

Refinitiv Benchmark Services Limited

Benchmark Statement Refinitiv/CoreCommodity CRB[®] Index

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The Financial and
Risk business of
Thomson Reuters
is now Refinitiv.



Contents

Introduction.....	3
Overview of Methodology.....	4
Input Data Errors and Insufficient Data Handling	4
Potential Limitations of the Benchmark	5
Methodology Changes and Benchmark Cessation	5
Further Information	6

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Introduction

The Refinitiv/CoreCommodity CRB[®] Index (the “Benchmark”) was introduced in 2005 as 10th revision of original CRB index founded in 1957 to provide a more liquid and economically relevant benchmark that will provide a timely and accurate representation of commodities as an asset class. The Refinitiv/CoreCommodity CRB[®] Indices are classified as Regulated-data benchmark as per Article 3 (24)(a)(i) of the EU BMR and categorized as Non-Significant Benchmark.

The historic CRB Index has undergone 9 previous weighting revisions since its inception to ensure market representative and the current model is a continuation from 2005 revision.

	1957	1961	1967	1971	1973	1974	1983	1987	1992	1995	2005
Number of Futures Markets	26	25	26	27	28	27	27	21	21	17	19
Number of Spot Markets	2	2	2	2	0	0	0	0	0	0	0
Markets in Index	28	27	28	29	28	27	27	21	21	17	19
Markets Removed		1	0	10	1	1	4	6	1	5	1
Markets Added		0	1	9	2	0	4	0	1	1	3
Forward Averaging Window (months)	12	12	12	12	12	12	12	9	9	6	Rolling Nearby
Averaging technique											Arithmetic Monthly Rebalancing

The Refinitiv/CoreCommodity CRB[®] Indices are calculated for the Primary CRB Index comprising 19 individual commodity futures, the Non-Energy CRB index excludes energy segment and comprises 15 individual commodity futures, the Non-Agri and Livestock CRB index excludes both agricultural and livestock commodity futures and comprises 9 individual commodity futures. All the CRB index segments are calculating the excess return and total return version along with 3 month forward excess return and total return versions. A euro dominated and currency hedged index is also calculated for the Primary CRB total return index using 1 month forex forwards with a daily adjusted notional.

Refinitiv Benchmark Services (UK) Limited (“RBSL” or “the Administrator”) is the administrator of the Refinitiv/CoreCommodity CRB Index segments and all related versions. The Refinitiv/CoreCommodity CRB[®] Index is a commodity benchmark based on exchange traded commodity futures and subject to the EU Benchmark Regulation (“BMR”). RBSL administers the Refinitiv/CoreCommodity CRB[®] Index in accordance with Article 26 (“non-significant benchmarks”) of the EU BMR. RBSL has adopted policies and procedures to comply with the ESMA’s Regulation.

The Benchmark is intended to cover the commodity futures traded over world leading regulated derivative exchanges where there is sufficient liquidity in the commodity futures market to provide accurate index representation. Currently the Benchmark comprises 19 commodity futures as listed in the Benchmark Methodology and the Benchmark disseminated with 15 seconds interval from 07:30 EST (11:30 GMT) to 16:40 EST (20:40 GMT) on each business day on which US futures market is open for business.

The primary infrastructure used to source commodity futures data used in the determination of the Benchmark is the Refinitiv Elektron real-time data delivery system which directly linked with global derivative exchanges. For Total Return Euro Daily Hedge Index, the WM-Reuters Currency benchmarks 16:00 LDN rates to be used in hedge component calculation.

The benchmark is using primarily three major derivative exchanges CME (which owns CBOT, NYMEX and COMEX), ICE (which owns NYBOT) and LME and all exchanges are regulated by derivative exchange regulators. The Benchmark is not based on the contribution of input data. Benchmark also using 3 months US treasury previous day high value for Total Return version calculation.

Determination of the Benchmark is an automated ruled based process without any manual intervention and the commodity futures trade prices and settle prices are being plucked directly from the derivative exchange feeds that feed into the Elektron data highway.

This benchmark statement shall be updated whenever there is a change to the type of the Benchmark or to the Methodology used in the determination of the benchmark.

Overview of Methodology

Refinitiv/CoreCommodity CRB® Indices are calculated for the following segments, The Primary CRB index comprising 19 individual commodities, the Non-Energy CRB index which excludes energy commodities and comprises 15 individual commodities, and the Non-Agri and Livestock CRB index which excludes both agricultural and livestock commodities and comprises 9 individual commodities. For each Commodity Segment, four types of indices are calculated, an excess return, 3 months forward exchange return, total return and 3 months forward total return. In addition, a euro denominated and currency hedged index is calculated for the Primary CRB total return index using 1 month FX forwards with a daily adjusted notional.

An individual commodity “Percent Return” is calculated for each commodity futures, in each Commodity Segment Main index and Forward index. The roll from the front expiration month to the immediate back expiration month of the relevant futures contract takes place over the first four business day period of each calendar month. Exposure is rolled in equal amounts of 25% on each day during the roll period such that by the fourth day of the roll period, 100% of the weight is in the immediate back expiration month.

The Refinitiv/CoreCommodity CRB® Commodity Segment Main and Forward indices are rebalanced monthly after close of 6th Business day to reinstate the fixed weights allocations from 2005 revision.

Input Data Errors and Insufficient Data Handling

The ability of RBSL to determine and publish the Refinitiv/CoreCommodity CRB® Indices Benchmarks in accordance with this Methodology depends on the accuracy of the regulated futures exchange data available to RBSL for the calculation of the Benchmark. Reasonable efforts are made to ensure the correctness and validity of regulated futures exchange data used in index calculations.

RBSL reserves the rights to restate the index level where errors have identified on index input data by Refinitiv Index operations or notified by regulated futures exchanges. All index restatements will be communicated to stakeholders through Refinitiv regular client communication channels, in addition Eikon Data Alerts and posting a data notification.

Also “Market Emergency” is herein defined as any unscheduled and extraordinary condition in which liquidity in the markets used to source input data is interrupted (such as an event resulting in the unscheduled closing of futures exchanges). Should a Market Emergency occur, RBSL reserves the right to take such action with respect to the Refinitiv/CoreCommodity CRB® Indices as it deems appropriate given the circumstances and after consulting with the Index Oversight Committee as appropriate. All index revisions will be consulted with market participants (via market consultation) and then the change in commodity constituent/s will be communicated to stakeholders through Refinitiv regular client communication channels.

Potential Limitations of the Benchmark

The design of the Benchmark is resilient against disruptions and periods of high volatility. However, technical problems or extreme market events may lead to re-publish the most recent Benchmark end of day close until the disruption has ended or changes have been implemented. RBSL will attempt to notify interested parties of any such actions as well in advance as is practicable. There is no assurance, however, that following a Market Emergency, the actions taken in response to such Market Emergency, or any other force majeure event, will not have an adverse effect on the value of the Refinitiv/CoreCommodity CRB® Indices or the manner in which they are calculated.

Methodology Changes and Benchmark Cessation

The Refinitiv/CoreCommodity CRB® Indices Methodology is subject to a review in order to assess its ongoing fitness for purpose on at least an annual basis. In the event that the review leads RBSL to believe that a change to the Methodology is required and that the change is material in its effect on the benchmark, a market consultation will be conducted in accordance with the RBSL Benchmark Methodology Change Procedures in order to seek feedback from a representative range of stakeholders. RBSL will review all feedback and, if following such review it resolves to proceed with the proposed change or changes, will provide sufficient notice to users of the Benchmark before implementing such change or changes.

Circumstances beyond the control of RBSL may necessitate an immediate change to or the cessation of the Benchmark. Such circumstances include without limitation (i) loss of commodity futures exchange input data source and (ii) a loss of interest in the available indices over wider market.

In the event that an immediate change is required, RBSL will provide as much notice as is practicable in accordance with the RBSL Benchmark Methodology Change Procedures and following such change will conduct an internal review of the Benchmark Methodology.

If it becomes necessary to cease calculation and distribution of the benchmark, RBSL will implement the [RBSL Benchmark Cessation Policy](#). This includes conducting an analysis of the estimated usage of the Benchmark and, where feasible, the selection of a credible alternative benchmark. In all cases, RBSL will take all reasonable steps to ensure that all users and other stakeholders are made aware as soon as possible of any intention or possible necessity to cease the Benchmark.

Any material change to the Benchmark Methodology or cessation of the Benchmark may have an impact on any financial contract or financial instrument that references the Benchmark or on the measurement of the performance of an investment fund that uses or refers to the Benchmark. Financial instruments that reference the Benchmark include UCITS ETF and exchange traded and OTC derivative contracts including swaps and option contracts.

A material change to the Methodology may lead to a change in the economic reality represented by the Benchmark and therefore to the economic exposure of any financial contract or financial instrument that references the Benchmark. A cessation of the Benchmark would require the selection of an alternative benchmark or the implementation of any fallback procedures for financial contracts or financial instruments that reference the Benchmark.

Further Information

The Benchmark Methodology used in the determination and administration of the Refinitiv/CoreCommodity CRB® Indices is available on RBSL's [website](#).

For further information about the Refinitiv/CoreCommodity CRB® Indices, please refer to the website at [Refinitiv Commodity Indices](#) or contact the Administrator at index_queries@refinitiv.com

Appendix

First Publication: 10 December 2019 - Thomson Reuters/CoreCommodity CRB® Indices authorized by **EU Benchmark Regulations**.

Second Publication: 20 April 2020 - Changed the index name from Thomson Reuters/CoreCommodity CRB® Indices to **Refinitiv/CoreCommodity CRB® Indices**.

ESG Disclosures - Low Carbon benchmarks regulation (2019/2089)

EXPLANATION OF HOW ESG FACTORS ARE REFLECTED IN THE BENCHMARK STATEMENT	
SECTION 1 – CONSIDERATION OF ESG FACTORS	
Item 1. Name of the benchmark administrator.	Refinitiv Benchmark Services (UK) Limited
Item 2. Type of benchmark or family of benchmarks.	Commodity
Item 3. Name of the benchmark or family of benchmarks.	CoreCommodity/CRB Indices
Item 4. Are there in the portfolio of the benchmark administrator any EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks, benchmarks that pursue ESG objectives or benchmarks that take into account ESG factors?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Item 5. Does the benchmark or family of benchmarks pursue ESG objectives?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No