EU Benchmarks Regulation

Benchmark Statement

In respect of the

Credit Suisse International: Fixed Income Family of Benchmarks

Date of publication: 04.03.2020
Date of last update: 04.03.2020
Introduction

Credit Suisse International ("CS") administers a number of indices that it considers to be "benchmarks" within the scope of Regulation (EU) 2016/1011 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds (the "EU BMR").

CS has grouped the benchmarks that it administers into a number of "families" for the purposes of applying certain provisions of the EU BMR. This document constitutes the “Benchmark Statement” under Article 27 of the EU BMR in respect of CS’s “fixed income” family of benchmarks (each benchmark in such family, a “Fixed Income Benchmark”) and provides the information required by the EU BMR to be included in such statement. The methodology of each Fixed Income Benchmark is set out in the relevant Index Rules applicable to such Fixed Income Benchmark and such Index Rules are available to CS (acting in other capacities), its affiliates, persons who have entered into licencing agreements to use the relevant Fixed Income Benchmark and, any other person to whom the administrator is required to make such Index Rules available to under the EU BMR. Licenced users of a Fixed Income Benchmark, their counterparties and investors should carefully read and consider the relevant Index Rules prior to making any decision to use such Fixed Income Benchmark or to investing in products referencing such Fixed Income Benchmark.

Any person who has entered into a licencing agreement to use a CS administered benchmark and any of its respective counterparties and investors (including prospective counterparties and investors) can contact CS in writing at its principal office at 1 Cabot Square, Canary Wharf, London E14 4QJ, United Kingdom, Attention: Benchmark Administration Manager if they are unsure whether the benchmark they are using (or wants to potentially use) is a Fixed Income Benchmark (for which this document is relevant) or is a benchmark belonging to another CS family of benchmarks.

Capitalised terms used in this Benchmark Statement, which are not otherwise defined, shall have the same meaning as set out in the Appendix hereto ("Definitions for key terms relating to the Fixed Income Benchmarks").
1. **ISINs**
   There are currently no ISINs allocated to any of the Fixed Income Benchmarks.

2. **Contributions of Input Data**
   None of the Fixed Income Benchmarks are determined using Contributions of Input Data.

3. **Economic reality measured by the Fixed Income Benchmarks**
   Each Fixed Income Benchmark is designed to measure the performance of an investment strategy that provides exposure to a notional portfolio comprised of Fixed Income Instruments systematically rebalanced in accordance with predefined rules. Particular Fixed Income Benchmarks may also be subject to a volatility control mechanism, which is designed to systematically adjust the allocation to the notional portfolio of Fixed Income Instruments to target a specified level of volatility, according to predefined rules.

   The types of Fixed Income Instruments that may comprise the portfolio from time to time are set out in the relevant Index Rules and may mean that (i) the portfolio would be linked to specified markets or specified geographical boundaries or may be global and (ii) the instruments in the portfolio provide long only, short only or both long and short exposures to fixed income assets such as bonds, money market instruments and/or interest rates. Please refer to the Index Rules for the relevant Fixed Income Benchmark for a description of the geographical boundaries of the economic reality measured by such Fixed Income Benchmark and whether the economic reality consists of long only, short only or long and short positions.

   In addition, particular Fixed Income Benchmarks may include features that use non-Fixed Income Instruments Input Data, including but not limited to, currency rates. These features do not alter the economic reality measured by the Fixed Income Benchmark but provide a variation in the manner in which such economic reality is measured. For example, measuring the performance in a currency other than the currency of the portfolio of Fixed Income Instruments or measuring a leveraged exposure to the portfolio of Fixed Income Instruments or a different type of performance.

4. **Definitions of Key Terms**
   The definitions for all key terms relating to each Fixed Income Benchmark covered by this Benchmark Statement are provided in the Appendix to this document.

5. **Methodology**
   The Fixed Income Benchmarks are rules-based indices developed by CS that are designed to implement, and measure the performance of, a particular investment strategy. The exercise of discretion is limited to exceptional circumstances relating to market disruption or market changes outside the control of CS. The rationale for adopting the methodology of each Fixed Income Benchmark is to create a measure of the performance of a specific, systematically rebalanced, notional portfolio and to enable investors to take a synthetic exposure to such notional portfolios when investing in products linked to the Fixed Income Benchmark.

   The methodology of each Fixed Income Benchmark and of each new benchmark to be added as a Fixed Income Benchmark, is subject to the approval by CS's Benchmark Governance Committee (or any successor in such role) ("BGC") in accordance with a formalised internal process to ensure ongoing compliance with the requirements of the EU BMR. This internal process stipulates that the BGC is provided with the details of the new benchmark, including (but not limited to) the investment strategy, operational risks and
control framework for the new benchmark, its index rules and risk disclosures, an
assessment of the sufficiency, reliability and verifiability of the Input Data.

The BGC members include representatives of CS’s index calculation team, product
structuring team, general counsel division and compliance division.

The methodology of each Fixed Income Benchmark is subject to an annual review by the
BGC to determine if any recent events would have impacted the quality or integrity of the
relevant Fixed Income Benchmark methodology. Reviews may also be conducted on an ad
hoc basis where the BGC considers it desirable or necessary to do so, including in
response to specific events or otherwise. Specific events include (without limitation) any
index errors, index disruptions, changes in the applicable legal or regulatory environment;
any feedback from stakeholders, challenges, complaints; and/or any material audit findings
or findings or recommendations from CS’s Benchmark Oversight Committee (or any
successor in such role).

6. **Criteria and procedures used to determine the Fixed Income Benchmark Level**

The Fixed Income Benchmarks are rules-based indices and are designed not to rely on
Expert Judgement or discretionary determinations in ordinary circumstances. Each Fixed
Income Benchmark is determined by CS collecting the Input Data necessary for such
determination and specified in the relevant methodology and applying the rules prescribed
by the methodology to calculate the performance of the relevant notional portfolio. The
calculated performance may be subject to further predefined and transparent adjustments,
which may include (but are not limited to) deduction of fees, costs associated with currency
hedges included in the portfolio, currency conversions and costs associated with notional
borrowing in relation to leveraged portfolios.

The Fixed Income Instruments that comprise the relevant notional portfolio from time to
time are determined periodically on the basis of pre-defined rules set out in the relevant
Index Rules. Once the Fixed Income Instruments that comprise the relevant notional
portfolio at the relevant time are determined, their weightings from time to time are
determined based on pre-defined rules set out in the relevant Index Rules.

7. **Input Data**

The Input Data for the majority of Fixed Income Benchmarks comprises only externally
sourced Input Data. In a limited number of Fixed Income Benchmarks some Input Data
may be internally sourced. Externally sourced Input Data include:

(a) transaction data i.e. executed prices relating to certain Fixed Income Instruments
    traded on exchanges;

(b) committed quotes relating to certain Fixed Income Instruments traded on
    exchanges;

(c) in relation to interest rates and exchange rates, the published levels of the interest
    rate or currency benchmarks providing such rates; and

(d) in relation to any indices (whether sponsored or administered by CS, any of its
    affiliates, or any third party entity), the levels published by the respective
    administrator or sponsor of such indices.
CS sources the above Input Data from third party data vendors that it considers reputable and does not classify any of the above data as regulated data but classifies it as readily available.

In certain cases a Fixed Income Benchmark may use internally sourced Input Data. Where this is the case the relevant Index Rules will indicate when Input Data is internally sourced.

CS may change the Data Sources it uses to source the Input Data from time to time in accordance with CS's internal governance procedures provided that any new data provider or Data Source meets CS's requirements.

The Index Rules for each Fixed Income Benchmark specify the single Input Data type required to be collected and observed for each relevant component for the determination of such Fixed Income Benchmark. If it is impossible to collect and observe the required Input Data type for a component due to market disruption, this would result in lack of sufficient Input Data to determine the Fixed Income Benchmark according to the methodology. In such cases CS may use Expert Judgement to estimate relevant values or adjust prices and values or may (i) postpone or suspend the determination of the relevant Fixed Income Benchmark or (ii) supplement, amend (in whole or in part), revise, rebalance or withdraw the relevant Fixed Income Benchmark.

8. **Insufficient Input Data, Insufficient or Inaccurate Data Sources**

Market disruption may lead to insufficient Input Data and/or insufficient or inaccurate Data Sources.

Events that may lead to market disruption include, (but are not limited to), suspensions or unscheduled closures in relevant interest rate or foreign exchange markets, any suspension of or limitation imposed on trading by any relevant exchange or other trading facility, the closure of any relevant exchange or other trading facility before its scheduled closing time, changes in the liquidity, trading volume, terms or listing of any Fixed Income Instrument comprised in the relevant portfolio, the failure of any Data Source to publish the Input Data or the level published is significantly different to the level of such data prevailing in the market.

In addition to the cases of market disruption, other factors that may lead to lack of sufficient Input Data or to Input Data that is not consistent with the assumptions made when such Input Data was selected as the basis for the calculation of the Fixed Income Benchmark, or to the Input Data being unreliable include, (but are not limited to),: (a) a material change in the content, composition, constitution of, or in the formula for or method of, calculating relevant Input Data, (b) any other event that disrupts or impairs the ability of market participants in general to effect transactions in, or obtain market values for, the relevant instrument, (c) any event that, in the determination of CS, has a material adverse effect on the ability of a market participant to establish, maintain, value, rebalance or unwind a hedge position in relation to an investment product linked to the Fixed Income Benchmark, including a Fixed Income Instrument comprising the portfolio measured by the Fixed Income Benchmark, and (d) any event resulting in a breakdown in any means of communication or a procedure normally used to enable the determination of the Fixed Income Benchmark.

The methodology of each Fixed Income Benchmark specifies the relevant market disruption or other event that would lead to lack of sufficient Input Data or where the Data Sources may be insufficient, inaccurate or unreliable.
In addition, while CS intends to use well-established and reputable data providers to source its Input Data, there is a risk that this Input Data may be inaccurate, delayed or not up to date. There is also a risk that while the Input Data is accurate, the data feed to CS is impaired.

9. **Extrapolation**
CS may use extrapolation to determine the value of over-the-counter derivatives linked to bond, money market and/or interest rate underlyings which have a different tenor to the maturities for which a value is available using externally sourced data. The extrapolation method applies pre-defined formulae to externally sourced Input Data to generate an extrapolated value.

10. **Procedures for determining the Fixed Income Benchmark in periods of stress**
In the limited circumstances mentioned above, the BGC will either make the decision or approve the decision on whether to (i) suspend or delay the calculation and publication of the Fixed Income Benchmark or (ii) determine the Fixed Income Benchmark on the basis of estimated or adjusted data and publish the respective Level or (iii) supplement, amend (in whole or in part), revise, rebalance or withdraw the Fixed Income Benchmark. Such decision and approval would be made in accordance with the criteria relating to the exercise of discretion described under “Exercise of discretion” below.

11. **Limitations of the Fixed Income Benchmarks**
The market disruption and other events that may lead to the Input Data or Data Sources being insufficient, inaccurate or unreliable or to the Input Data being not consistent with the assumptions made when such Input Data was selected as the basis for the calculation of the Fixed Income Benchmark may compromise the reliability of the Fixed Income Benchmark.

12. **External and other factors may necessitate changes or cessation of the Fixed Income Benchmark**
CS provides notice that factors, including external factors beyond the control of the administrator, may necessitate changes to, or the cessation of, any Fixed Income Benchmark.

13. **Exercise of discretion**
CS may exercise discretion to:

(a) determine whether a market disruption or another event has occurred that may lead to the Input Data being insufficient or to such data being not consistent with the assumptions made when such Input Data was selected as the basis for the calculation of the Fixed Income Benchmark;

(b) estimate or adjust the level of Input Data when CS has determined that one or more of the above events have occurred;

(c) address other unscheduled events which may make it impossible to calculate the Fixed Income Benchmark;

(d) decide whether to (i) estimate or adjust the level of Input Data in the above circumstances or (ii) suspend or delay the calculation and publication of the Fixed Income Benchmark or (iii) supplement, amend (in whole or in part), revise, rebalance the Fixed Income Benchmark;
(e) decide how to address errors in Input Data or in the determination of the Fixed Income Benchmark, including whether to restate the Level of the Fixed Income Benchmark in such circumstances;

(f) decide how to address any omissions or ambiguities in the relevant Index Rules; and

(g) decide whether to terminate the Benchmark.

If the need to exercise discretion arises, CS will do so in a way that minimises potential or actual conflicts of interests and will act in good faith and in a commercially reasonable manner consistently with (a) the objective of the Fixed Income Benchmark; (b) any previous exercise of discretion in the same or similar instances; and (c) where possible, across Fixed Income Benchmarks in relation to the affected asset class or instrument. Where there is a corresponding regulatory obligation, CS shall also take into account whether fair treatment is achieved by the exercise of discretion in accordance with applicable regulatory obligations.

Where CS is entitled to exercise discretion, any such exercise will be either made by the BGC or be subject to the approval of the BGC.

14. Changes to, or cessation of, a Fixed Income Benchmark may impact financial contracts, financial instruments or investment funds that reference that Fixed Income Benchmark

CS may decide to make modifications to the Fixed Income Benchmark, or permanently cancel and discontinue calculating and publishing a Fixed Income Benchmark (in compliance with applicable law and regulation) at any time.

Changes to, or the cessation of, a Fixed Income Benchmark may have an impact on the financial contracts and financial instruments that reference the Fixed Income Benchmark or the measurement of the performance of investment funds.

Users should check that the contractual terms of such financial contracts and financial instruments contain appropriate fallback provisions.

15. Error procedures

CS has a number of procedures and processes in place which are designed to ensure the accuracy and reliability of its published Fixed Income Benchmark Levels. Notwithstanding these procedures and processes, errors in Input Data or in the determination of a Benchmark may sometimes occur. When an error due to the correction by a third party Data Source of Input Data is identified and the impact is below a certain pre-defined threshold, the Level of the Fixed Income Benchmark is restated. In all other cases, the restatement of the Level of the Fixed Income Benchmark is subject to the approval of the BGC or the chairperson of the BGC. The approval of the BGC is also required in relation to any decision not to restate the Level of the Fixed Income Benchmark upon the discovery of any issue or error that would normally give rise to a restatement. All restatements of Fixed Income Benchmarks are reported to the BGC as and when they occur and are then recorded and (if necessary), discussed at the next periodic BGC meeting (usually held monthly).

When determining whether to approve a restatement, the BGC and its members will take into account, among other factors, any applicable FCA conduct rules, CS’s conduct and ethics standards, proportionality and the impact on users.
16. **Classification of benchmarks**
CS has determined that each Fixed Income Benchmark is a non-significant benchmark in accordance with Article 3(1)(27) EU BMR.

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Appendix – Definitions for key terms relating to the Fixed Income Benchmarks

This Appendix sets out the definitions in relation to the terms which CS considers to be “key terms” for the Fixed Income Benchmarks covered by this Benchmark Statement.

The terms defined herein will not necessarily apply to each Fixed Income Benchmark within the Fixed Income Benchmarks family; nor are these terms intended to be exhaustive in respect of any of the Fixed Income Benchmarks, as there may be additional terms relating to (amongst other things) the determination, calculation, disruption, governance, summary description and/or risk factors of any given Fixed Income Benchmark which are not included below. In addition, some of these terms may be defined differently within the individual Index Rules, in which case the meaning used in the Index Rules shall prevail. Further reference should therefore also be had to the Index Rules of the relevant Fixed Income Benchmark, as may be amended and/or updated by CS from time to time.

Definitions:

“Benchmark” means any index administered by CS which CS has determined that it may be used as a “benchmark” as defined in the EU BMR.

“Benchmark Statement” means the statement referred to under Article 27 of EU BMR.

“Contributions of Input Data” means providing any Input Data no readily available to CS, or to another person for the purposes of passing to CS, that is required in connection with the determination of a Benchmark, and is provided for that purpose.

“Data Source” means the publication, page (or any other origin of reference, including an exchange) containing (or reporting) the prices, levels, rates or other data utilised by CS as Input Data, and to any successor publication, page or source on which the relevant prices, levels, rates or other data may be disseminated.

“Fixed Income Instruments” means bonds, money market instruments, interest rate fixings, bond, money market or interest rate indices (whether sponsored or administered by CS, any of its affiliates, or any third party entity), listed futures linked to one or more bond, money market or interest rate underlyings, listed options linked to one or more bond, money market or interest rate underlyings, or OTC derivatives linked to one or more bond, money market, or interest rate underlyings (such as interest rates swaps or swaptions).

“Expert Judgment” refers to the exercise of discretion by an administrator with respect to the use of data in determining a Fixed Income Benchmark. Expert Judgment includes extrapolating values from prior or related transactions, adjusting values for factors that might influence the quality of data, such as market events or impairment of a buyer or seller’s credit quality, or weighting firm bids or offers greater than a particular concluded transaction.

“Index Rules” means, in respect of any Fixed Income Benchmark, the methodology or rule book for such Fixed Income Benchmark.

“Input Data” means the data in respect of the value of one or more underlying assets, or prices, used by CS to determine a Fixed Income Benchmark.

“Level” means, in relation to a Fixed Income Benchmark, the calculated and announced value of such Fixed Income Benchmark.