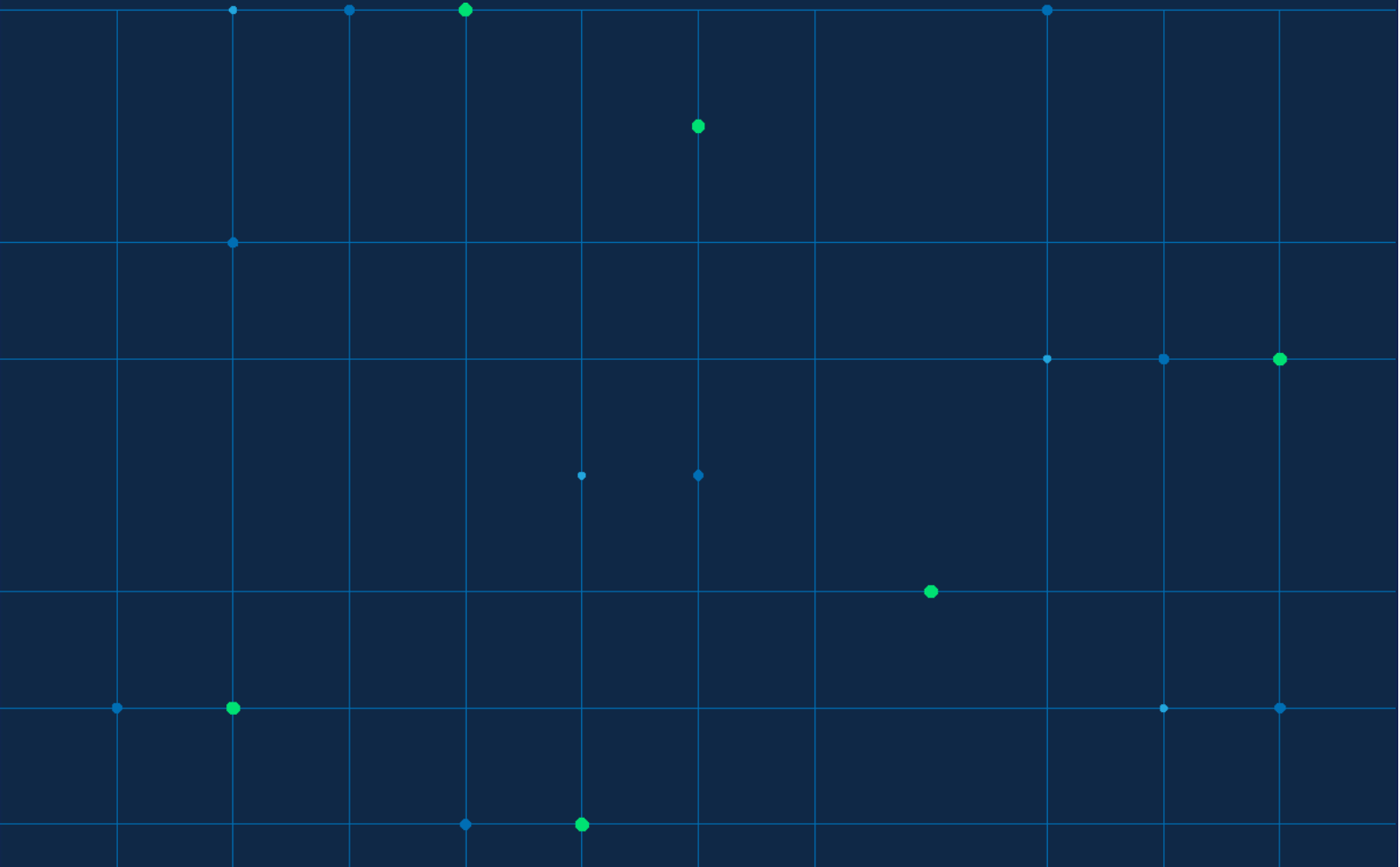


CME EUR/USD Cross Currency Basis Index (XEURBI)

UK BMR Benchmark Statement

CME Group Benchmark Administration Limited

Publication Date: July 29th, 2024





Introduction

The CME EUR/USD Cross Currency Basis Index (the Benchmark) is classified as a “regulated data benchmark” under Article 3(24) of the UK Benchmark Regulation (BMR)¹.

The Benchmark is administered and calculated by CME Group Benchmark Administration Limited (CBA), authorized and supervised, as a Benchmark Administrator by the UK Financial Conduct Authority.

¹ <https://www.fca.org.uk/markets/benchmarks/regulation>

| BMR / RTS | BMR Benchmark Statement requirement | Administrator's statement |
|---------------------------------------|---|---|
| Article 27 (1) BMR | <p>Within two weeks of the inclusion of an administrator in the register referred to in Article 36, the administrator shall publish, by means that ensure fair and easy access, a benchmark statement for each benchmark or, where applicable, for each family of Benchmark, that may be used in the Union in accordance with Article 29. Where that administrator begins providing a new benchmark or family of Benchmark that may be used in the Union in accordance with Article 29, the administrator shall publish, within two weeks and by means that ensure a fair and easy access, a benchmark statement for each new benchmark or, where applicable, family of Benchmark. The administrator shall review and, where necessary, update the benchmark statement for each benchmark or family of Benchmark in the event of any changes to the information to be provided under this Article and at least every two years.</p> | <p>In order to facilitate fair and easy access, this Benchmark Statement appears on the Administrator's website.</p> <p>The Administrator shall ensure that this Benchmark Statement is updated in the event of any material changes and no later than every two years.</p> |
| <p>The Benchmark Statement shall:</p> | | |
| (a) | <p>clearly and unambiguously define the market or economic reality measured by the benchmark and the circumstances in which such measurement may become unreliable;</p> | <p>The EUR/USD Cross Currency Basis Index measures the basis point deviation from the covered interest parity implied forward FX price. This is established by calculating the difference between the next ESTR quarterly IMM futures interest rate and the implied ESTR interest rate from the next Euro FX and SOFR quarterly IMM futures.</p> <p>The calculation is based on the 4pm London Markers for the Euro FX, ESTR and SOFR Futures, determined according to the daily settlement process.</p> <p>The Benchmark may become unreliable as a result of insufficient input data (RTS 1(2)(c)) or severe market disruption (RTS 1(3)(c)).</p> |
| (b) | <p>lay down technical specifications that clearly and unambiguously identify the elements of the calculation of the benchmark in relation to which discretion may be exercised, the criteria applicable to the exercise of such discretion and the position of the persons that can exercise discretion, and how such discretion may be subsequently evaluated;</p> | <p>The Benchmark is calculated based on CME's 4pm London markers for Euro FX, ESTR and SOFR Futures. No expert judgement or discretion is exercised in the daily determination of the benchmark.</p> <p>The input data used in the calculation of the CME EUR/USD Cross Currency Basis Index is from CME Group's Designated</p> |

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| | | <p>Contracts Market (DCM). Details of the CME Futures contracts used in the calculation of the Benchmark and their volume and open interest is available on CME Group's website links below:</p> <ul style="list-style-type: none"> • three-month ESTR Futures (ESTR) • three-month SOFR Futures (SR3) and; • EUR/USD FX Futures (Euro FX) |
| (c) | <p>provide notice of the possibility that factors, including external factors beyond the control of the administrator, may necessitate changes to, or the cessation of, the benchmark; and</p> | <p>There is the possibility that factors, including external factors beyond the control of the Administrator, may necessitate changes to, or the cessation of, the Benchmark.</p> <p>Where material changes to or the cessation of the Benchmark become necessary, the Administrator will engage stakeholders and users by way of a public consultation.</p> <p>All changes are reviewed by the Oversight Committee.</p> |
| (d) | <p>advise users that changes to, or the cessation of, the benchmark may have an impact upon the financial contracts and financial instruments that reference the benchmark or the measurement of the performance of investment funds.</p> | <p>Changes to, or the cessation of, the Benchmark may have an impact upon the financial contracts and financial instruments that reference the benchmark or the measurement of the performance of investment funds.</p> <p>The Administrator advises users of the Benchmark to regularly assess whether it remains appropriate, suitable and fit for purpose. Users should develop contingency provisions and fall-back plans in the event of the benchmark becoming unavailable.</p> |
| Article 27(2) BMR | A benchmark statement shall contain at least: | |
| (a) | the definitions for all key terms relating to the benchmark; | See the Appendix for definitions used in this Benchmark Statement. |
| (b) | the rationale for adopting the benchmark methodology and procedures for the review and approval of the methodology; | The aim of the Benchmark is to represent the basis point deviation from the covered interest parity |

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| | | <p>implied forward FX price. This is established by calculating the difference between the next ESTR quarterly IMM futures interest rate and the implied ESTR interest rate from the next Euro FX and SOFR quarterly IMM futures.</p> <p>The Administrator regularly reviews the Methodology to ensure that the Benchmark remains representative of the economic reality intended to be represented.</p> <p>Amendments to the Methodology are determined by the Administrator, after wide consultation with the relevant stakeholders, including the Oversight Committee.</p> |
| (c) | <p>The criteria and procedures used to determine the benchmark, including a description of the input data, the priority given to different types of input data, the minimum data needed to determine a benchmark, the use of any models or methods of extrapolation and any procedure for rebalancing the constituents of a benchmark's index;</p> | <p>Input data to the Benchmark calculation are the 4pm London Markers of three-month ESTR Futures (ESTR), three-month SOFR Futures (SR3) and EUR/USD FX Futures (Euro FX) contracts, traded on the Chicago Mercantile Exchange Inc (CME Inc.) Designated Contract Market (DCM).</p> |
| (d) | <p>the controls and rules that govern any exercise of judgement or discretion by the administrator or any contributors, to ensure consistency in the use of such judgement or discretion;</p> | <p>No expert judgement or discretion is exercised in the daily determination of the Benchmark.</p> |
| (e) | <p>the procedures which govern the determination of the benchmark in periods of stress or periods where transaction data sources may be insufficient, inaccurate or unreliable and the potential limitations of the benchmark in such periods;</p> | <p>The Methodology includes contingency measures to deal with determination of the Benchmark in periods of stress or periods where transaction data sources may be insufficient, inaccurate or unreliable.</p> |
| (f) | <p>the procedures for dealing with errors in input data or in the determination of the benchmark, including when a redetermination of the benchmark is required; and</p> | <p>The Administrator has in place operating procedures designed to ensure the integrity of input data and prompt correction of calculation errors, including re-publication of the Benchmark. These are facilitated through Chicago Mercantile Exchange Inc., who acts as calculation agent to</p> |

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| | | the Administrator for the Benchmark. |
| (g) | the identification of potential limitations of the benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs. | <p>The Methodology relies solely on the 4pm London Markers published by a CFTC regulated DCM based on transaction data. The Administrator continuously monitors volumes in the underlying markets and reports back to the Oversight Committee to assess whether the input data have sufficient liquidity.</p> <p>If the 4pm London Markers for the ESTR, SOFR or Euro FX Futures markets are unavailable for use in the calculation, the Administrator will re-publish the prior day's Index level.</p> |
| RTS 1(1) | The benchmark statement shall state: | |
| (a) | the date of publication of the statement and, where applicable, the date of its last update; | Please see the beginning of this document for the date of publication and last update. |
| (b) | where available, the international securities identification number (ISIN) of the benchmark or Benchmark; alternatively, for a family of Benchmark, the statement may provide details of where the ISINs are publicly accessible free of charge; | Not applicable to the Benchmark. |
| (c) | whether the benchmark, or any benchmark in the family of Benchmark, is determined using contributions of input data; | <p>The Benchmark is calculated using transaction data, sourced directly from the CFTC regulated DCM operated by CME Inc.</p> <p>The Benchmark is not determined using contributions of input data.</p> |
| (d) | whether the benchmark or any benchmark in the family of Benchmark qualifies as one of the types of Benchmark listed under Title III of Regulation (EU) 2016/1011, including the specific provision by virtue of which the benchmark qualifies as that type. | The CME EUR/USD Cross Currency Basis Index is classified as a Regulated Data Benchmark as all input data are official marker prices obtained entirely and directly from a US CFTC regulated DCM operated by CME Inc. which benefits from an equivalence decision under Article 28(4) MiFIR. |
| RTS 1(2) | In defining the market or economic reality, the benchmark statement shall include at least the following information: | |
| (a) | a general description of the market or economic reality; | The CME EUR/USD Cross Currency Basis Index represents the basis point deviation from the |

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| | | covered interest parity implied forward FX price. |
| (b) | the geographical boundaries, if any, of the market or economic reality; | The Benchmark represents the cross currency basis in the EUR/USD market. |
| (c) | any other information that the administrator reasonably considers to be relevant or useful to help users or potential users of the benchmark to understand the relevant features of the market or economic reality, including at least the following elements insofar as reliable data on these elements is available: (i) information on actual or potential participants in the market; (ii) an indication of the size of the market or economic reality. | The calculation of the Benchmark relies on the 4pm London Markers sourced from a CFTC regulated DCM. In Q2 2024, the average daily volume of three-month ESTR Futures was €15bn, three-month SOFR Futures was \$3tn and EUR FX Futures was \$32bn. |
| RTS 1(3) | In defining the potential limitations of the benchmark and the circumstances in which the measurement of the market or economic reality may become unreliable, the benchmark statement shall include at least: | |
| (a) | a description of the circumstances in which the administrator would lack sufficient input data to determine the benchmark in accordance with the methodology. | In accordance with the Methodology, the previous day's values will be reused if there were no 4pm London Markers available on a given day. |
| (b) | where relevant, a description of instances when the accuracy and reliability of the methodology used for determining the benchmark can no longer be ensured, such as when the administrator deems the liquidity in the underlying market as insufficient; | The accuracy and reliability of the Benchmark could no longer be ensured in the event of continued insufficient liquidity in the underlying futures markets. To that extent, the Administrator regularly monitors transacted volumes for the underlying futures markets used in the calculation of the Benchmark and reports to the Oversight Committee any concern regarding the liquidity of the underlying markets. |
| (c) | any other information that the administrator reasonably considers to be relevant or useful to help users and potential users to understand the circumstances in which the measurement of the market or economic reality may become unreliable, including a description of what might constitute an exceptional market event. | The Benchmark relies on the regular functioning of the underlying futures markets; reliable representation of underlying markets could be severely affected if futures markets were not operating or the trading venues where transactions are executed experience severe disruptions or regulatory limitations to their normal functioning. |

| BMR / RTS | BMR Benchmark Statement requirement | Administrator's statement |
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| RTS 1(4) | In specifying the controls and rules that govern any exercise of judgement or discretion by the administrator or any contributors in calculating the benchmark or Benchmark, the benchmark statement shall include an outline of each step of the process for any ex post evaluation of the use of discretion, together with a clear indication of the position of any person(s) responsible for carrying out the evaluations. | No expert judgement or discretion is exercised in the daily determination of the Benchmark. |
| RTS 1(5) | In specifying the procedures for review of the methodology, the benchmark statement shall at least outline the procedures for public consultation on any material changes to the methodology. | <p>The Methodology provides that the Administrator will consult with stakeholders on material changes to the Methodology.</p> <p>Consultation will ordinarily consist of publishing of proposals, providing stakeholders with a reasonable time to respond and publishing actions as a result of the consultation.</p> <p>In addition, the Oversight Committee can request the Administrator to consult on any change as appropriate.</p> |
| RTS 2 | In addition to the information to be included pursuant to Article 1, for a regulated-data benchmark or, where applicable, family of regulated-data Benchmark, the benchmark statement shall state at least the following in its description of the input data: | |
| (a) | the sources of the input data used; | The Benchmark is calculated using the official 4pm London Markers produced by the exchange, sourced directly from the regulated trading venues operated by CME Inc. |
| (b) | for each source, the relevant type, as listed in Article 3(1)(24) of Regulation (EU) 2016/1011. | The EUR/USD Cross Currency Basis Index is classified as a Regulated Data Benchmark as all input data is official marker prices contributed entirely and directly from a US CFTC regulated DCM operated by CME Inc. under a MiFIR Equivalence Decision by the HM Treasury. |
| RTS 3 | In addition to the information to be included pursuant to Article 1, for an interest rate benchmark or, where applicable, family of interest rate Benchmark, the benchmark statement shall include at least the following information: | |
| (a) | a reference alerting users to the additional regulatory regime applicable to interest rate Benchmark under Annex I to Regulation (EU) 2016/1011; | N/A – Not an interest rate benchmark. |
| (b) | a description of the arrangements that have been put in place to comply with that Annex. | N/A – Not an interest rate benchmark |
| RTS 4 | In addition to the information to be included pursuant to Article 1, for a commodity benchmark or, where applicable, family of commodity Benchmark, the benchmark statement shall at least: | |

| BMR / RTS | BMR Benchmark Statement requirement | Administrator's statement |
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| (a) | indicate whether the requirements of Title II of, or Annex II to, Regulation (EU) 2016/1011 apply to the benchmark, or family of Benchmark as prescribed by Article 19 of that Regulation; | N/A – Not a commodity benchmark |
| (b) | include an explanation as to why Title II of or, as the case may be, Annex II to that Regulation applies; | N/A – Not a commodity benchmark |
| (c) | include in the definitions of key terms a concise description of the criteria that define the relevant underlying physical commodity; | N/A – Not a commodity benchmark |
| (d) | where applicable, indicate where the explanations are published that the administrator is required to publish under paragraph 7 of Annex II to that Regulation. | N/A – Not a commodity benchmark |
| RTS 5 | In addition to the information to be included pursuant to Article 1, for a critical benchmark, or, where applicable, a family of Benchmark that contains at least one critical benchmark, the benchmark statement shall include at least the following information: | |
| (a) | a reference alerting users to the enhanced regulatory regime applicable to critical Benchmark under Regulation (EU) 2016/1011; | N/A – Not a critical benchmark |
| (b) | a statement indicating how users will be informed of any delay in the publication of the benchmark or of any re-de-termination of the benchmark and indicating the (expected) duration of measures. | N/A – Not a critical benchmark |
| RTS 6 | In addition to the cases referred to in the third subparagraph of Article 27(1) of Regulation (EU) 2016/1011, an update of the benchmark statement shall be required whenever the information contained in the statement ceases to be correct or sufficiently precise, and including in any event in the following cases: | |
| (a) | whenever there is a change in the type of the benchmark; | This Benchmark Statement shall be updated where information contained within it ceases to be correct or sufficiently precise, including where there is a change to the type of input data. |
| (b) | whenever there is a material change in the methodology used for determining the benchmark or, if the benchmark statement is for a family of Benchmark, in the methodology used for determining any benchmark within the family of Benchmark. | This Benchmark Statement shall be updated where there is a material change in the Methodology used for determining the Benchmark. |

1. Appendix I – Key Terms & Definitions

Capitalised terms used in this Benchmark Statement that are not otherwise defined have the meaning set out below:

| TERM | DESCRIPTION |
|----------------------|---|
| Administrator | CME Group Benchmark Administration Limited |
| BMR | UK Benchmark Regulation (Regulation (EU) 2016/2011, as retained in UK law under the EUWA) |
| EUWA | European Union (Withdrawal) Act 2018, as amended from time to time |
| MiFIR | Markets in Financial Instruments Regulation (Regulation EU No 600/2014), as retained in UK law under the EUWA |
| DCM | Designated Contract Market |
| SOFR | Secured Overnight Funding Rate |
| ESTR | Euro Short Term Rate |
| RTS | Regulatory Technical Standard, which in the context of the BMR means Regulation (EU) 2018/1643 (as retained in UK law under the EUWA) |

2. Appendix II – ESG Disclosures

| Explanation of how ESG Factors are Reflected in the Key Elements of the Benchmark Methodology | | |
|---|--|--|
| Item 1 | Name of the benchmark administrator. | CME Benchmark Administration Limited |
| Item 2 | Type of benchmark or family of Benchmark. | Other |
| Item 3 | Name of the benchmark or family of Benchmark. | CME EUR/USD Cross Currency Basis Index |
| Item 4 | Are there in the portfolio of the benchmark administrator any EU Climate Transition Benchmark, EU Paris-aligned Benchmark, Benchmark that pursue ESG objectives or Benchmark that take into account ESG factors? | No |
| Item 5 | Does the benchmark or family of pursue ESG objectives? | No |
| Item 10 | Does the benchmark align with the target of reducing carbon emissions or the attainment of the objectives of the Paris Agreement | No |
| | The temperature scenario, in accordance with international standards, used for the alignment with the target of reducing GHG emissions or attaining of the objectives of the Paris Agreement | N/A |
| | The name of the provider of the temperature scenario used for the alignment with the target of reducing GHG emissions or the attainment of the objectives of the Paris Agreement | N/A |
| | The methodology used for the measurement of the alignment with the temperature scenario | N/A |
| | The hyperlink to the website of the temperature scenario used | N/A |

