INDEX GUIDELINE

Solactive US Treasury Yield Curve Steepener 2-5 vs 10-30 Index

Version 1.1

05 October 2023

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Introduction

INTRODUCTION

This document (the "Guideline") is to be used as a guideline with regard to the composition, calculation and maintenance of the Index. Any changes made to the Guideline are initiated by the Committee specified in Section 1.6. The Index is calculated and published by Solactive AG. The name "Solactive" is trademarked.

It contains the underlying principles and rules regarding the structure and operation of the Solactive US Treasury Yield Curve Steepener 2-5 vs 10-30 Index (the "Index"). Solactive AG shall make every effort to implement the applicable 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 Index is merely calculated and published by Solactive AG and it 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 publication of the Index by Solactive AG does not constitute a 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.

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Index Specifications

1 INDEX SPECIFICATIONS

> The Solactive US Treasury Yield Curve Steepener 2-5 vs 10-30 Index (the "Index") is an Index owned by Solactive AG and is calculated and distributed by Solactive AG.

> The Index tracks the investment performance of a systematic strategy whose returns are directly linked to changes in the US treasury yield curve. The Index is constructed such that for a 1bp increase in the steepness of the curve, the index is expected to increase roughly 10bps.

> The Index consists of four underlyings. It has a long position in the 2Y and 5Y US Treasury Bond Futures and a short position in the 10Y and 30Y Us Treasury Bond Futures.

> The Index is calculated as a Total Return Index and published in USD.

1.1 SHORT NAME AND ISIN

The Index is distributed under ISIN DE000SLA8QW6, the WKN is SLA8QW. The Index is published on Reuters under the code .SOUSTFTT and on Bloomberg under the code SOUSTFTT Index.

1.2 INITIAL VALUE

The Index is based on 100 at the close of trading on the Index Base Date.

1.3 DISTRIBUTION

The Index is published via the price marketing services of Boerse Stuttgart GmbH and is distributed to all affiliated vendors, including Bloomberg. Each vendor decides on an individual basis as to whether it will distribute/display the Index via its information systems.

1.4 PRICES AND CALCUATION FREQUENCY

The price of the Index is calculated on each Business Day based on the settlement prices on the respective Exchanges on which the Index Components are listed. The most recent settlement prices of all Index Components are used. Should there be no current settlement price available, the most recent settlement price on Reuters for the preceding Trading Day is used in the calculation.

The Index is calculated once every Business Day. In the event that data cannot be provided to Thomson Reuters or to the pricing services of Boerse Stuttgart GmbH, the Index cannot be distributed.

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1.5 OVERSIGHT

A Committee composed of staff from Solactive AG is responsible for decisions regarding the composition of the Index as well as any amendments to the rules (in this document referred to as the "Committee" or the "Index Committee"). The Committee shall also decide about the future composition of the Index. if any Extraordinary Events should occur and the implementation of any necessary adjustments.

Changes to the Guideline are submit to the Committee for approval.

1.6 PUBLICATION

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

1.7 HISTORICAL DATA

Historical data will be maintained from the Index Launch Date.

1.8 LICENSING

Licenses 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.

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Calculation of the Index

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2 CALCULATION OF THE INDEX

2.1 INDEX CALCULATION FORMULA

The Index is calculated on each Business Day t according to the following formula:

$$I_t = Cash_t + u_{ER,R} * (ER_t - ER_R)$$

with

$Cash_t$ = Cash value on Business Day t, calculated according to Section 2.2

ER_t = Excess Return Index value on Business Day t, calculated according to Section 2.3

ER_R = Excess Return Index value on the Rebalancing Day immediately preceding Business Day t

$u_{ER,R}$ = Excess Return Index units on the Rebalancing Day immediately preceding Business Day t, calculated as follows:

$$u_{ER,R} = \frac{I_R}{ER_R}$$

2.2 CASH CALCULATION FORMULA

The cash is calculated on each Business Day t according to the following formula:

$$Cash_t = I_R * \left(1 + Y_{3M,R} * \frac{DCF(t,R)}{360}\right)$$

with

I_R = Index value on the Rebalancing Day immediately preceding Business Day t

$Y_{3M,R}$ = 3 Month US treasury bond yield on the Rebalancing Day immediately preceding Business Day t

$DCF(t,R)$ = number of calendar days between Business Day t (inclusive) and the Rebalancing Day immediately preceding Business Day t (exclusive)

2.3 EXCESS RETURN INDEX CALCULATION FORMULA

The Excess Return Index is calculated on each Business Day t according to the following formula:

$$ER_t = ER_R + \sum_{k=2,5,10,30} u_{k,R} * (P_{k,c,t} - P_{k,c,R})$$

with

$u_{k,R}$ = units of the k year US Treasury Bond Future on the Rebalancing Day immediately preceding Business Day t, calculated according to Section 2.4

$P_{k,c,t}$ = Settlement Price of the Current k year US Treasury Bond Future Contract on Business Day t

$P_{k,c,R}$ = Settlement Price of the Current k year US Treasury Bond Future Contract on the Rebalancing Day immediately preceding Business Day t

2.4 FUTURE UNITS CALCULATION

2.4.1 Future Unit Calculation on a Rebalancing Day

The units of each k year US Treasury Bond Future are calculated on each Rebalancing Day R according to the following formula:

$$u_{k,R} = \frac{TD_k}{CD_{k,R} * P_{k,n,R}} * ER_R$$

with

TD_k = Target Duration of the k year US Treasury Bond Future, specified in Section 4.3

$P_{k,n,R}$ = Settlement Price of the Next k year US Treasury Bond Future Contract on the Rebalancing Day immediately preceding Business Day t

$CD_{k,R}$ = Contract Duration of the next k year US Treasury Bond Future Contract on the Rebalancing Day R, calculated as follows:

$$CD_{k,R} = max[ED_{k,R}, MD_{k,R}]$$

with

$ED_{k,R}$ = Empirical Duration of the Next k year US Treasury Bond Future Contract on the Rebalancing Day R, calculated according to section 2.4.2

$MD_{k,R}$ = Modified Duration of the Next k year US Treasury Bond Future Contract on the Rebalancing Day R, calculated according to section 2.4.3

2.4.2 Empirical Duration Calculation

The Empirical Duration the k year US Treasury Bond Future is calculated according to the following formula:

$$CD_{k,R} = \frac{\sum_{i=1}^{N}\left[(CR_{k,t-i} - \overline{CR}_{k,t}) * (YR_{k,t-i} - \overline{YR}_{k,t})\right]/(N-1)}{\sum_{i=1}^{N}\left[(YR_{k,t-i} - \overline{YR}_{k,t})^2\right]/(N-1)}$$

with

N = Lookback period, i.e. 20

$CR_{k,t}$ = contract returns of the Next k year US Treasury Bond Future Contract on Business Day t, calculated as follows:

$$CR_{k,t} = \frac{P_{k,n,t}}{P_{k,n,t-1}} - 1$$

$\overline{CR}_{k,t}$ = average contract returns of the Next k year US Treasury Bond Future Contract on Business Day t over the lookback period, calculated as follows:

$$\overline{CR}_{k,t} = \frac{\sum_{i=i}^{N} CR_{k,n,t-i}}{N}$$

$YR_{k,t}$ = yield returns of the k year US Treasury Bond yield on Business Day t, calculated as follows:

$$YR_{k,t} = \frac{(Y_{kY,t} - Y_{kY,t-1})}{100}$$

with

$Y_{kY,t}$ = k Year US treasury bond yield on Business Day t, specified in Section 4.3

$\overline{YR}_{k,t}$ = average yield returns of the k year US Treasury Bond Future Contract on Business Day t over the lookback period, calculated as follows:

$$\overline{YR}_{k,t} = \frac{\sum_{i=1}^{N} YR_{kY,t-i}}{N}$$

2.4.3 Modified Duration Calculation

The Modified Duration the k year US Treasury Bond Future is calculated according to the following formula:

$$MD_{k,R} = \frac{MacD_{k,R}}{1 + Y_{kY,R-1}/2}$$

with

$Y_{kY,R-1}$ = k Year US treasury bond yield on the Business Day immediately preceding Rebalancing Day R

$MacD_{k,R}$ = Macaulay Duration of the Next k year US Treasury Bond Future Contract on the Rebalancing Day R, calculated as follows:

$$MacD_{k,R} = \frac{1}{IP_{k,R}} * \left(\sum_{i=1}^{C_k-1} \left[\frac{0.03}{\left(1+\frac{Y_{kY,R-1}}{2}\right)^{i}} * \frac{i}{2} \right] + \frac{1.03}{\left(1+\frac{Y_{kY,R-1}}{2}\right)^{C_k}} * \frac{C_k}{2} \right)$$

with

C_k =Number of Coupon periods of the k year US Treasury Bond Future, specified in Section 4.3

$IP_{k,t}$ = Implied Price of the k year US Treasury Bond Future, calculated as follows:

$$IP_{k,R} = \sum_{i=1}^{C_k-1}\left[\frac{0.03}{\left(1+\frac{Y_{kY,R-1}}{2}\right)^i}\right] + \frac{1.03}{\left(1+\frac{Y_{kY,R-1}}{2}\right)^{C_k}}$$

2.5 ACCURACY

$>$ The value of the Index will be rounded to 3 decimal places for the purpose of publication.

2.6 MISCELLANEOUS

2.6.1 Recalculation

Solactive AG makes the greatest possible efforts to accurately calculate and maintain its indices. However, the occurrence of errors in the index determination process cannot be ruled out. In such cases Solactive AG adheres to its publicly available Correction Policy.

2.6.2 Market Disruption

In periods of market stress Solactive AG calculates its indices following predefined and exhaustive arrangements set out in its publicly available Disruption Policy.

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Definitions

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3 DEFINITIONS

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

The "Index Currency" is USD.

The "Index Base Date" is 28th February 2006.

A "Business Day" means any day in which the Exchange is open and publishes a Contract Settlement Price for the Designated Relevant Contracts.

"Exchange" means the Chicago Mercantile Exchange.

"Rebalancing Day" is the fourth last Business Day in the month February, May, August and November given that day is not a half-trading day for the futures on the exchange, otherwise the first Business Day immediately preceding the fourth last Business Day which is not a half-trading day.

"3 Month US treasury bond yield" is the yield displayed under Reuters-RIC "TRUS3MT"

"Settlement Price" is daily settlement price published by the Exchange.

"Current k year US Treasury Bond Future Contract" means the future contract with the earliest First Notice Day equal or greater than the current Business Day except for the period of Business Days between the Rebalancing Day and the end of the corresponding month where the definition references the future contract with the earliest first notice day greater than the current month .

"Next k year US Treasury Bond Future Contract" means the future contract with the earliest First Notice Day greater than the First Notice Day of the Current future contract.

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Appendix
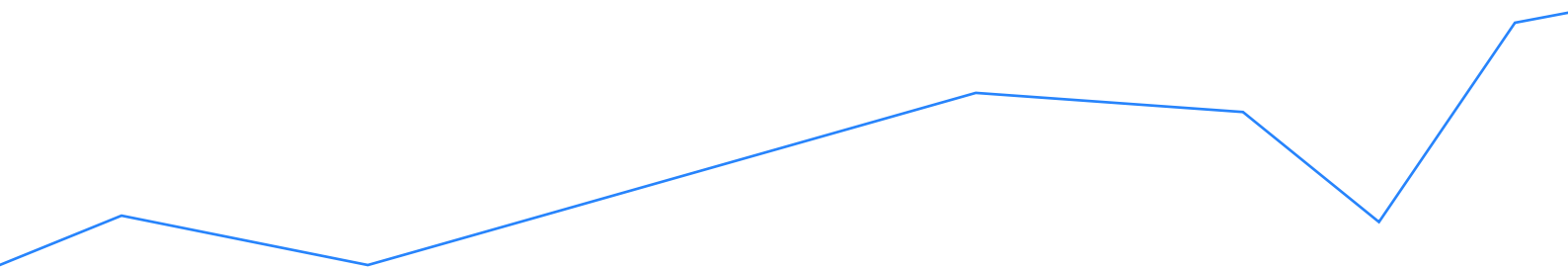
4 APPENDIX

4.1 CONTACT DATA

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4.2 CHANGES 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 that it 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.

4.3 INDEX DETAILS

k	Future Base-RIC	Y_{kY} Instrument	C_k	TD_k
2	TU	TRUS2YT	4	5
5	FV	TRUS5YT	9	5
10	TY	TRUS10T	13	-5
30	US	TRUS30T	30	-5