0	2.1
2026Q1	1.9	2.0	2.1
2026Q2	1.8	2.0	2.1
2026Q3	1.8	2.0	2.1
2026Q4	1.8	2.0	2.1
2027Q1	1.8	2.0	2.0
2027Q2	1.8	1.9	2.0
2027Q3	1.8	1.9	2.0
2027Q4	1.8	1.9	2.0
2028Q1	1.8	1.9	2.0
2028Q2	1.8	1.9	2.0
2028Q3	1.8	1.9	2.0
2028Q4	1.8	2.0	2.0
long run	1.8	1.9	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.JUL22.MEDIAN.Q.Y.U2._Z.HEF (quarterly data) and SMA.JUL22.MEDIAN.A.Y.U2._Z.HEF (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: 28.

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

(percentages)

Date	Below 2%	Above 2%
2022	0.0	100.0
2023	20.0	80.0
2024	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.JUL22.MEDIAN.A._Z.U2.ABOVE_2.HIC_TARGET_DISTRIBUTION, SMA.JUL22.MEDIAN.A._Z.U2.BELOW_2.HIC_TARGET_DISTRIBUTION.
Number of responses: 26.

4.3 Please indicate the percentage chance that 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
Average probability	0.4	0.3	0.6	1.2	3.8	8.2	17.9	33.5	20.4	7.8	3.2	1.6	0.5	0.3	0.3

Note: Cross-sectional distribution.

SMA.JUL22.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: 27.

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 even beyond this horizon.

Risks surrounding the euro area growth outlook

(percentages)

Date	Downside	Balanced	Upside
2022	89.3	10.7	0.0
2023	92.9	3.6	3.6
2024	32.0	68.0	0.0

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.JUL22.PC.A._Z.U2.DOWNSIDE.YER_RISKS, Replace "DOWNSIDE" with "BALANCED" or "UPSIDE".

Number of responses: 28.

Risks surrounding the euro area inflation outlook

(percentages)

Date	Downside	Balanced	Upside
2022	0.0	0.0	100.0
2023	3.6	17.9	78.6
2024	4.0	64.0	32.0

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.JUL22.PC.A._Z.U2.DOWNSIDE.HIC_RISKS, Replace "DOWNSIDE" with "BALANCED" or "UPSIDE".

Number of responses: 28.

