

# INDEX GUIDELINE

Solactive World ex-Switzerland Fiscal Strength Government IG Bond China Cap CHF Index

Version 1.3

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### INTRODUCTION

This document (the "GUIDELINE") is to be used as a guideline with regard to the composition, calculation and maintenance of the Solactive World ex-Switzerland Fiscal Strength Government IG Bond China Cap CHF Index (the "INDEX"). Any amendments to the rules made to the GUIDELINE are approved by the INDEX COMMITTEE as specified in the Bond Index Methodology. The INDEX is owned, calculated, administered and published by Solactive AG ("SOLACTIVE") assuming the role as administrator (the "INDEX ADMINISTRATOR") under the Regulation (EU) 2016/1011 (the "BENCHMARK REGULATION" or "BMR"). The name "Solactive" is trademarked.

The GUIDELINE and the policies and methodology documents referenced herein contain the underlying principles and rules regarding the structure and operation of the INDEX. SOLACTIVE does not offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the INDEX nor the level of the INDEX at any certain point in time nor in any other respect. SOLACTIVE strives to the best of its ability to ensure the correctness of the calculation. There is no obligation for SOLACTIVE – irrespective of possible obligations to issuers of financial instruments or investment funds referencing the INDEX under a valid license – to advise third parties, including investors and/or financial intermediaries, of any errors in the INDEX. The publication of the INDEX by SOLACTIVE does not constitute a recommendation for capital investment and does not contain any assurance or opinion of SOLACTIVE regarding a possible investment in a financial instrument based on this INDEX.

### 1. INDEX SPECIFICATIONS

#### 1.1. SCOPE OF THE INDEX

The Solactive World ex-Switzerland Fiscal Strength Government IG Bond China Cap CHF Index is a benchmark to measure the performance of global investment grade bonds issued by central governments denominated in local currency. The benchmark includes developed and emerging markets.

The INDEX tilts the country's weight based on calculated scores. These scores reflect the country's strength from a fiscal point of view. Countries with a score below its peers on an individual performance indicator will be underweighted, and vice versa.

#### **1.2. IDENTIFIERS AND PUBLICATION**

The INDEX is published under the following identifiers:

Name	ISIN	Currency	Туре	Calculation Formula*	RIC	BBG ticker
Solactive World ex-Switzerland Fiscal Strength Government IG Bond China Cap CHF Index	DE000SL0DR75	CHF	TR	Periodic	.SOLWFCC	SOLWFCC
Solactive World ex- Switzerland Fiscal Strength Government IG Bond China Cap CHF Hedged Index	DE000SL0DR67	CHF	СН	Standard	.SOLWFCCH	SOLWFCCH

\*The calculation formula refers to the index calculation's dependency on cash reinvestment, based on whether the cash reinvestment occurs on a daily/direct basis or periodically.

\* CH means that the INDEX is calculated as Currency Hedge index as described in the Bond Index Methodology, which is available on the SOLACTME website: <u>https://www.solactive.com/documents/bond-index-methodology/</u>

The INDEX is published on the website of the INDEX ADMINISTRATOR (www.solactive.com) and is, in addition, available via the price marketing services of Boerse Stuttgart GmbH and may be distributed to all of its affiliated vendors. Each vendor decides on an individual basis as to whether it will distribute or display the INDEX via its information systems.

Any publication in relation to the INDEX (e.g. notices, amendments to the GUIDELINE) will be available at the website of the INDEX ADMINISTRATOR: <u>https://www.solactive.com/news/announcements/</u>.

#### 1.3. INITIAL LEVEL OF THE INDEX

The initial level of the INDEX on the 31/08/2023 is 1000. Levels of the INDEX published for a period prior to this date have been back-tested. Historical values from the 31/08/2023 will be recorded in accordance with Article 8 of the BMR.

#### 1.4. PRICES AND CALCULATION FREQUENCY

The INDEX is calculated and distributed once every BUSINESS DAY based on the LAST EVALUATED BID PRICES of the INDEX COMPONENTS. Bonds added in a rebalancing (see Section 3) are included the INDEX at the LAST EVALUATED ASK PRICES on the relevant REBALANCE DAY. Bonds which are excluded from the INDEX in a rebalance are reflected in the calculation of the level of the INDEX for the REBALANCE DAY at the LAST EVALUATED BID PRICES on the relevant REBALANCE DAY. INDEX analytical values are calculated each BUSINESS DAY using the LAST EVALUATED BID PRICES based on FIXING TIME. Prices of INDEX COMPONENTS not listed in the INDEX CURRENCY are converted using the 4 pm London Time WM Fixing quoted by Reuters.

The currency hedged indices are calculated based on TRADING PRICES on the exchanges on which the UNDERLYING INDEX COMPONENTS are listed. TRADING PRICES of the UNDERLYING INDEX COMPONENTS not listed

in the INDEX CURRENCY are converted using the current Intercontinental Exchange (ICE) spot foreign exchange rate. Should there be no current TRADING PRICE for an INDEX COMPONENT, the later of: (i) the most recent CLOSING PRICE; or (ii) the last available TRADING PRICE for the preceding TRADING DAY is used in the calculation.

In addition to the intraday calculation a closing level of the INDEX for each calculation day is also calculated. This closing level is based on the CLOSING PRICES for the underlying index and 4:00 PM London WM Spot and Forward Fixings quoted by Reuters. If there is no 4:00 PM London time WM Fixing for the relevant CALCULATION DAY, the last available 4:00 PM London time WM Fixing will be used for the closing level calculation.

### 2. INDEX SELECTION

On each SELECTION DAY, all bonds which meet the INDEX COMPONENT REQUIREMENTS are eligible for inclusion in the INDEX and will be added as INDEX COMPONENT on the REBALANCE DAY. Additionally, on each SELECTION DAY, it will be evaluated whether all current INDEX COMPONENTS still meet the INDEX COMPONENT REQUIREMENTS. Each INDEX COMPONENT that does not meet the INDEX COMPONENT REQUIREMENTS will be removed from the INDEX on the next REBALANCE DAY.

#### 2.1. SELECTION OF THE INDEX COMPONENTS

The initial composition of each INDEX, as well as any selection for a rebalance (as specified in Section 3) is determined using the following rules:

• All INDEX COMPONENT must be a member of the PARENT INDEX (Solactive World ex-Switzerland Government IG Bond CHF Index).

(the "INDEX COMPONENT REQUIREMENTS")]

#### [2.1.1 SELECTION OF THE INDEX CURRENCY COMPONENTS

Based on the INDEX CURRENCY UNIVERSE, the initial composition of the INDEX as well as any selection for an ordinary rebalance is determined on the SELECTION DAY in accordance with the following rules (the "INDEX CURRENCY COMPONENT REQUIREMENTS"):

•All of the currencies from the INDEX CURRENCY UNIVERSE.

#### 2.2. WEIGHTING OF THE INDEX COMPONENTS

On each SELECTION DAY each INDEX COMPONENT is weighted using the market value based on the LAST EVALUATED BID PRICES and accrued interest as on the SELECTION DAY in order to achieve the aim of the INDEX. The weighting of the INDEX COMPONENTS will be as follows:

#### Fiscal Score Calculation

The following KPIs are collected at country level:

- Debt/GDP
- Deficit/GDP
- Current Account Balance/GDP

The data is updated in March each year. Countries lacking sufficient data are excluded from the universe.

Fiscal score (FS) calculation follows a three-step approach:

- Transformation of the KPIs using min-max scaling.
- Assignment of a multiplier between 0.2 and 1.65 depending on the scaled value from least favourable to most favourable.
- Aggregation to final scores using:

$$FS_{j} = 0.5 * \beta_{Db_{j}} + 0.25 * \beta_{Df_{j}} + 0.25 * \beta_{Cab_{j}}$$

Where:

 $\beta_{Db_i}$  = Multiplier of country *j* based on its Debt/GDP ratio

 $\beta_{Df_i}$  = Multiplier of country *j* based on its Deficit/GDP ratio

 $\beta_{Cab_i}$  = Multiplier of country *j* based on its Current Account Balance/GDP ratio

#### Calculation of Bond Weight

The weight of a bond in the index is calculated using the following formulas:

$$w_i = wp_i * FS_i$$

Where:

 $w_i$  = final weight of the bond i in the index

 $wp_i$  = weight of the bond *i* in the parent index

 $FS_i$  = Fiscal Strength Score of country j

#### China Weight Restriction

China's final weight in the INDEX will be capped at 0%. The residual weight is proportionally distributed to the remaining countries.

#### 2.2.1 WEIGHTING OF THE INDEX CURRENCY COMPONENTS

On each SELECTION DAY, the weight of each INDEX CURRENCY COMPONENT is assigned according to the aggregated weights of all the UNDERLYING INDEX COMPONENTS quoted in the respective currency.

### 3. ORDINARY REBALANCE

In order to reflect the new selection of the INDEX COMPONENTS determined on the SELECTION DAY (in accordance with Section 2.1) the INDEX is adjusted on the REBALANCE DAY after CLOSE OF BUSINESS.

For more information on the rebalance procedure please refer to the Bond Index Methodology, which is incorporated by reference and available on the SOLACTIVE website: <u>https://www.solactive.com/documents/bond-index-methodology/</u>.

SOLACTIVE will publish any changes made to the INDEX COMPONENTS with sufficient notice before the REBALANCE DAY on the SOLACTIVE webpage.

### 4. CORPORATE ACTIONS

As part of the INDEX maintenance SOLACTIVE will consider various events – also referred to as corporate actions – which result in an adjustment to the INDEX between two regular REBALANCE DAYS. Such events have a material impact on the price, weighting or overall integrity of INDEX COMPONENTS. Therefore, they need to be accounted for in the calculation of the INDEX. Adjustments to the INDEX to account for corporate actions will be made in compliance with the Bond Index Methodology.

### 5. **DEFINITIONS**

**"BENCHMARK REGULATION"** shall have the meaning as defined in Section "Introduction".

"BMR" shall have the meaning as defined in Section "Introduction".

"BUSINESS DAY" is with respect to the INDEX each day Monday to Friday except the following sets of days: banking holidays as defined by the New York Stock Exchange (NYSE) and SIFMA.

"CLOSE OF BUSINESS" is a time stamp when an INDEX is calculated.

**"CLOSING PRICE"** in respect of an INDEX COMPONENT and a TRADING DAY is a security's final regular-hours TRADING PRICE published by the EXCHANGE and determined in accordance with the EXCHANGE regulations. If the EXCHANGE has no or has not published a CLOSING PRICE in accordance with the EXCHANGE rules for an INDEX COMPONENT, the last TRADING PRICE will be used.

"CURRENCY HEDGE INDEX" represent the return resulting from the sum of an underlying index performance and the performance of the hedge of this index using currency forward contracts.

"GUIDELINE" shall have the meaning as defined in Section "Introduction".

"INDEX" shall have the meaning as defined in Section "Introduction".

"INDEX ADMINISTRATOR" shall have the meaning as defined in Section "Introduction".

"INDEX CALCULATOR" is SOLACTIVE or any other appropriately appointed successor in this function.

"INDEX COMPONENT" is each bond reflected in the INDEX.

"INDEX COMPONENT REQUIREMENTS" shall have the meaning as defined in Section 2.1.

"INDEX CURRENCY" is the currency specified in the column "Currency" in the table in Section 1.2.

"INDEX CURRENCY COMPONENTS" is each currency on which UNDERLYING INDEX COMPONENT trades in the market.

**"INDEX CURRENCY COMPONENT WEIGHT"** is value resultant from the sum of all the UNDERLYING INDEX COMPONENT'S weights quoted in the respective currency.

"INDEX CURRENCY UNIVERSE" is the sum of all currencies which fulfill the INDEX CURRENCY UNIVERSE REQUIREMENTS.

"INDEX CURRENCY UNIVERSE REQUIREMENTS" shall have the meaning as defined in Section 2.1.1

"ISSUER" is the issuing entity of the respective bond.

"INDEX COMMITTEE" shall have the meaning as defined in the Bond Index Methodology.

"LAST EVALUATED ASK PRICES" the last available evaluated ask price by the designated PRICING PROVIDER.

"LAST EVALUATED BID PRICES" the last available evaluated bid price by the designated PRICING PROVIDER.

"PARENT INDEX" refers to Solactive World ex-Switzerland Government IG Bond CHF Index.

**"PRICING PROVIDER"** is available under https://www.solactive.com/documents/bond-pricing-provider/

**"REBALANCE DAY"** is the last BUSINESS DAY of the month.



**"SELECTION DAY"** is 8 BUSINESS DAYS before the scheduled REBALANCE DAY, disregarding any potential change of the REBALANCE DAY. For currency hedged indices, the selection day is equal to the rebalance day and rebalancing frequency is monthly.

**"SOLACTIVE"** shall have the meaning as defined in Section "Introduction".

**"SPOT"** is the spot foreign exchange rate to convert the currency of the INDEX COMPONENT into the denomination of the INDEX CURRENCY.

**"TRADING PRICES"** in respect of an INDEX COMPONENT and a TRADING DAY is the most recent published price at which the INDEX COMPONENT was traded on the respective EXCHANGE.

"UNDERLYING INDEX COMPONENTS" is each security reflected in the composition of the UNDERLYING INDEX.

Please note that the definitions included in the Bond Index Methodology apply to this guideline. In case of a discrepancy, the definition presented in the guidelines should prevail.

### 6. HISTORY OF INDEX CHANGES

Version	Date	Description		
1.0	01 September 2024	Index Guideline creation (initial version)		
1.1	12 September 2024	Index Unhedged & Currency Guidelines Merge		
1.2	24 September 2024	Index China Cap Process Implementation		
1.3	11 November 2024	China cap set to 0 explicitly. Index is removed from BMR regulation		



## CONTACT

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