

INDEX GUIDELINE

Solactive Euro High Yield BB 1-5 Year ex. Financials EUR TR Index

Version 1.0

10 July 2019

TABLE OF CONTENTS

In	trodu	ction	3
1.	Ir	ndex Specifications	4
	1.1.	Scope of the Index	4
	1.2.	Identifiers and Publication	4
	1.3.	Initial Level of the Index	4
	1.4.	Prices and calcuation frequency	4
	1.5.	Licensing	5
	1.6.	Conflicts of Interest	5
	1.7.	Definitions in respect of Section 1	5
2.	Ir	ndex Selection	7
	2.1.	Selection of the Index components	7
	2.2.	Weighting of the index components	8
	2.3.	Definitions in respect of Section 2	8
3.	R	ebalance	. 10
	3.1.	Ordinary Rebalance	. 10
	3.2.	Extraordinary Rebalance	. 10
	3.3.	Definitions in respect of Section 3	. 10
4.	С	alculation of the Index	11
	4.1.	Index formula	11
	4.2.	Accuracy	11
	4.3.	Adjustments	12
	4.4.	Corporate actions	12
	4.5.	Recalculation	13
	4.6.	Market Disruption	13
5.	Μ	liscellaneous	14
	5.1.	Discretion	14
	5.2.	Methodology Review	14
	5.3.	Changes in calculation method	14
	5.4.	Termination	14
	5.5.	Oversight	15
Сс	ontac	t	16

INTRODUCTION

This document (the "**Guideline**") is to be used as a guideline with regard to the composition, calculation and maintenance of the Solactive Euro High Yield BB 1-5 Year ex. Financials NOK TR Index (the "**Index**"). Any amendments to the rules made to the Guideline are approved by the Index Committee specified in Section 5.5. The Index is owned, calculated, administered and published by Solactive AG ("**Solactive**") assuming the role as index 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 guidelines 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 – 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 Index is designed to mirror the unhedged performance of the euro denominated high yield debt market with a rating between BB+ and BB- and a maturity of up 5 years in NOK. Specifically, the index excludes all bonds issued by financial corporations according to the sector classification of FactSet.

1.2. IDENTIFIERS AND PUBLICATION

The Index is published under the following identifiers:

Name	ISIN	Currency	Туре	RIC	BBG ticker
Solactive Euro High Yield BB					
1-5 Year ex. Financials EUR	DE000SLA8SK7	EUR	TR	.SOLE5BBE	N/A
TR Index					

The Index is published 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. In the event that data cannot be provided to the price marketing services of Boerse Stuttgart GmbH, the Index cannot be published.

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 Live Date is 1000. Historical values from the Live Date will be recorded in accordance with Article 8 of the BMR. Levels of the Index published for a period prior to the Live Date have been back-tested.

1.4. PRICES AND CALCUATION 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 Price on the relevant Rebalance Day (as specified in Section 3.3). Bonds which are excluded from the Index in a rebalancing are reflected in the calculation of the level of the Index for the Rebalance

Day at the Last Evaluated Bid Price on the relevant Rebalance Day. Index analytical values are calculated each Business Day using the Last Evaluated Bid Price based on Fixing Time. Prices of Index Components not listed in the Index Currency are converted using the WM Fixing quoted by Reuters

Should there be no current spot foreign exchange rate available on Reuters the most recent spot foreign exchange on Reuters for the preceding Trading Day is used in the calculation.

1.5. LICENSING

Licenses to use the Index as the underlying value for financial instruments, investment funds and financial contracts may be issued to stock exchanges, banks, financial services providers and investment houses by Solactive.

1.6. CONFLICTS OF INTEREST

No conflicts of interest have been identified for this Index.

1.7. DEFINITIONS IN RESPECT OF SECTION 1

This section contains defined terms used in Section 1 and, if applicable, other Sections of the Guideline.

"**Business Day**" in relation to the index is each day Monday to Friday except common European banking holidays. Common European banking holidays are Good Friday, Easter Monday, Christmas Day, Boxing Day and New Years Day.

"Fixing Time" is 16:00 London Time.

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

"Index Component" is each bond reflected in the Index.

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

"Last Evaluated Ask Price" the last available evaluated ask price by the designated Pricing Provider.

"Last Evaluated Bid Price" the last available evaluated Bid price by the designated Pricing Provider.

"Last Evaluated Mid Price" is the average between Last Evaluated Ask Price and Last Evaluated Bid Price.

"Last Evaluated Price" the evaluated Bid/Ask/Mid price by the designated Pricing Provider at Fixing Time.

"Launch Date" is the 2019-07-10.

"Live Date" is 2019-07-02.

"**Pricing Provider**" is Interactive Data Corporation part of the ICE group.

"**Start Date**" is 2012-12-31.

2. INDEX SELECTION

On each Selection Day, all bonds which meet the Index Component Requirements (as specified in Section 2.1) 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:

- a. Bonds should be denominated in Euros (EUR).
- b. Minimum amount outstanding of 150 million EUR is required.
- c. Time to maturity of at least 18 months for new issues entering the index. The minimum time to maturity for bonds in the index is 12 months.
- d. Bonds that switch from fixed to floating rate coupons qualify provided they are callable within the fixed rate period and have at least one year prior to the date the bond transitions from a fixed to a floating rate coupon structure.
- e. All bonds included must be rated either BB+, BB or BB- by Standard & Poor's or Ba1, Ba2, Ba3 by Moody's Investors Services. In case of a split rating the worse rating is decisive. In case only one rating agency rates the bond, this rating shall be decisive. All ratings must be above D (default). If a bond is rated D by S&P or C by Moody's it is removed at the next rebalancing.
- f. Bonds issued by financial corporations according to the FactSet sector classification are not eligible for the index.
- g. Fixed Coupon Bonds, Zero Coupon Bonds, Payment-In-Kind Bonds and Step-Up Coupon Bonds are eligible for inclusion in the index.
- h. Bearer Bonds are eligible for inclusion in the index.
- i. For a bond to be included in the index, a price must be available from the designated pricing provider.
- j. Sinking Fund Bonds, Floating Rate Bonds, Convertible Bonds, Inflation-linked Bonds, Contingent Capital Securities, Covered Bonds, Preferred Securities, Securitized or Collateralized Bonds or Collateralized Debt Obligations (CDOs) are not eligible for inclusion in the index.



- k. Callable perpetual securities qualify for inclusion in the index provided they are at least one year from the next call date.
- l. Bonds sold by supranational entities are not eligible for inclusion.
- m. Bonds sold by entities that are 100%-owned by national governments or their departments, or that are guaranteed by them are excluded from the index. Bonds sold by entities which carry out government-sponsored roles, particular in the public sphere, are also excluded.
- n. Private placements are not eligible for inclusion in the index.
- o. Only one bond per trance with exactly the same parameters (coupon, maturity, etc.) will be selected for inclusion in the index. If several tranches (with the same parameters) are available bonds that are issued domestically, and under Euro MTN program are preferred.

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 index features an issuer cap of 5%. If on selection day any given issuer has a weight of more than 5% the weights of all bonds of this issuer will be reduced proportionally, so the issuer receives a weight of 5% on selection day.

2.3. DEFINITIONS IN RESPECT OF SECTION 2

This section contains defined terms used in Section 2 and, if applicable, other Sections of the Guideline.

"Contingent Capital Securities" are bonds that will be converted into equity if a certain trigger event takes place or written down.

"Convertible Bonds" are bonds that can be converted into a predetermined amount of the company's equity at certain times during its life.

"Country of Incorporation" is defined by Solactive based on the assessment of market data providers as the country where the company is incorporated or legally registered.

"Country of Risk" is defined by Solactive based on the assessment of market data providers as the country in which the company would be influenced the most by potential changes in the business environment.

"Covered Bonds" are bonds backed by a ring-fenced pool of assets such as mortgages or public-sector loans. The issuer retains the responsibility to maintain the quality of the underlying asset

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

"Fixed Coupon Bonds" are bonds with a coupon rate that is fixed throughout their life, as opposed to bonds with floating, or variable coupons.

"Inflation-linked Bonds" are bonds whose principal and coupon payments are indexed to inflation.

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

"Payment-In-Kind Bonds" are a type of bonds that pay interest in additional bonds rather than in cash

"Preferred Securities" combine both debt and equity characteristics.

"Securitized or Collateralized Bonds" are bonds secured against specific assets or receivables (ABS), mortgages (MBS) or cash flows.

"Selection Day" is 3 Business Days before the scheduled Rebalance Day, disregarding any potential change of the Rebalance Day.

"Sinking Fund Bond" is a bond where the issuer is required to redeem a proportion of the bonds either by market purchases or by lot at predefined dates prior to redemption.

"Step-Up Coupon Bonds" are bonds whose coupons increase while the bond is outstanding. The coupon amounts are determined at issuance.

"Zero Coupon Bonds" means bonds which do not pay interest but are issued at a discount.

3. REBALANCE

3.1. ORDINARY REBALANCE

In order to reflect the new selection of the Index Components determined on the Selection Day (in accordance with section 2.[1][2]) the Index is adjusted on the Rebalance Day after Close of Business.

A detailed description of the rebalance procedure can be found in the Bond Index Methodology which is incorporated by reference and available at www.solactive.com

Solactive will publish any changes made to the Index Components with sufficient notice before the Rebalance Day on the Solactive webpage under the section "<u>Announcement</u>", which is available at https://www.solactive.com/news/announcements/.

3.2. EXTRAORDINARY REBALANCE

The Index is not rebalanced extraordinarily.

3.3. DEFINITIONS IN RESPECT OF SECTION 3

This section contains defined terms used in Section 3 and, if applicable, other Sections of the Guideline.

"Close of Business" is a time stamp when an Index is calculated. This occurs at 17:30 EST every Business Day.

"**Rebalance Day**" is the last Business Day of month. If that day is not a Business Day the Rebalance Day will be the immediately following Business Day.

4. CALCULATION OF THE INDEX

4.1. INDEX FORMULA

The Index is calculated as a total return index.

A total return index seeks to replicate the overall return from holding an index portfolio, thus considering both coupon payments and Corporate Action proceeds in addition to the price changes adjusted for any accrued interest. Coupon and other cash payments will be reinvested on the monthly basis.

The Index calculation is performed according to the Bond Index Methodology, which is available at www.solactive.com.

The base market value formula implies a periodic reinvestment in the Index of proceeds resulting from corporate actions and coupon payments in respect of the Index Components on the next regular Rebalance Day following such events. For the period until reinvestment the proceeds are held in a cash component. On the Rebalance Day the proceeds are reinvested in the Index proportionately to the weights of the Index Components. The base market value formula tracks the performance of the Index Components relative to their market value on the immediately preceding Rebalance Day. The market value for a single Index Constituent on a Rebalance Day is based on the price for the respective bond and its face value on the Selection Day associated with the Rebalance Day.

The formula is expressed in mathematical terms as follows:

$$Index_t = Index_n \cdot \frac{MarketValue_t + Cash_t}{BaseValue_n}$$

A more detailed description of the mechanics of the base market value formula can be found in the Bond Index Methodology under section 1.2.2.

4.2. ACCURACY

The Index Level will be rounded to 2 decimal places. The Amount Outstanding per bond instrument will be rounded to 0 decimal places. The Last Evaluated Bid, Ask Price of a bond instrument will be rounded to 4 decimal places.

4.3. ADJUSTMENTS

Under certain circumstances, an adjustment of the Index may be necessary between two regular Rebalance Days. Basically, such adjustment is need to be made if a corporate action (as specified in section 4.4 below) in relation of an Index Component occurs. Such adjustment may need to be done in relation to an Index Component and/or may also affect the number of Index Components and/or the weighting of certain Index Components and will be made in compliance with the Bond Index Methodology, which is available at www.solactive.com (under section "Indices", subsection "Regulatory Documents").

4.4. 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. Corporate actions will be implemented from the cum-day to the ex-day of the corporate action, so that the adjustment to the index coincides with the price effect of the respective corporate action taking effect.

Adjustments to the Index to account for corporate actions will be made in compliance with the Bond Index Methodology, which is available at solactive.com (under section "Indices", subsection "Regulatory Documents"). This document contains for each corporate action a brief definition and specifies the relevant adjustment to the Index variables.

While Solactive aims at creating and maintaining its methodology for treatment of corporate actions as generic and transparent as possible and in line with regulatory requirements, it retains the right in accordance with the Bond Index Methodology to deviate from these standard procedures in case of any unusual or complex corporate action or if such a deviation is made to preserve the comparability and representativeness of an Index over time.

Solactive considers following, but not conclusive, list of corporate actions as relevant for index maintenance:

- > Early Redemption (an event that leads to a redemption of a bond before the regular maturity date)
- > Flat Trading (e.g. a bond issuer fails to meet its coupon payment obligation)
- > Bond Default (e.g. when the issuer fails to meet its coupon payment obligation or repay the principal at maturity)
- > Tender Offers (a holder of a bond is invited to tender the bond for a specific price at a specific time before the regular maturity date)
- > Exchange Offers (type of a tender offer where the issuer offers its bondholders to exchange their existing bonds for an asset other than cash)

- > Distressed Debt Exchange (form of debt exchange when bondholders agree to reduce the principal amount of debt securities in order to obtain higher payment priority in the form of secured debt)
- > Bond Funge (bond issue that is attached to an existing one (parent bond). On a defined date the parent bond absorbs the funged bond)
- > Payment-in-Kind Bonds (a situation where a bond pay interest in additional bonds rather than in cash)
- > Conversion of [CoCo] Bonds
- > Debt Issuance]
- > Bond Maturity

4.5. RECALCULATION

Solactive makes the greatest possible efforts to accurately calculate and maintain its indices. However, errors in the index determination process may occur from time to time for variety reasons (internal or external) and therefore, cannot be completely ruled out. Solactive endeavors to correct all errors that have been identified within a reasonable period of time. The understanding of "a reasonable period of time" as well as the general measures to be taken are generally depending on the underlying and is specified in the Solactive <u>Correction Policy</u>, which is incorporated by reference and available on the Solactive website: <u>www.solactive.com</u>.

4.6. MARKET DISRUPTION

In periods of market stress Solactive calculates its indices following predefined and exhaustive arrangements as described in the Solactive <u>Disruption Policy</u>, which is incorporated by reference and available on the Solactive website: <u>www.solactive.com</u>. Such market stress can arise due to a variety of reasons, but generally results in inaccurate or delayed prices for one or more Index Components. The determination of the Index may be limited or impaired at times of illiquid or fragmented markets and market stress.

5. MISCELLANEOUS

5.1. **DISCRETION**

Any discretion which may need to be exercised in relation to the determination of the Index (for example the determination of the Index Universe (if applicable), the selection of the Index Components (if applicable) or any other relevant decisions in relation to the Index) shall be made in accordance with strict rules regarding the exercise of discretion or expert judgement.

5.2. METHODOLOGY REVIEW

The methodology of the Index is subject to regular review, at least annually. In case a need of a change of the methodology has been identified within such review (e.g. if the underlying market or economic reality has changed since the launch of the Index, i.e. if the present methodology is based on obsolete assumptions and factors and no longer reflects the reality as accurately, reliably and appropriately as before), such change will be made in accordance with the <u>Methodology Policy</u>, which is incorporated by reference and available on the Solactive website: <u>www.solactive.com</u>.

Such change in the Methodology will be announced on the Solactive webpage under the section "<u>Announcement</u>", which is available at www.solactive.com/news/announcements. The date of the last amendment of this Index is contained in this Guideline.

5.3. 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.

5.4. TERMINATION

Solactive makes the greatest possible efforts to ensure the resilience and continued integrity of its indices over time. Where necessary, Solactive follows a clearly defined and transparent procedure to adapt index methodologies to changing underlying markets (see Section 5.2 "Methodology Review") in order to maintain

continued reliability and comparability of the indices. Nevertheless, if no other options are available the orderly cessation of an index may be indicated. This is usually the case when the underlying market or economic reality, which an index is set to measure or to reflect, changes substantially and in a way not foreseeable at the time of inception of the index, the index rules, and particularly the selection criteria, can no longer be applied coherently or the index is no longer used as the underlying value for financial instruments, investment funds and financial contracts.

Solactive has established and maintains clear guidelines on how to identify situations in which the cessation of an index is unavoidable, how stakeholders are to be informed and consulted and the procedures to be followed for a termination or the transition to an alternative index. Details are specified in the Termination Policy, which is incorporated by reference and available on the Solactive website: address: <u>www.solactive.com</u>.

5.5. OVERSIGHT

An index committee composed of staff from Solactive and its subsidiaries (the "**Index Committee**") is responsible for decisions regarding any amendments to the rules of the Index. Any such amendment, which may result in an amendment of the Guideline, must be submitted to the Index Committee for prior approval and will be made in compliance with the "Solactive Methodology Policy", which is available at www.solactive.com.



CONTACT

Solactive AG German Index Engineering Guiollettstr. 54 60325 Frankfurt am Main Germany

 Tel.:
 +49 (0) 69 719 160 00

 Fax:
 +49 (0) 69 719 160 25

 Email:
 info@solactive.com

 Website:
 www.solactive.com

© Solactive AG