

Summary of responses to the ECB's public consultation on the publication of compounded term rates using the €STR

October 2020

Executive summary

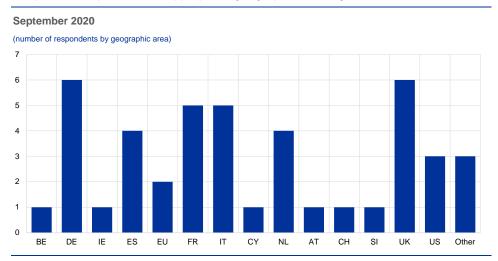
The ECB's public consultation on the publication of compounded term rates using the euro short-term rate (€STR) closed on Friday, 11 September 2020. The consultation drew significant interest from the financial sector as 44 market participants submitted responses or comments in relation to the consultation document. The diversified response sample ensures a representative coverage. The main takeaways from this public consultation can be summarised as follows.

- A large majority of respondents were in favour of the ECB as a trusted authority
 publishing compounded term rates using the €STR, as proposed in the
 consultation document. The €STR compounded rates are expected to be
 reliable and robust as the calculations would be based on the overnight €STR.
- Respondents broadly agreed with the proposed calculation methodologies for compounded rates as well as index values. A few suggestions called for more precise explanations and examples, especially regarding non-standard maturities and the use of the index values.
- 3. Most respondents supported the proposed day-count convention, namely the modified previous business day convention. It was acknowledged that this convention would be most suitable for a backward-looking compounded term rate, in line with the analyses presented in the consultation paper. However, a few respondents would prefer the modified following business day convention, as this is the current market standard, and changing to a new standard is seen as challenging.
- 4. The proposed selection of maturities received wide support because it is aligned with current standards and euro interbank offered rate (EURIBOR) maturities. This would facilitate the usage and adoption of the €STR compounded term rates for both new and legacy contracts as possible fall-back provisions.
- Respondents largely agreed with the proposed rate precision, namely using four decimal places for the €STR compounded term rates. With regard to the index values, a number of respondents recommended the use of eight decimal

- places or starting the index publication with a value of 100 instead of 1 in order to reduce IT implementation issues.
- 6. While most respondents agreed with the envisaged publication timing, the correction policy received mixed feedback. Half of the respondents would prefer to have a cut-off time for possible corrections, even if errors are seen as unlikely to happen. According to these respondents, it would be preferable for the correction policy to be in line with that of the €STR.

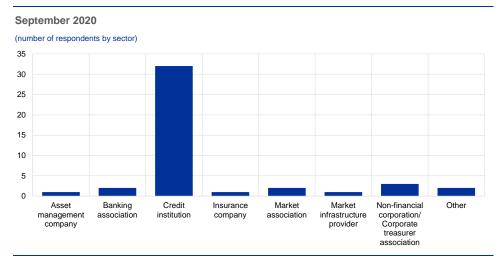
The remainder of this document summarises answers to each question.

Chart 1
Response sample ensures appropriate geographic coverage



Source: ECB

Chart 2Response sample represents relevant stakeholder groups



Source: ECB.

1 Introduction

Question 1: Are you in favour of the ECB publishing **STR** compounded rates?

Respondents are in favour of the ECB publishing €STR compounded term rates. As the ECB is seen as a trusted source, this would facilitate market acceptance.

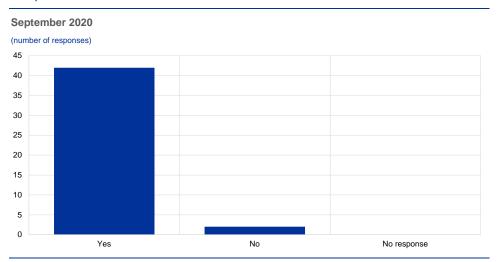
The vast majority of respondents are in favour of the ECB publishing a compounded €STR. It was seen as highly beneficial that a trusted authority like the ECB would publish such compounded rates, as it would foster acceptance and transparency to the largest possible extent. Furthermore, the proposed rates were perceived as being robust since they would be based on the overnight €STR already published by the ECB.

It was also mentioned that publicly available compounded rates would support the pricing of commercial and retail contracts, thereby reducing litigation risks. Similarly, IT complexity for financial institutions would be reduced as there would be no need to implement own compounded €STR calculations in different IT systems, even if some systems are already able to calculate compounded daily rates. Respondents also mentioned that the publication of a compounded €STR would be particularly useful in implementing EURIBOR fall-back provisions in both legacy and new contracts.

In terms of the use of a compounded €STR in the loan market, a few respondents expressed a concern that market participants might face challenges when adopting compounded rates in loan contracts, since the rates might not always reflect the reference period as initially negotiated. Additional difficulties may arise due to the different holiday calendars across the European Union.

One respondent suggested avoiding the name "compounded term rate", as some users could misunderstand these rates as being forward-looking. The respondent proposed "compounded average rate" for the sake of clarity.

Chart 3
A large majority of respondents are in favour of the ECB publishing €STR compounded rates



Source: ECB

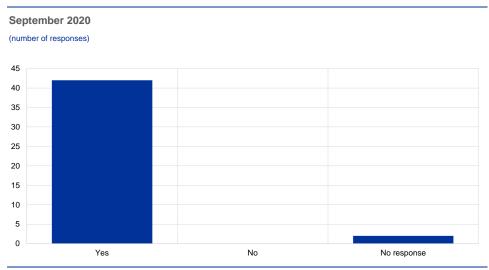
2 Methodology

Question 2: Do you agree with the proposed calculation methodology?

The vast majority of respondents agreed with the proposed calculation methodology as it reflects the generally accepted concept of the fair value of money.

Respondents widely acknowledged that the proposal is consistent with standard methodology already used in derivatives markets, and would therefore benefit from large acceptance across markets. Respondents also appreciated the fact that the proposal is in line with similar initiatives in other jurisdictions, and that the proposed methodology adequately reflects the concept of the fair value of money.

Chart 4
The vast majority of respondents agreed with the proposed calculation methodology



Source: ECB

Question 3: Do you agree with the index calculation methodology?

Respondents supported the proposal, as it is in line with compounded indices already available in other main jurisdictions. Some respondents suggested that the index publication could benefit from additional features.

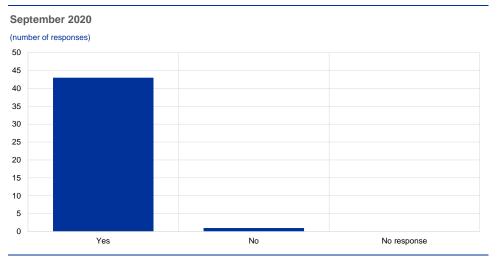
Respondents broadly agreed with the index calculation methodology as proposed in the consultation paper. The calculation is straightforward, which would facilitate the acceptance across the market and among non-professional end users. Numerous respondents appreciated the fact that the proposal is in line with the compounded indices already available in other jurisdictions. Furthermore, respondents noted as particularly beneficial the fact that the proposed index would allow for the calculation of interest for non-standard maturities.

A small number of respondents pointed out that the possible usage of the index in the loan markets may not be suitable in a negative rates environment. They therefore suggested the publication of an alternative index, in addition to the proposed one, using a floor for negative interest rates in order to ensure applicability and acceptance in the loan market.

Some respondents expressed their preference for an index starting value of 100 instead of 1, which would not only ensure compatibility with a wide range of front-office and infrastructure providers' systems, but would also increase the accuracy of the index calculation.

One respondent also mentioned that the name "€STR Index" might cause confusion and suggested a more descriptive name such as "€STR Compounded Index".

Chart 5Respondents broadly agreed with the index calculation methodology as proposed in the consultation paper



Source: ECB

3 Applicable day-count convention

Question 4: Do you agree with the proposed day-count convention, namely the modified previous business day convention?

The majority of respondents found the proposed day-count convention appropriate, while some respondents would prefer to use the modified following business day convention.

Most respondents supported the analyses and conclusions as outlined in the consultation paper, and agreed with the proposed day-count convention. It was acknowledged that the modified previous business day convention seemed to be the most accurate option for backward-looking compounded term rates, as the occurrence of timing mismatches would be reduced compared with the modified following business day convention. One respondent also suggested providing concise explanations and examples for cases where the proposed convention would lead to multiple start dates, in order to facilitate better understanding across the market and particularly among non-expert users.

A few respondents would not even recommend the use of a compounded €STR for pre-defined maturities, and pointed out that the proposed index values might provide a better solution for calculating interest. A small number of other respondents recommended the publication of the compounded index for non-business days, too, which would provide users with more flexibility for non-standard interest periods.

Some respondents suggested publishing the compounded term rates together with additional information on the start date instead of the end date of the period in

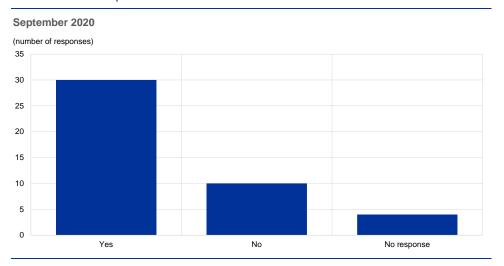
question, as this would enhance users' understanding and facilitate better alignment with contractual terms.

Furthermore, a few respondents suggested the publication of compounded €STR values for a fixed number of days, e.g. for 30, 90, and 180 days.

While the day-count convention proposed in the public consultation (the modified previous day-count convention) was put forward to better match ex post the standard convention used in most contracts (the modified following day-count convention), some respondents disagreed with the proposed day-count convention. They pointed out that most legacy contracts included the modified following business day convention, and that therefore such a mismatch between the original contract specification and a possible fall-back should be avoided. Furthermore, the modified following business day convention is seen as the current market standard, and adopting a new standard would be challenging because updates to infrastructure, IT systems and client communication would be required. The same respondents recommended the use of the modified following business day convention, which would also reduce the risk of mismatches with hedging instruments.

Additionally, those respondents would prefer international harmonisation of the standards used in other jurisdictions, as different conventions may lead to confusion and additional complexity.

Chart 6The majority of respondents found the proposed day-count convention appropriate, while a few would prefer to use the current market standard



Source: ECB.

4 How to solve residual calendar discrepancies

Question 5: Do you agree that the use of the daily index value is a simple and transparent solution for the non-standard situations described in the Public Consultation document?

Question 6: If you have replied "No" to Question 5, what other alternative approach would you suggest? Please explain the advantages you associate with this alternative approach.

Most respondents agreed that the daily index values provide a simple and transparent solution for non-standard situations.

Most respondents perceive the index as a simple and transparent solution for managing non-standard tenors and broken interest periods, as it enables maximum flexibility. It was mentioned that the complexity of the compounded rate calculation is manageable and transparent. A few respondents indicated that the use of the index should especially be avoided in contracts with consumers, since any additional calculation adds complexity.

Feedback suggested that the distinction between standard and non-standard situations might be challenging, as the start date would need to be identified. In this regard, the publication of the respective start dates of the compounded €STR would be seen as very useful for users because it would allow them to differentiate between standard and non-standard situations and therefore switch to the index value accordingly. Moreover, the availability of the proposed index would eliminate the need for market participants to interpolate between the published maturities of the compounded €STR values.

One respondent recommended the publication of the index value for all calendar days to facilitate the use of the index in non-standard situations. Another respondent expressed their scepticism as to whether switching back and forth between the compounded €STR values and the index, depending on the specific case, would be feasible.

Regarding the choice of using either the standard rates or the index value, there were limited and contradicting views.

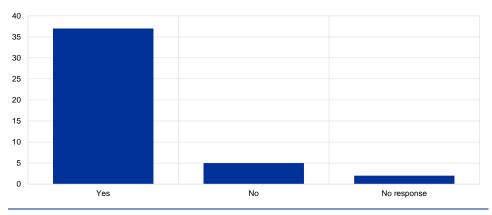
A few respondents proposed the publication of a dedicated calculation tool which would enable customers to calculate and verify compounded term rates in order to increase consumers' acceptance.

Chart 7

Most respondents agreed that the daily index values provide a simple and transparent solution for non-standard situations

September 2020

(number of responses)



Source: ECB

5 Publication policy

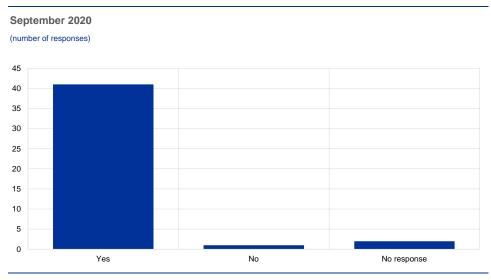
Question 7: Does the proposed range of maturities cover market participants' business needs?

The proposed maturities, which are in line with the currently available EURIBOR tenors, meet the respondents' needs.

Respondents confirmed that the proposed range of maturities would meet their needs because those tenors are used for standard products and instruments. As for non-standard tenors, the proposed index values could be used for calculating interest. Most respondents appreciated the fact that the maturities are in line with the currently available EURIBOR tenors, thereby facilitating the implementation of fall-back provisions.

A few respondents suggested the publication of longer or two- and nine-month maturities along with three- or six-month averages for "statistical needs". However, these maturities would not be seen as essential to the market participants.

Chart 8
Respondents agreed with the proposed maturities as they are in line with the currently available EURIBOR fixings



Source: ECB.

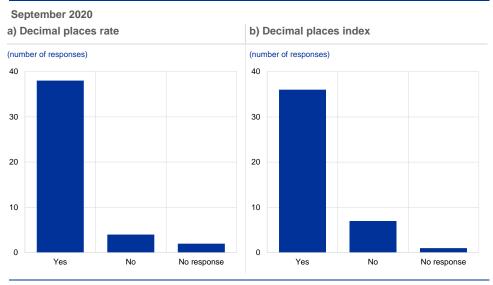
Question 8: Do you agree that (a) four decimal places for the published term rates, and (b) nine decimal places for the published index values are sufficient to meet users' needs?

Respondents broadly agreed with the proposals for the published rates and index values. Some respondents would recommend eight instead of nine decimal places for the index values.

The vast majority of respondents agree that four decimal places for the published term rates are sufficiently precise and in line with the common market standards. A low number of respondents would recommend five decimal places for the compounded \in STR values in order to increase accuracy.

The comments received on the decimal places for the published index value were more mixed. Some respondents saw nine decimal places as sufficient, while a large number of respondents would be in favour of index values with eight decimal places. This is because the index values would be in alignment with other indices already available, ensuring consistency across different jurisdictions. It was also mentioned that some infrastructure providers' systems were unable to handle data with more than eight decimal places. For this reason, it was suggested that 100 with eight decimal places (instead of 1 with nine decimal places) be used as an initial point for the index value publication. This would not only lead to a higher level of precision but also ensure alignment with standards in other jurisdictions. One respondent recommended the publication of ten decimal places. Another respondent pointed out that rounding should only apply to the final value and not within the calculation, i.e. past index values should not be used for calculating the index.

Chart 9
Respondents broadly agreed with both proposals for the published rates and index values



Source: ECB.

Question 9: Do you agree with the envisaged publication timing and correction policy?

A large majority of respondents supported the publication timing, while the proposed correction policy received rather negative feedback.

The vast majority of respondents supported the proposed publication timing of the compounded rates and the index values, and found this to be consistent with the €STR. One respondent would find it beneficial to have the compounded term rates and index value available at the same time as the overnight €STR.

Around half of the respondents agreed with the proposed correction policy and saw no need for a time limit, as they considered the occurrence of computation errors to be very unlikely. However, almost half of the respondents did not agree with the proposal and recommended a time limit for corrections, preferably on the same day, following the same procedure as for the €STR publication. This would enable:

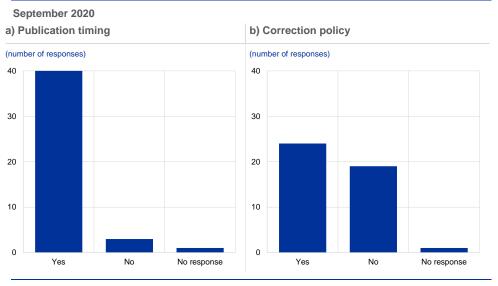
- alignment with other compounded rates and indices available in other jurisdictions;
- the alleviation of uncertainty among users and the reduction of litigation risk;
- the facilitation of middle- and back-office activities, as daily processes can be "closed";
- the calculation of accrued interest within internal systems;

 the avoidance of the necessity to implement backward-looking monitoring and controlling tools in the event of changes.

In the case of an unlimited correction policy being chosen and a correction occurring, respondents would expect the ECB to inform the public, e.g. with a press release or a similar notification. Furthermore, a dedicated and easily accessible web page, similar to the €STR page, would be expected for the publication.

Chart 10

The vast majority of respondents supported the publication timing, while the correction policy components, i.e. time unlimited corrections, were received with wide scepticism



Source: ECB.

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For specific terminology please refer to the ECB glossary (available in English only).