cfbenchmarks
a kraken company

CME CF Cryptocurrency Pricing Products

Benchmark Statement

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1 Version History

Version	Date	Changes
1.0	4th September 2019	Initial version
2.0	20th May 2020	Update copyright, news link
3.0	28th July 2020	Additional detail added to: Addition of: • Section 3 – Benchmark Uses and Aims • Items to Section 4 – Methodology • Items ot Section 6 – Usage of the Benchmarks • Section 8 renamed to Changes to, and Cessation of the Benchmark with additional descriptions
4.0	30th July 2021	Amendments to Restatement & Republishing
5.0	28th February 2022	Addition of New York variants Change to Registered Address
6.0	28th April 2022	Addition of New Benchmarks
7.0	6th June 2022	Addition of New Benchmarks
8.0	31st October 2022	Addition of New Benchmarks Updated links to documents
9.0	19th December 2022	Addition of New Benchmarks
10.0	30th January 2023	Addition of New Benchmarks
11.0	28th February 2023	• Expansion of Section 2 to include information on "Impact of Brexit on the Benchmark Regulation and CF Benchmarks" • Update to Contact Information
12.0	11th September 2023	Addition of New Benchmarks Update to the copyright date
12.1	13th November 2023	Update to logo & format
12.2	20th November 2023	Updated logo (AKC v2)
12.3	08th February 2024	Updated added to Section 2 and Section 7
12.4	16th July 2024	Updated to Section 10
12.5	29th July 2024	Addition of New Benchmarks

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2 Introduction

CF Benchmarks Ltd (CF Benchmarks) is the Benchmark Administrator for the CME CF Cryptocurrency Pricing Products.

This Benchmark Statement is published by CF Benchmarks in compliance with Article 27 of EU Regulation 2016/1011 of the European Parliament and of the Council of 8 June 2016 on Indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014 (the Benchmarks Regulation or BMR) and should be read in conjunction with the related documentation available on the CF Benchmarks website[1] and the Administrators policies[2]

CF Benchmarks was authorised by the United Kingdom Financial Conduct Authority with an effective date of 19th August and was granted a Part 4A permission under Part 4A of the Financial Services and Markets Act 2000 ("FSMA") to carry on the regulated activity of administering a benchmark. That Part 4A permission constitutes CF Benchmarks Ltd.'s 'Registration' for the purposes of Article 34 of the BMR.

CF Benchmarks was included in the ESMA Register of Benchmark Administrators on 21st August 2019.

This Benchmark Statement was published on 4th September 2019. Any updates to this statement will be duly recorded in the version history.

Impact of Brexit on the Benchmark Regulation and CF Benchmarks

On 31st January 2020, as the EU-UK Withdrawal Agreement entered into force, the UK withdrew from the EU and officially became a third country. The Withdrawal Agreement provided for a transition period which ensured that EU law continued to apply to the UK from 1st February 2020 to 31st December 2020. At the end of the transition period, the UK left the Single Market.

Due to the expiration of the Brexit transition period on 31st December 2020 (and pursuant to ESMA's notice on 1st October 2020), CF Benchmarks, along other UK administrators, was removed from the ESMA Register of Benchmark Administrators as of 1st January 2021 and became a "third country" administrator.

CF Benchmarks becoming a "third country" administrator will not immediately impact the use of CF Benchmarks regulated indices in the EU, which can continue to be used by EU supervised entities through the "BMR transitional period" which was extended until the end of 2025.

[1] https://www.cfbenchmarks.com/documentation/products/cme-cf
[2] Available upon request

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On 17th October 2023 the European Commission (EC) launched a new proposal to review the Benchmarks Regulation, the EC proposes to introduce a new, simplified approach to EU and third-country benchmarks. The EC F&Q announcement is available here, a full EC proposal can be found here. The proposal removes the requirement of authorisation or registration (EU administrators) or endorsement or recognition (third-country administrators) for administrators of only non-significant benchmarks.

It is now for the European Parliament and the Council to negotiate the new proposal. The EC has proposed that the new rules apply directly in the Member States as of 1 January 2026.

CF Benchmarks will use the BMR transitional period to monitor the EC decisions and will complete its Brexit plans based on the outcome of the proposal, which will allow CF Benchmarks regulated indices to continue being used in the EU after the expiration of the BMR transitional period.

3 Benchmark Description and Aims

The benchmarks within the family seek to measure the price of the base asset of the benchmark in the denomination of the quote asset by observing the economic reality of the exchange of one for the other.

4 Methodology

The CME CF Cryptocurrency Pricing Products are a family of benchmarks that measure the value of Cryptocurrencies and digital assets relative to fiat currencies. Within the family there are both Reference Rates and Real Time Indices. To date, the benchmarks within the family are:

- Once a Day Reference Rates (subject to the CME CF Reference Rates Methodology:
    - CME CF Bitcoin Reference Rate
    - CME CF Bitcoin Reference Rate – New York Variant
    - CME CF Bitcoin Reference Rate - Asia Pacific Variant
    - CME CF Ether-Dollar Reference Rate
    - CME CF Ether-Dollar Reference Rate – New York Variant
    - CME CF Ether-Dollar Reference Rate - Asia Pacific Variant
    - CME CF Algorand- Dollar Reference Rate
    - CME CF Bitcoin Cash – Dollar Reference Rate
    - CME CF Cardano – Dollar Reference Rate
    - CME CF Chainlink – Dollar Reference Rate
    - CME CF Cosmos – Dollar Reference Rate

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- CME CF Litecoin – Dollar Reference Rate
- CME CF Polygon – Dollar Reference Rate
- CME CF Polkadot – Dollar Reference Rate
- CME CF Solana – Dollar Reference Rate
- CME CF Stellar Lumens – Dollar Reference Rate
- CME CF Uniswap – Dollar Reference Rate
- CME CF Bitcoin – Euro Reference Rate
- CME CF Ether – Euro Reference Rate
- CME CF Avalanche – Dollar Reference Rate
- CME CF Filecoin – Dollar Reference Rate
- CME CF Tezos – Dollar Reference Rate
- CME CF Aave-Dollar Reference Rate
- CME CF Curve-Dollar Reference Rate
- CME CF Synthetix-Dollar Reference Rate
- CME CF Axie Infinity-Dollar Reference Rate
- CME CF Chiliz-Dollar Reference Rate
- CME CF Decentraland-Dollar Reference Rate
- CME CF Ripple-Dollar Reference Rate
- CME CF Internet Computer-Dollar Reference Rate

- Once a second, Real Time Indices (subject to the CME CF Real Time Indices Methodology)
  - CME CF Bitcoin Real Time Index
  - CME CF Ether-Dollar Real Time Index
  - CME CF Algorand- Dollar Real Time Index
  - CME CF Bitcoin Cash – Dollar Real Time Index
  - CME CF Cardano – Dollar Real Time Index
  - CME CF Chainlink – Dollar Real Time Index
  - CME CF Cosmos – Dollar Real Time Index
  - CME CF Litecoin – Dollar Real Time Index
  - CME CF Polygon – Dollar Real Time Index
  - CME CF Polkadot – Dollar Real Time Index
  - CME CF Solana – Dollar Real Time Index
  - CME CF Stellar Lumens – Dollar Real Time Index
  - CME CF Uniswap – Dollar Real Time Index
  - CME CF Bitcoin – Euro Real Time Index
  - CME CF Ether – Euro Real Time Index
  - CME CF Avalanche – Dollar Real Time Index
  - CME CF Filecoin – Dollar Real Time Index
  - CME CF Tezos – Dollar Real Time Index
  - CME CF Aave-Dollar Real Time Index
  - CME CF Curve-Dollar Real Time Index
  - CME CF Synthetix-Dollar Real Time Index
  - CME CF Axie Infinity-Dollar Real Time Index

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- CME CF Chiliz-Dollar Real Time Index
- CME CF Decentraland-Dollar Real Time Index
- CME CF Ripple-Dollar Real Time Index
- CME CF Internet Computer-Dollar Real Time Index

The methodologies referred to comply with the criteria set out in article 12 of the BMR and:

a. are robust and reliable
b. have clear rules identifying how and when discretion may be exercised in the determination of the benchmark(s)
c. are rigorous, continuous and capable of validation including, where appropriate, back-testing against available transaction data
d. are resilient and ensures that the benchmark can be calculated in the widest set of possible circumstances, without compromising its integrity
e. are traceable and verifiable.

The methodologies are reviewed by the Administrator and approved by the CME CF Oversight Committee on a no less than annual basis.

Restatement & Republishing

The Administrator operates a Republishing and Restatement Policy that has been approved by the CME CF Cryptocurrency Pricing Products Oversight Committee. This policy is implemented for the CME CF Cryptocurrency Reference Rates through section 6 of the methodology which is available here.

The CME CF Cryptocurrency Real Time Indices are not restated or republished under any circumstances due to their high frequency nature.

Expert Judgement

The Administrator does not utilise expert judgment in the day to day calculation of the Reference Rates. In extraordinary circumstances Expert Judgement may be exercised by the Administrator in accordance with its codified policies and processes which are available upon request.

Further information on the CME CF Reference Rate Methodology is available here.
Further information on the CME CF Real Time Index Methodology is available here.

5 General Disclosure

The CME CF Cryptocurrency Pricing Products Family of benchmarks is deemed non-significant in accordance with article 26 of the BMR.

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CF Benchmarks as the administrator of the CME CF Cryptocurrency Pricing Products family has applied all applicable provisions of the BMR, including but not limited, to the below articles:

- Conflict of Interest (Article 4) - please see here for the applicable conflict of interest policy
- Oversight function (Article 5) - please see here for the CME CF Cryptocurrency Pricing Products Oversight Committee Charter
- CF Benchmarks Control Framework (Article 6), and CF Benchmarks Accountability Framework[3] (Article 9)
- CF Benchmarks Input data Policy (Article 11)
- Code of Conduct and Requirements for Contributors (Article 15 & 16) – the CME CF Cryptocurrency Pricing Products do not utilise contributed data as input data. The Administrator has therefore not applied the provisions contained in these articles to the CME CF Cryptocurrency Pricing Products.

6 Usage of the Benchmarks

The CME CF Cryptocurrency Pricing Products family of benchmarks has been specifically designed to facilitate the valuation of and settlement of financial instruments, including but not limited, to futures contracts made available for trading on trading venues and platforms. The CME CF Cryptocurrency Pricing Products family of benchmarks are also intended to be used for the creation/redemption and valuation of investment funds and products.

Further information on the CME CF Cryptocurrency Pricing Products family is published on the CF Benchmarks website at www.cfbenchmarks.com

The methodologies have been designed to be able to calculate the benchmarks in the widest set of possible circumstances, however at times of acute market stress or should the market for trading of the quote asset change fundamentally then the methodology may not be able to be calculated. In such instances the benchmark may undergo calculation failure as described in the benchmark methodologies.

7 Publication timings

The usual publication time for CME CF Reference Rates is 16:01 London time.

The usual publication time for the New York variants of CME CF Reference Rates in 16:01 New York time.

[3] Available upon request

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The usual publication time for the Asia Pacific variants of CME CF Reference Rates in 16:01 Hong Kong time.

CME CF Real Time Indices are published every second, in accordance with predetermined CF Benchmarks procedures as described in the methodology.

Any exceptions to the provisions of the Methodology such as Delayed Calculation & Publication; Calculation Failure; Restatement & Republishing and Market Failure Events shall be clearly communicated to all licensees via Statuspage.

8 Changes to or Cessation of, the Benchmark

There may be circumstances where CF Benchmarks determines a change is required to be made to the published methodology to ensure the integrity of the benchmark. In these instances, CF Benchmarks, in accordance with the relevant provisions of Article 27 and 28 of the BMR will conduct a Benchmark Consultation Process as described in the CF Benchmarks Governance and Oversight Framework which is available upon request to interested parties. All relevant information pertaining to the Benchmark Consultation Process will be published on its website.

There may also be circumstances where the CF Benchmarks determines that cessation of a benchmark may be necessary, this could be due to input data becoming unavailable. In these instances, CF Benchmarks, in accordance with the relevant provisions of Article 27 and 28 of the BMR will conduct a Benchmark Cessation Process as described in the CF Benchmarks Governance and Oversight Framework which is available upon request to interested parties. All relevant information pertaining to the Benchmark Cessation Process will be published on its website.

Where methodology changes or cessation do occur, this could impact the market for financial instruments and investment funds that utilise the benchmark in the manner described in Article 3 (7) of the BMR.

9 Oversight

The CME CF Cryptocurrency Pricing Products family of benchmarks has an independent Oversight Committee, with minutes of the meetings made publicly available. In addition, membership criteria and the Oversight Committee Charter are also available on the CF Benchmarks website here.

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10 Updates to this Statement

CF Benchmarks shall update this benchmark statement in the event of any changes to the information provided hereunder, including but not limited to any updates to the Methodology.

This Benchmark Statement shall in any case be subject to review at least every two years (article 27 of the BMR).

In compliance with the Article 27 of the UK Benchmarks Regulation (UK BMR), CF Benchmarks is disclosing that this benchmark family does not integrate Environmental, Social and Governance (ESG) factors in its design and therefore does not pursue ESG objectives

Contact Information

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	Formal complaints or concerns regarding CME CF Cryptocurrency Pricing Products must be submitted by Email: complaints@cfbenchmarks.com Further details can be found on https://blog.cfbenchmarks.com/about/

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