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Proposed fixing process

Contents

Introduction

This document constitutes a recommendation from the Working Group for the framework for the fixing of an RFR (nearly risk-free rate) in SEK. The recommendation has been drawn up by AGAR, based on the issues raised in consultations and communication with market participants. This document contains various details and descriptions that define and operationalise the definition of the interest rate previously recommended by the Working Group.[1] A significant change to the proposed fixing process may result in a change to the definition of the recommended interest rate.

[1] https://www.swedishbankers.se/media/4272/beslut.pdf

In drawing up its recommendations for this fixing process, AGAR's basic approach is that it should be as similar as possible to international practice for the fixing of other RFRs. As there is a lack of global uniformity, compromises have had to be made on a number of points.

In order to understand the entire framework for the development of the interest rate, this document must be supplemented by:

- The administrator's code of conduct, which includes information about who can decide on changes to the documents governing the development of the interest rate, methods for the publication of the interest rate, rules on the use of the interest rate, etc.
- The banks' code of conduct. This document governs how the reporting banks are to report the underlying data for fixing the interest rate. In other words, what is to be reported, in addition to what is described in this document, how it is to be reported, who can be authorised to report and so on.

The above codes of conduct shall be drawn up by the administrator.

The framework for the recommended fixing process contains information about which banks can be included in the reporting of data, how transactions that will form the basis of the interest rate are defined, when these transactions can take place and when they should be reported, how the quality of the transactions can be verified, a method for eliminating certain transactions with the highest and lowest interest rates, how the actual calculation of the interest rate can take place, what can happen if there is a lack of transactions, how and when publication can take place and finally details of which backup procedures can be used should anything fail in the process. Note that the final fixing method will be published by the administrator and that it is subject to change, particularly during the scheduled testing period for the new reference rate.

A. Reporting banks

1. The administrator collects the transactions that will form the basis for calculating the interest rate from the reporting banks.
2. Transaction data is collected based on the Administrator's transaction reporting requirements.[2] Unless otherwise stated in the fixing process rules, these transaction reporting rules apply.
3. The reporting banks are those banks that are monetary policy counterparties to the Swedish Central Bank and which are required to report transactions on a daily basis and which the administrator does not consider unsuitable. These are

[2] https://www.riksbank.se/en-gb/statistics/short-term-money-market-rates/transaction-reporting/

the basic requirements for a bank's transactions to be considered part of the underlying data.

4. The reporting bank must have specially designated persons who are authorised to submit transactions. The administrator must be able to identify who is responsible for reporting under normal circumstances, as well as when any backup procedures are applied. The reporting banks must have procedures in place to ensure that only authorised staff are able to execute the reports and answer any questions. It must also be clearly established between the Administrator and the reporting banks who is authorised to communicate that any errors have been made in the reporting.
5. If the Swedish Central Bank chooses to include a new bank as a monetary policy counterparty, its transactions that comply with the requirements of section B shall be included in the underlying data used to calculate the interest rate, unless the Administrator considers the bank to be unsuitable.
6. The Administrator has the right to exclude banks if they are not deemed suitable. Reasons for exclusion can include the contributions from the bank frequently containing errors and shortcomings, the bank failing to report on time or where the existence of a circumstance that may reduce the credibility of the interest rate is suspected. If a new bank is included in the reporting and the Administrator considers there is reason to believe that its reporting will not be of sufficient quality, this bank's transactions should not be included in the underlying data for the interest rate.
7. A bank that meets the requirements specified in the fixing process and which is deemed suitable is required to report its transaction data.

B. Transaction requirements

The following requirements shall apply for inclusion in the underlying data for fixing the interest rate. The following points are based on the recommended definition of the interest rate as previously published by AGAR. Where solutions are identified that are better aligned with international practice and which can enhance the stability and credibility of the interest rate, the administrator shall adopt these solutions instead.

1. Banks shall report all of their transactions that fulfil the requirements of the reporting instruction referred to in A2 above. The administrator shall then select the correct transactions from the reported transactions, according to the requirements stipulated below in B2–B10.
2. The transaction must relate to an agreement on the payment of Swedish kronor (SEK) over 24 hours (O/N) to the reporting bank.
3. The payment must result in an account-based liability. The interest rate must be based on unsecured transactions.
4. The Trade date and Settlement date must be the trading day to which the interest rate relates. The date before publication.

5. The Maturity date must be the next trading day after the date to which the interest rate relates.
6. The Call or Put field must be blank or zero.
7. The underlying data shall include only those transactions that have taken place with correct counterparties. Correct Swedish counterparties are identified using sector codes as follows:

Sector code	Description
13112	The Swedish National Debt Office
1221	Banks
1222	Bank branches in Sweden
1223	Building societies
1224	Other monetary financial institutions
1225	Monetary securities companies and brokers
1229	General monetary financial institutions
123	Money market funds
124	Investment funds
126	Financial service companies
127	Intra-group financial institutions and lenders
128	Insurance companies
129	Pension funds

Foreign counterparties with equivalent sector codes shall also be deemed correct.

8. The underlying data must not include intra-group transactions.[3]
9. To calculate the interest rate, the interest rate must be retrieved from the Deal rate field and the volume must be retrieved from the Transaction Nominal Amount field. The interest rate must be indicated here using the Actual/360 interest rate convention.

C. Reporting times and publication

1. The following is a proposal recommended by AGAR based on its work to identify suitable reporting times and publication. Where solutions are identified that are better aligned with international practice and which can enhance the stability and credibility of the interest rate, the administrator shall adopt these solutions instead.
2. It is proposed that the interest rate fixed be published at 10 am each trading day. The times specified below are based on this publication time.

[3] As defined in ECB/2014/48, Article 1, point 19.

3. The applicable interest rate shall be calculated on the basis of transactions that took place on the trading day immediately preceding the publication date.
4. The following information shall be published each trading day:
   a) The interest rate fixed, expressed to three decimal places
   b) The number of transactions on which the calculation is based, before trimming
   c) The daily turnover before trimming
   d) The number of banks that have contributed at least one transaction
   e) The calculation method used. It should always be indicated whether the standard method or the exemption rule has been applied.
5. The rate shall be published at least on the administrator's website.
6. If an error is detected no later than 12 noon on the publication date that has affected the interest rate fixed by three points or more, the interest rate fixing shall be repeated. This new fixing, the refixing, shall take place at 1 pm. If an error is detected after 12 noon, there shall be no refixing. If the error does not affect the fixing by three points or more, there shall also be no refixing. The principles for refixing are described in greater detail in J7 below.
7. Information shall be published regularly about any errors and incidents that have occurred. These reports shall also include errors and incidents that have not required any action to be taken. Reports shall indicate the type of incident, date, any backup procedure and consequences.
8. The administrator shall keep the supervisory authority informed of all incidents that occur and shall regularly report on the functioning of the entire system for fixing the interest rate.

D. Quality control of transactions

1. The reporting banks must have adequate programs for identifying transactions in line with the Administrator's requirements. The method used by these programs to select transactions shall undergo a standard review to ensure that they are operating in accordance with the requirements. The review shall take place in the same way as the verification of similar external reporting.
2. The administrator shall verify that relevant transactions have been collected and that nothing is thought to be missing. The administrator also has the task of determining which transactions are relevant for the definition of the applicable interest rate. These shall be identified using the method described in section B. Frequent checks shall be performed to ensure that this selection is made in a satisfactory manner.
3. The administrator shall also make reasonability assessments of the transactions submitted and the transactions reported for the applicable interest rate.

E. Elimination of the highest and lowest – trimming

1. The following is a proposal recommended by AGAR based on its work to identify the most suitable trimming rules. Where solutions are identified that are better aligned with international practice and which can enhance the stability and credibility of the interest rate, the administrator shall adopt these solutions instead.
2. In order to reduce both the risk of manipulation and the spread each day, it is proposed that the transactions with the highest and lowest interest rates each day be eliminated.
3. If the transactions and reporting banks are sufficient for the standard calculation method to be used, transactions equivalent to 25% of the daily turnover shall be removed.
4. This shall be done by aggregating the turnover of each unique interest rate and then removing turnover equivalent to the highest 12.5 per cent of interest rates and the lowest 12.5 per cent of interest rates. The fixing is then calculated on the basis of the remaining 75 per cent of turnover.

F. Standard calculation method

1. The standard method of determining the interest rate fixing is used on every trading day when the exemption rule does not have to be applied (see section G).
2. The standard method of calculation is to multiply the interest rate for all acceptable transactions remaining after trimming by the transaction's share of daily turnover.

G. Weak underlying data and exemption rule

1. The following is a proposal recommended by AGAR based on its work to identify the most suitable exemption rules. Where solutions are identified that are better aligned with international practice and which can enhance the stability and credibility of the interest rate, the administrator shall adopt these solutions instead.
2. If the underlying transaction data is too weak, an exemption rule shall be used to calculate the applicable interest rate.
3. The underlying data is considered too weak if the daily turnover before trimming is below 2 billion or if there are fewer than three banks with transactions to report. If the exemption rule is applied, there should be no trimming.
4. The exemption rule means that if the underlying data is too weak on any given day, the most recently published interest rate is weighted so that the underlying data is upweighted to the minimum approved level of turnover (2 billion) and the minimum number of reporting banks (three).

5. If the number of banks reporting transactions is three or more but turnover is only 1.5 billion, for example, the most recently published interest rate from the previous day shall be included in the calculation. The interest rate from the previous publication is then weighted in as 25 per cent *(= (2 billion – 1.5 billion) / 2 billion*) and the interest rate for the current day as 75 per cent (*=1.5 billion / 2 billion*). The weighted interest rate is then the fixing for the day.
6. If turnover is 2 billion or more but the number of reporting banks is only two, for example, the most recently published interest rate from the previous day shall be included in the calculation. The interest rate from the previous publication is then weighted in as 1/3 (equivalent to one missing bank) and the interest rate for the current day as 2/3 (corresponding to two reporting banks). The weighted interest rate is then the fixing for the day.
7. If turnover on the day in question is 1.5 billion and the number of banks that have transactions to report is only two, the fixing for the day is calculated in two steps. In step 1, the method above is applied to calculate the interest rate with respect to volume. In step 2, the fixing is then calculated by weighting the interest rate resulting from step 1 with regard to the number of banks that reported transactions.
8. In the event of a lack of both turnover and reporting banks, the following example illustrates how the calculation can be made:

Most recent fixing	-0.30%
Today's contribution	
Bank A	-0.28%, 0.4 billion
Bank B	-0.26%, 1.1 billion
Calculations	
Step 1	$\left(-0.28 * \frac{0.4}{2}\right) + \left(-0.26 * \frac{1.1}{2}\right) + \left(-0.30 * \frac{0.5}{2}\right) = -0{,}274$
Step 2	$\left(-0.274 * \frac{2}{3}\right) + \left(-0.30 * \frac{1}{3}\right) = -0.283$
Today's fixing	−0.283%

J. Backup procedures

1. The following is a proposal recommended by AGAR based on its work to identify the most suitable backup procedures. Where solutions are identified that are better aligned with international practice and which can enhance the stability and credibility of the interest rate, the administrator shall adopt these solutions instead.

2. Proposed general framework (the times below are based on the proposed publication time for the interest rate):
   a) All banks that have a daily reporting requirement under the Administrator's regulations must have reported by 7 am at the latest on the publication date. The interest rate is fixed once all the banks have submitted their daily report file. The daily file must always be submitted, regardless of whether or not transactions have taken place.
   b) If the interest rate cannot be fixed at 10 am, the fixing time shall be postponed by 10 minutes. This can be repeated five times. If it has still not been possible to perform a fixing, the interest rate for the current date is fixed at the most recently published fixing. This is called the *Reserve Procedure*.
   c) All events and incidents requiring the application of backup procedures shall be reported publicly afterwards. This means that information should be published about what has happened, which procedure has been applied and the consequences of this. This information should be published on the Administrator's website and through affiliated information providers, as well as sent to all reporting banks.
3. If a transaction report is missing from one or more banks
   a) If one or more banks do not submit transactions before 7 am, a reminder is sent to the bank or banks that have failed to report.
   b) If one or more banks have not submitted their reports by 8.15 am, the Administrator will contact the bank or banks in question at 8.30 am so that their reports can be submitted no later than 9 am.
   c) Alternative reporting solutions shall be considered that do not compromise the security of reporting.
   d) If a solution cannot be found, the Reserve Procedure shall come into effect.
4. If the communication system of an individual bank breaks down
   a) An alternative method of communication with the Administrator shall be established. Accepted methods of security and encryption shall be used.
   b) If a bank realises that its communication with the Administrator is not functioning normally, the bank shall notify the Administrator of this immediately. An agreement shall be reached on an alternative method to be used for the delivery of transaction data.
   c) The Administrator must be able to identify the person who is submitting the transactions using this backup procedure.
   d) The Administrator shall have a method that enables the identification of transaction data that is acceptable as underlying data for the interest rate, even when it is submitted using this backup procedure.
5. If the entire communication system or fixing system breaks down
   a) Examples of this include large-scale power failure, significant computer failure at the Administrator, fire or similar occurrence of physical risk or the telephone network or communication system breaking down.

b) The Administrator shall ensure that it is possible to transfer transaction data from all reporting banks to a calculation facility that is separate from the normal facility. The Administrator shall have a method that enables the identification of transaction data that is acceptable as underlying data for the interest rate, even when it is submitted using this backup procedure.

c) If an interest rate cannot be fixed, the reserve procedure shall come into effect.

6. If an incorrect contribution is detected before fixing

a) If a reporting bank discovers before 9 am that the data already submitted contains some form of error, the transactions shall be resubmitted and the bank shall notify the Administrator of what has happened.

b) The fixing is calculated using standard procedures and publication takes place as normal.

c) Any incident that leads to this backup procedure shall be included in the regular incident report.

7. If incorrect contributions are detected after fixing – refixing

a) This is described in C6 above.

b) The error must have been detected before 12 noon and must affect the interest rate by three points or more.

c) If a bank detects errors in the data that has already been submitted, the bank shall contact the Administrator and prepare to submit the corrected data.

d) In order to check the error, the Administrator shall have the ability to receive new transactions, amend the transactions received and recalculate the interest rate in order to verify that the error may affect the fixing by three points or more. This will take place after 12 noon.

e) If the Administrator confirms that an error has caused the interest rate to be wrong by three points or more, a new interest rate shall be published at 1 pm.

f) AGAR recommends that the refixing should apply as the correct listing for the interest rate for the relevant day at 12 noon on the day that refixing takes place. Various forms of compound interest rates and indices based on the interest rate shall be recalculated so that the refixing and nothing else is included in the calculations.