Pre-€STR

1 Introduction

On 21 September 2017 the European Central Bank (ECB) announced that it would develop a euro unsecured overnight interest rate based on data already available to the Eurosystem. The euro short-term rate (€STR), to be produced before 2020, will complement existing benchmark rates produced by the private sector and serve as a backstop reference rate. It will be based entirely on transactions in euro that are reported by banks in the ECB’s money market statistical reporting (MMSR).

Respondents to the two related public consultations emphasised the need for indicative figures to be published early on. The ECB therefore publishes preliminary figures, referred to as the pre-€STR, with the aim of reducing market uncertainty, allowing market participants to assess the suitability of the new rate and familiarise themselves with its statistical properties, and providing them with the opportunity to adjust processes and procedures adequately to ensure a seamless transition to the new rate.

2 Data underlying the pre-€STR

The pre-€STR is based on daily confidential statistical information relating to money market transactions collected in accordance with Regulation (EU) No 1333/2014 (MMSR Regulation)¹, which entered into force on 1 January 2015. The regular data collection started on 1 July 2016.

The pre-€STR is based exclusively on eligible data from the unsecured market segment of the MMSR. Details on the reporting requirements for the MMSR as well as the current reporting population are available on the ECB website.

The data underlying the pre-€STR are subject to the thorough daily data quality management process that forms part of the MMSR and reflect all revisions submitted by reporting agents at the time of calculating the rate, including cancellations, corrections and amendments.

The data quality management process includes a set of technical checks which verify that the submitted data complies with the structure and formats required for the MMSR. Furthermore, a large number of data quality checks are carried out to ensure the correctness of the reported data, for example the date structure of the transaction (trade, settlement and maturity dates) is reviewed. The data quality checks are complemented by a series of advanced checks including checks of the

number of new transactions and revisions submitted per reporting agent, and of the application of various methods for outlier detection.

In case of deviations from the usual reporting patterns, or when outliers are identified, the respective reporting agents are contacted to clarify the identified cases. The same procedure is applied when a deviating or outlying transaction is identified based on other advanced methods, for example through the matching of the two legs of a transaction, which can be applied when both counterparties are MMSR reporting agents.

The daily data quality management process is complemented by the statistical non-compliance procedure, which provides for the monitoring and enforcement of reporting agents’ compliance with the minimum standards. These minimum standards are defined in the MMSR Regulation and include minimum standards for transmission, accuracy, compliance with concepts and revisions.

The minimum standards for transmission include, among others, that the reporting must be timely and within the deadlines set by the ECB and the relevant national central bank (NCB) and that the statistical reports must take their form and format from the technical reporting requirements set by the ECB and the relevant NCB. The minimum standards for accuracy set a number of rules to ensure that the reported information is correct and complete, while the minimum standards for conceptual compliance relate to compliance with the definitions and classifications contained in the MMSR Regulation.

Compliance with the minimum standards is regularly monitored by the ECB and NCBs. In the case of non-compliance, the respective reporting agents are contacted and asked to implement corrective measures. In case of repeated non-compliance, an infringement procedure is initiated and sanctions may be imposed in accordance with the applicable legal framework.

3 Calculation method

After having established the data underlying the pre-ESTR, the rate is calculated in line with the calculation method defined for the ESTR.

The pre-ESTR is an overnight rate calculated on the basis of unsecured borrowing deposit transactions carried out by MMSR reporting agents with financial corporations. Transactions with a value of less than €1 million or with a non-fixed rate are excluded.

The rate is calculated as a volume-weighted trimmed mean at the 25% level², meaning that the rate is calculated based on the middle 50% of transactions by volume.

² Trimming at the 25% level means that the top and bottom 25% of the rates in volume terms are removed.
The pre-€STR includes the same features as described in the €STR methodological note:

- rate for the relevant day rounded to three decimals (labelled “Pre-Euro Short-Term Rate - Volume-weighted trimmed mean”);
- total nominal amount of transactions in EUR millions before trimming (labelled “Pre-Euro Short-Term Rate - Total volume”);
- number of banks reporting transactions before trimming (labelled “Pre-Euro Short-Term Rate - Number of banks”);
- number of transactions before trimming (labelled “Pre-Euro Short-Term Rate - Number of transactions”);
- percentage of total nominal amount reported by the five largest contributing banks that day (labelled “Pre-Euro Short-Term Rate - Share 5 largest banks”);
- calculation mode: normal or contingency (labelled “Pre-Euro Short-Term Rate - Calculation method”);
- rates at the 25th and 75th percentiles of volumes rounded to two decimals (labelled “Pre-Euro Short-Term Rate - Rate at 25th percentile of volume” and “Pre-Euro Short-Term Rate - Rate at 75 percentile of volume”).

4 Publication

The publication includes data and charts illustrating significant features of the pre-€STR. These are made available in the ECB’s Statistical Data Warehouse and on the ECB website. The published daily figures are based on time-lagged historical time series for the reserve maintenance periods starting 15 March 2017. Releases may include revisions to previously published data.

5 Differences between the pre-€STR and the €STR

The pre-€STR is calculated using the same methods as defined for the €STR. The pre-€STR differs in that it is based on data that include all revisions in terms of cancellations, corrections and amendments submitted by reporting agents by the time of calculating the rate, while the €STR will be published every morning and takes into account only the data received by the submission deadline of 07:00 CET that morning.

6 Definitions

The following key terms are defined in line with the MMSR Regulation:
• **Unsecured deposits (borrowing)** refers to unsecured interest-bearing deposits that are either redeemable at notice or have an overnight maturity, and that are taken (borrowed) by the reporting agent.

• **Overnight maturity** refers to when the settlement date and the trade date of a transaction are the same and the transaction matures on the following TARGET2 business day. The maturity of call accounts and other unsecured borrowing redeemable at notice is classified as overnight. It excludes those instruments which cannot be redeemed/terminated/closed overnight.

• **Counterparty sectors** cover monetary financial institutions, including central banks and money market funds, other financial intermediaries, non-money market investment funds, insurance corporations and pension funds.

• **Fixed rate** is the interest rate, expressed in accordance with the ACT/360 money market convention, at which the deposit was concluded and at which the cash amount lent is remunerated. In the case of debt instruments, this is the effective interest rate, expressed in accordance with the ACT/360 money market convention, at which the instrument was issued or purchased.

• **Reporting agents** are the legal and natural persons and entities which are subject to the ECB’s statistical reporting requirements.

• **Total nominal amount** refers to the sum of the nominal amount of all eligible transactions conducted during a given day.

• **Volume-weighted trimmed mean rate** is calculated as the rates weighted by the respective nominal amount over the respective day, removing the top and bottom 25% of the rates in volume terms.

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**Disclaimer**

The pre-ESSTR is only a set of indicators for the €STR. Its publication is for information purposes only and the data are not intended for use as a benchmark in any market transaction, whether directly or indirectly.