

Index guideline relating to the

## **Solactive USD China Corporate High Yield Bond Index**

Version 1.3 dated February 2<sup>nd</sup> 2018



# Contents

## Introduction

### 1 Index specifications

- 1.1 Short name and ISIN
- 1.2 Initial value
- 1.3 Distribution
- 1.4 Prices and calculation frequency
- 1.5 Weighting
- 1.6 Index Committee
- 1.7 Publication
- 1.8 Historical data
- 1.9 Licensing

### 2 Composition of the Index

- 2.1 Selection of the Index Components
- 2.2 Ordinary adjustment
- 2.3 Extraordinary adjustment

### 3 Calculation of the Index

- 3.1 Index formula
- 3.2 Accuracy
- 3.3 Adjustments

### 4 Definitions

- 4.1 Index-specific definitions
- 4.2 Further definitions

### 5 Appendix

- 5.1 Contact data
- 5.2 Calculation of the Index – change in calculation method

This document contains the underlying principles and regulations regarding the structure and the operating of the Solactive USD China Corporate High Yield Bond Index. Solactive AG shall make every effort to implement regulations. Solactive AG does not offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the index nor the index value at any certain point in time nor in any other respect. The Solactive USD China Corporate High Yield Bond Index is the sole property of Solactive AG. Solactive AG strives to the best of its ability to ensure the correctness of the calculation. There is no obligation for Solactive AG – irrespective of possible obligations to issuers – to advise third parties, including investors and/or financial intermediaries, of any errors in the index. The calculation and publication of the indices by Solactive AG is no recommendation for capital investment and does not contain any assurance or opinion of Solactive AG regarding a possible investment in a financial instrument based on this index.

# Introduction

This document is to be used as a guideline with regard to the composition, calculation and management of the Solactive USD China Corporate High Yield Bond Index. Any changes made to the guideline are initiated by the Committee specified in section 1.6. The Solactive USD China Corporate High Yield Bond Index is the sole property of Solactive AG. The Solactive USD China Corporate High Yield Bond Index is calculated and published by Solactive AG. The name “Solactive” is copyrighted.

## 1 Index specifications

The Solactive USD China Corporate High Yield Bond Index tracks the outstanding Chinese corporate debt denominated in USD in the fixed income market. The index is rebalanced on a quarterly basis. The index is a Total Return Index, coupon and other cash payments will be reinvested in the index on each rebalancing day.

### 1.1 Name and ISIN

The index is distributed under the following identifier:

Name	ISIN	WKN	Reuters RIC	Bloomberg Ticker
Solactive USD China Corporate High Yield Bond Index	<b>DE000SLA4AU3</b>	<b>SLA4AU</b>	<b>.SOLCNHYC</b>	<b>SOLCNHYC Index</b>

### 1.2 Initial value

The index will be calculated every Business Day starting 30th of August 2017. The index is based on 1000 as at the close of trading on 31.01.2014 (CEST).

### 1.3 Distribution

The Solactive USD China Corporate High Yield Bond Index is published via the price marketing services of Boerse Stuttgart AG and is distributed to all affiliated vendors.

### 1.4 Prices and calculation frequency

The Solactive USD China Corporate High Yield Bond Index is calculated based on the Last Evaluated Bid Price (see 4.2 Further Definitions) of the respective Index Components. New Index Components entering the Index are included at their Last Evaluated Ask Price. The index is calculated and distributed once every Business Day. In the event that data cannot be provided or that there are troubles regarding the price marketing of Solactive AG the index cannot be distributed.

### 1.5 Weighting

The Index Components are weighted according to their market value. A 40% sector cap is applied<sup>1</sup>. Should a single sector breach the limit of 40%, the exceeding weight will be proportionally distributed among the remaining ones. The capping will be applied on each ordinary rebalancing. Weights may breach this limit between rebalancing dates due to price fluctuations. After the sector cap has been applied a 5% issuer cap is applied. Should a single issuer breach the limit of 5%, the exceeding weight will be proportionally distributed among the remaining ones. The capping will be applied on each ordinary rebalancing. Weights may breach this limit between rebalancing dates due to price fluctuations.

### 1.6 Index Committee

The Solactive USD China Corporate High Yield Bond Index is a rules-based index. Solactive AG is responsible for applying the rules as described in this index guideline.

---

<sup>1</sup> The sector cap has been introduced on 30.01.2018.

Only in case of an Extraordinary Event a Committee composed of Solactive AG employees (hereinafter referred to as the "**Committee**" or the "**Index Committee**") will decide about the future composition of the Solactive USD China Corporate High Yield Bond Index. The Committee will meet and decide on how to treat the Extraordinary Event in the index based on the information available. An extraordinary adjustment will only be implemented if the majority of the Committee supports the suggested treatment. As soon as a decision has been taken all parties related to the index are informed about the Extraordinary Event as well as the decided treatment and date of implementation. For further information on the treatment of Extraordinary Events see chapter 2.3.

The Committee can also make amendments to the index rules if required. As an example, if the index does not meet legal or regulatory requirements (for the index itself or related financial products) anymore the Committee reserves the right to adjust the rules to meet these requirements. This may affect selection criteria or weighting rules. If there are any changes to the rules, all parties related to the index are informed and the new rulebook will be published on the company website [www.solactive.com](http://www.solactive.com).

## **1.7 Publication**

All specifications and information relevant for calculating the index are made available on the <http://www.solactive.com> web pages and sub-pages.

## **1.8 Historical data**

Historical data will be maintained from the 31.01.2014.

## **1.9 Licencing**

Licences to use the index as the underlying value for derivative instruments are issued to stock exchanges, banks, financial services providers and investment houses by Solactive AG.

## 2 Composition of the Index

### 2.1 Selection of the Index Components

At the launch of the index, all financial instruments which meet the requirements of the Selection Pool as defined under 4.1. are eligible for inclusion in the index. Instruments that will be issued after the launch of the index between two selection days will be added to the index on the next Adjustment Day given they fulfil all requirements of the Selection Pool

Additionally, on the quarterly Selection Day, the Index Committee evaluates whether all current Index Components still meet the requirements of the Selection Pool and – if necessary – any Index Components which do not pass this screen are removed from the Selection Pool on the Adjustment Day.

Extraordinary adjustments are possible.

### 2.2 Ordinary adjustment

The composition of the index is ordinarily reviewed on the quarterly Selection Day. Any change to the index will be implemented on the Adjustment Day.

### 2.3 Extraordinary adjustment

Extraordinary Events may lead to adjustments of the index between Adjustment Days.

To standardise processes the following standard treatments for common corporate actions have been established:

**Full Tender or Early Redemption:** The bond proceeds will be reinvested into the index on the effective date. For the avoidance of doubt a tender must be mandatory, the pure offer to tender a bond will not lead to an adaption of the index.\* On the effective date price and accrued interest are 0 and the proceeds (tender/redemption price + accrued interest/coupon) are considered as “Paid Cash” in the return formula (see 3.1.1). On the next calculation day the bond is removed from the index and weightings are calculated according to the formula in 3.1.1. The new higher weightings of the remaining constituents imply the direct reinvestment of the redeemed bond into all other Index Components.

#### Exchange Offer:

- 1) optional exchange offers are not treated in the index;\*
- 2) mandatory exchange offers: In case less than 90% of the amount outstanding is exchanged the exchange will not be considered in the index.
- 3) mandatory exchange offers: In case more than 90% of the amount outstanding is exchanged the exchange will be considered in the index calculation by exchanging the relevant bonds, so that the new bond will receive the weight of the old exchanged bond.

The capping factor of the new bond is calculated based on the following formula:

$$CapFactor_{t,new} = \frac{(Price_{t,old} + ACCInt_{t,old}) * Amount_{SD,old} * Cap_{SD,old}}{(Price_{t,new} + ACCInt_{t,new}) * Amount_{t,new}}$$

**Flat Trading:** A bond is flat trading if the bond issuer will not meet its coupon payment obligation which means that the buyer of a bond is not responsible for paying the interest that has accrued since the last payment. If a bond is defined to be “flat trading” between two adjustment days the respective accrued interests and coupons will be set to 0. The bond will not be removed until the next adjustment date.

**Default:** If a bond’s status changes to “in default” it will be removed from the index at the last available evaluated price from the pricing source.

\*For the avoidance of doubt, an optional tender or exchange offer may lead to an index adjustment after the end of the submission period. In case the tender or exchange has been successful for at least 90% of the Amount Outstanding, the bond will be removed from the index/exchanged into the relevant bond.

In case of an Extraordinary Event that is not covered by the standard treatments mentioned above the Committee will meet and decide on how to treat the Extraordinary Event in the index based on the information available. An extraordinary adjustment will only be implemented if the majority of the Committee supports the suggested treatment. As soon as a decision has been taken all parties related to the index are informed about the Extraordinary Event as well as the decided treatment and date of implementation.

### 3 Calculation of the Index

#### 3.1. Index formula

The Solactive USD China Corporate High Yield Bond Index is an index whose value reflects the relative changes in bond values.

As a formula:

$$Index_t = Index_n \frac{MarketValue_t + PaidCash_t}{BaseValue_n}$$

$$MarketValue_t = \sum_{i=1}^a (DirtyPrice_{i,t} + CPAdj_{i,t}) \cdot Amount_{i,n} \cdot Capfactor_{i,rb}$$

$$PaidCash_t = \sum_{i=1}^a Coupon_{i,t} \cdot Amount_{i,n} \cdot Capfactor_{i,rb}$$

$$BaseValue_n = \sum_{i=1}^a (DirtyPrice_{i,n} + CPAdj_{i,t}) \cdot Amount_{i,n} \cdot Capfactor_{i,rb}$$

Whereas:

$Index_t$  = Value of the index on Business Day t.

$Index_n$  = Value of the index on the last Adjustment Day n.

$CPAdj_{i,t}$  = Variable Coupon Adjustment Factor i on Business Day t is 0 if a bond enters the index during an ex-dividend period. If the bond is already in the index during the ex-dividend period, the Variable Coupon Adjustment Factor equals the coupon amount.

$DirtyPrice_{i,t}$  = Dirty Price of the bond i on Business Day t, whereas Dirty Price t is the sum of the clean price of the bond i on Business Day t and the accrued interest on Business Day t.

$DirtyPrice_{i,n}$  = Dirty Price of the bond i on the last Adjustment Day n, whereas Dirty Price is the sum of the clean price of the bond i on the last Adjustment Day n and the accrued interest on the last Adjustment Day n.

$Amount_{i,n}$  = Amount Outstanding of the respective bond as defined on the last Adjustment Day n.

$PaidCash_t$	= a) Value of the coupon payments between Adjustment Days. b) If a bond $i$ will be removed from the index between Adjustment Days, the resulting payment of the bond will be included in the Paid Cash component of the index. On the next Adjustment Day "Paid Cash" will be reinvested in the index.
$Coupon_{i,t}$	= Coupon payment of bond $i$ between payment date and Adjustment Day $n$ . In case there is no coupon payment, $Coupon_{i,t}$ is 0.
$Capfactor_{i,rb}$	= Weighting Cap Factor of portfolio component $i$ determined on Selection day $rb$ , to cap the weighting as described under Index Weighting

### 3.2 Accuracy

The value of the index will be rounded to four decimal places.

According to the terms of the bond, the Index Calculator will take the following conventions into account:

Act/Act

Act/360

Act/365

30/360

ISMA 30/360

The index does not take into account taxes and assumes gross coupon payments.

Accrued Interest is calculated with settlement convention  $t+2$  as of 22<sup>nd</sup> of September 2017 COB. Before that (incl. the backtest period) a settlement convention of  $t+3$  was used. If a bond does not pay any coupons (e.g. zero coupon bonds or T-Bills) the Accrued Interest as well as the coupon payment will be set to 0.

## 4. Definitions

### 4.1 index-specific definitions

The **“Selection Pool”** of the **Solactive USD China Corporate High Yield Bond Index** comprises bonds that fulfill the following conditions:

- a. Corporate debt
- b. Country of Risk of the issuer is the People's Republic of China (CN) or Hong Kong (HK)
- c. The issuer has outstanding debt of at least USD 1bn
- d. The issue is denominated in US Dollar (USD)
- e. The issue has an amount outstanding of at least USD 300 mil.
- f. The instrument has been in the market for at least 40 calendar days, i.e. the issue date is at least 40 calendar days before the adjustment day.
- g. Fixed coupon instrument
  - a. Fixed-to-float and Fixed-to-variable securities are eligible for inclusion given that they are at least one year from their conversion date.
  - b. Pay-in-kind (PIK) securities are eligible
  - c. Step-up-coupon instruments are eligible
- h. Remaining Time to Maturity (TTM) is between 2.00 and 5.00 years (measured from the rebalancing day) or the issue is a perpetual
- i. If several tranches are available, Private Placement (144A) are preferred over the remaining ones.
- j. One of the following rating criteria is met:
  - a. The issue not rated by both, Fitch Ratings (Fitch) and Moody's or
  - b. The issue has at least one rating that is equal to or lower than BBB- / Baa3 (Fitch / Moody's). For the avoidance of doubt, if two ratings are available, the lower one is decisive.
- k. The instrument is neither defaulted nor trading flat.
- l. Per issuer, from the pool of eligible instruments, the instrument with the highest Yield to Maturity (YTM) is selected. Should two or more instruments of the same issuer have the same YTM, the one with the highest amount outstanding is selected.

### 4.2 Further definitions

**“Adjustment Day”** is the last Business Day of March, June, September, and December.

**“Amount Outstanding”** is the face value of the respective bond.

**“Bond Price Provider”** is S&P Evaluation Services part of the ICE group.

A **“Business Day”** in relation to the index is any weekday except for the weekend and holidays specified by the New York Stock Exchange (NYSE) and by the Securities Industry and Financial Markets Association (SIFMA).

A **“Credit Event”** is the suspension of debt service, insolvency or failure to pay.

**“Early Redemption”** includes every event that leads to a redemption of a bond before the actual maturity date.

**“Effective Time to Maturity”** is the minimum of the next call or put date and the final maturity date.

**“Exchange Offer”** means that the holder of a bond is invited to exchange the existing bond to another debt security.

In particular, an **“Extraordinary Event”** is

- an early redemption of the bond
- a credit event



A bond is **“Flat Trading”** if the bond issuer does not meet its coupon payment obligation which means that the buyer of a bond is not responsible for paying the interest that has accrued since the last payment.

**“Foreign Exchange Rate”** is the respective WM 4pm London fixing.

A bond is **“In Default”** once the issuer is not able to fulfil its bond payment obligations anymore after the 30 days grace period.

The **“Index Calculator”** is Solactive AG or any other appropriately appointed successor in this function.

The **“Index Provider”** is Solactive AG or any other appropriately appointed successor in this function.

**“Index Components”** are all bonds in the Selection Pool.

The **“Index Currency”** is USD.

**“Issuer”** is the issuing entity of the respective bond.

**“Last Evaluated Bid Price”** generally is (aside from the rules referred to in „Extraordinary Events“) the last available evaluated Bid price provided by the Bond Price Provider.

**“Last Evaluated Ask Price”** generally is (aside from the rules referred to in „Extraordinary Events“) the last available evaluated Ask price provided by the Bond Price Provider.

The **“Market Value”** of a bond is defined as the sum of the Last Evaluated Price and Accrued Interest multiplied by the Amount Outstanding.

**“Re-Opening”** means offering an additional amount on an existing bond issue, as opposed to creating a new issue.

**“Selection Day”** is a Business Day 3 Business Days prior to the Adjustment Day.

**“Tender Offer”** means that a holder of a bond is invited to tender the bond for a specific price at a specific time before the actual maturity date.

## **5 Appendix**

### **5.1 Contact data**

#### **Information regarding the Solactive USD China Corporate High Yield Bond Index concept**

Solactive AG  
Guiollettstraße 54  
60325 Frankfurt am Main  
Tel.: +49 69 719 160 00  
Fax: +49 69 719 160 25  
indexing@solactive.com

### **5.2 Calculation of the Index – change in calculation method**

The application by the index calculator of the method described in this document is final and binding. The index calculator shall apply the method described above for the composition and calculation of the index. However, it cannot be excluded that the market environment, supervisory, legal, financial or tax reasons may require changes to be made to this method. The index calculator may also make changes to the terms and conditions of the index and the method applied to calculate the index, which he deems to be necessary and desirable in order to prevent obvious or demonstrable error or to remedy, correct or supplement incorrect terms and conditions. The index calculator is not obliged to provide information on any such modifications or changes. Despite the modifications and changes the index calculator will take the appropriate steps to ensure a calculation method is applied that is consistent with the method described above.