



Swiss Index

Methodology Rulebook Governing Bond Indices

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1 Index Structure

1.1 Introduction

This document is an integral part of the Swiss Index Rules. The Swiss Index Rules are outlined in a Methodology Rulebook for Equity and Real Estate Indices, Bond Indices, Strategy Indices and Swiss Reference Rates. This is the Methodology Rulebook governing Bond Indices. The initial section 'General principles' outlines the guiding principles underlying the rulebook and the application of the rules. The next section provides an overview of the definitions used in this rulebook. It is followed by a section on the calculation of indices and the outlines on the maintenance of index components, composition. The document closes with sections on correction policy, governance, external communication and trademark protection.

1.2 Revision History

Date	Version	Description
04.10.2021	1.00	Changed assignment of bonds into maturity buckets (from "yield to worst term" to "residual term"), Updated eligibility criteria for bonds by introducing "Seniority" in section 6.2; Clarified use of Fedafin corporate ratings as well as handling of restricted ratings in section A.2.
15.11.2021	1.10	Introduced a definition for bonds which are listed on both, SIX Swiss Exchange and SIX Digital Exchange ("SDX listed bonds") and an explanation of the calculation of the nominal amount for these bonds
29.12.2021	1.20	Expanded and re-worded Section 10 Governance, mainly to increase transparency of bodies and concepts when calculating indices
18.01.2022	1.30	Included SBI Domestic Government 1m – 3years
14.11.2022	1.40	Methodology update for SBI ESG indices (see Appendix E). Changes to thresholds in Critical Sectors and introduction of UNGC Introduction of section "Primary Data Sources"
14.03.2023	1.50	Minor adjustments of section 6.2 for the subjects "Coupon structure", "Seniority" and "Residual Term"
21.12.2023	1.60	Clarification of the content in section 10 in relation to which information has to be made available at the beginning of a market consultation
06.05.2024	1.70	Added SBI ESG 10+ index in Appendix F, Small adjustments in Appendix A to reflect changes with rating providers
01.07.2024	1.80	Added section 3.2.3 Spread Index, Added clarifications to formulas in section 3.1.4

1.3 General Principles

This rulebook is based on the general principles stated below. SIX uses the principles as an orientation and guiding principles for unforeseen circumstances that are not covered by the rulebook or in case of doubt.

- **Representative**
The development of the market is represented by the index.
- **Tradable**
The index components are tradable in terms of company size and market.
- **Replicable**
The development of the index can be replicated in practice with a portfolio.
- **Stable**
High index continuity.
- **Rules-based**
Index changes and calculations are rule-based.
- **Projectable**
Changes in rules are with appropriate lead time (usually at least 2 trading days) – no retrospective rule changes.
- **Transparent**
Decisions are based on public information.

2 Definitions

2.1 Instrument Definitions

SIX offers indices which replicate the development of a weighted group of instruments. Since the underlying instruments of the indices described in this rulebook are bonds, their attributes are defined underneath:

Term	Definition
Callable Bond	Bonds that can be redeemed early are callable bonds. They can be redeemed at the issuer's discretion at a predefined call date.
Corporate Action	A corporation uses a corporate action to amend its shareholder capital. Corporate actions may be but are not limited to increase of nominal amount or the calling of a bond. Corporate actions which have an effect on index calculation parameters are considered within the index calculation process.
Coupon Structure	Bonds which yield the same interest on a yearly basis are called fixed coupon or straight bonds. Other coupon structures may be zero coupon bonds which do not pay interest or floating rate notes where the interest varies depending on an agreed reference rate. Bonds can change from a fixed to a floating coupon structure.
Domicile	Each bond has a domicile. Bonds with a domicile in Switzerland and in the principality of Liechtenstein are categorized as 'Domestic' and bonds with a different domicile are categorized as 'Foreign'.
Instrument Currency	Each bond is issued in a specific currency.
Issuer	An organization that borrows money by selling bonds. There are various types of issuers, such as governments, supranational entities, regions or cities, as well as corporations.
Nominal Amount	On the issue date, the nominal amount equals the capital raised by the issuer. During the term, the nominal amount can be reduced or increased. In the case of bonds issued by the Swiss Confederation, any own tranches not yet placed are also included in the nominal amount. For SDX Listed Bonds the aggregate amount of both instruments is taken into account.
Price	Bonds are traded as a relative fraction of their face value in 'percent'. Due to the less liquid nature of bond markets the price of the instrument is based on the order book of SIX Swiss Exchange. Bid and ask quotes or mid-prices are used in the index calculation process. All prices are clean prices without accrued interest. SDX Listed Bonds will use the same pricing source.
Residual Term	In this rulebook the shorter term of Time to First Call and Time to Maturity is the Residual Term of the bond.
SBI Composite Rating	SIX assigns to each bond a SBI Composite Rating from AAA to BBB which states the creditworthiness of a bond. The rating used in the indices is rule-based and taking into consideration several external ratings. The classification process of the SBI Composite Rating is further described in Appendix A.
SDX Listed Bond	With the introduction of Swiss Digital Exchange (SDX) it is possible to list digital bonds in Switzerland. A bond which is listed at SDX (digital bond), and is also listed at SIX Swiss Exchange (traditional bond) under the same bond prospectus, and is therefore exchangeable between the two trading venues is referred to as "SDX Listed Bond" in this rulebook. SDX Listed Bonds will only appear once in the Swiss Bond Index with the ISIN of the traditional bond but with the aggregate nominal amount of the digital and the traditional bond. The pricing source for the ISIN in the Swiss Bond Index will be SIX Swiss Exchange.
Sector Code	Every bond is assigned a sector code which is based on the FTSE Russel ICB Fixed Income International Classification (ICB FI). The aim of ICB FI is to have a centrally valid definition in place of how bonds are to be grouped based on the business activity of the issuer. A general overview of ICB FI can be found in Appendix D.

Term	Definition
Time to First Call	The Time to First Call of a bond is the time period between now and the first possible call date of the bond.
Time to Maturity	The Time to Maturity of a bond is the time period between now and the expiration date of the bond.

2.2 Bond Index Definitions

Regarding bond indices, this document is using the following definitions:

Term	Definition
Base Date	The Base Date is the date when the Base Value is set. Usually this happens at the launch of the index.
Base Value	The Base Value of an index is the value it is standardized to. It is common to set a Base Value to 100 or 1000.
Cut-off Date	The data to select the index components from its universe is fixed at the cut-off date. Changes to the data that occur after the close of that trading day are only considered at the subsequent index review.
Effective Date	Ordinary and extraordinary index adjustments are considered in the index calculation from the effective date onward.
Filter	Filters are applied to the SBI index in order to create sub-indices. The available filters are 'Classification', 'Nominal Amount', 'Domicile', 'Residual Term', 'SBI Composite Rating', and "ESG eligibility". For each filter predefined options are available. The filters are described in detail in section 7.
Government Curve	The term "Government Curve" is used for a Yield Curve that depicts yields of government bonds on the vertical axis and the maturities of these bonds on the horizontal axis.
Index	An index measures the development of a defined market. The market is represented by the index components with defined characteristics and selected accordingly with the filters.
Index Component	All instruments which are part of the index
Index Composition	The Index Composition consists of the index components. The components are selected by applying the selection rules of the index.
Index Standardization	The index level is standardized to a base value at the base date. From this date on, the index level is constantly updated by incorporating market movements and corporate actions into the index level.
Index Type	Each index is calculated as a price, total return, yield and duration type. All types share the same Index Composition. Further details can be found in section 3.1.
Instrument	An instrument is issued by an issuer to raise capital. An issuer can emit different kind of instruments including equities and bonds. In this rulebook the term 'instrument' solely refers to issued bonds.
SBI Eligibility Criteria	The eligibility criteria are a set of conditions which a bond needs to fulfil to be selected for the SBI index. The conditions are outlined in section 6.
SBI Index Universe	The index universe is a group of instruments which share common characteristics. The index universe is the basis to select the Index Composition.
Swap Curve	The term "Swap Curve" is used for a Yield Curve that depicts yields of swaps on the vertical axis and the maturities of these swaps on the horizontal axis.
Yield Curve	For the purpose of this rulebook, a Yield Curve means a graphical representation of the yield of an interest-bearing financial instrument on the vertical axis and the maturities of these instruments on the horizontal axis.

3 Calculation of Index Values

3.1 Laspeyres Formula

SIX measures most of its indices based on a formula which goes back to Prof. Etienne Laspeyres who was ordinarius for Political Economy at the University of Basel from 1864 to 1866. Prof. Laspeyres' invention measures the change of value in a basket of goods relative to its value at inception.

Conceptually the index formula to calculate index levels (I) at a given point in time (t) divides a market value (M) by a divisor (D) as follows:

$$I_t = \frac{M_t}{D_t}$$

Legend:

I	Index value
M	Market value
D	Divisor
t	Time

The divisor is used twofold: First, it is used to standardize the index value to a meaningful size at inception of the index. It is carried forward over time from the day when the base value of the index was set. Second, it is used to outbalance external effects that lead to shifts in market value (ΔM) throughout the life of the index.

$$D_t = \frac{M_{t-1} - \Delta M_t}{I_{t-1}}$$

Legend:

ΔM	Change in market value
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Those effects usually have the form of corporate actions and have a defined effective date. Therefore the divisor might be adjusted on a day to day basis and held constant within a day. The new divisor is calculated on the evening of the day before the corporate action takes effect.

3.1.1 Theoretical Adjustments of Corporate Actions

Depending on the index type a corporate action may affect the market value of an instrument which leads to an adjustment in the divisor as stated in equation in section 3.1 in terms of $M_{t-1} - \Delta M_t = M_t$. Those effects are usually predictable and must be accounted for at their effective date in the sense of a market expectation. The change of market value in the index is the sum of the changes in the index components:

$$\Delta M_t = \sum_{i=1}^n \Delta M_{i,t}$$

To comply with the market expectation, different adjustments are applied for ΔM_i . More details on and examples of corporate actions are explained in section 3.1.4.

3.1.2 Price Return Index

The bond price index formula measures the price development of the bonds in the Index Composition.

To calculate the market value the following formula is used:

$$M_t = \sum_{i=1}^n w_{i,t} p_{i,t}$$

Legend:

w	Nominal amount
p	Price of bond listed at SIX Swiss Exchange

The nominal amount (w) of the bond (i) is multiplied by its clean price (p). The nominal amount is usually held constant within a trading day.

3.1.3 Gross Return Index

Compared to the Price Return Index, the Gross Return Index is different in two aspects: The price used to calculate the market value and the reinvestment of coupons into the index, which is explained in the section below.

To calculate the market value the following formula is used:

$$M_t = \sum_{i=1}^n w_{i,t} (p_{i,t} + \tau_{i,t} C_{i,1})$$

Legend:

τ	Fraction of current coupon period in %
C	Upcoming coupon in %
w	Nominal amount
p	Price of bond listed at SIX Swiss Exchange

The nominal amount (w) of the bond (i) is multiplied by its clean price (p) corrected for the accrued interest for a given day. To receive the accrued interest, the upcoming coupon payment (C) is multiplied by the fraction of the current coupon period as a result of dividing the days since the most recent payment with the days within the coupon period. This calculation is based on the 30/360 day count convention where each month has 30 days and one year has 360 days.

3.1.4 Practical Application of Corporate Actions

There are two standard corporate actions for which the index divisor is adjusted. Those are coupon payments and the change in the nominal amount of a bond instrument.

Coupon Payments

Coupon payments are adjusted only in Gross Return Indices and always treated as gross amounts, including the withholding tax portion. The change in market value for a coupon is defined as:

$$\Delta M_i = -\tau_{i,t} C_{i,1} * w_i$$

At the ex-date the coupon period changes to the next one. Therefore τ usually drops to 0 and no more accrued interest is added to the clean price for the past period because the coupon is detached from the asset. To offset this effect, the divisor is adjusted for the coupon amount assuming a reinvestment into the index.

Therefore the index adjustment and effect can be summarized as follows:

	Price Return Index	Gross Return Index
Index adjustment	None	$\Delta M_i = -\tau_{i,t} C_{i,1} * w_i$
Effect on divisor	→	↘

Change in Nominal Amount

A change in market value based on a change in the nominal amount of a bond is adjusted for both Price and Gross Return Indices. It is assumed that the increase or decrease has no effect on the market price.

$$\Delta M_i = (w_i' - w_i) * p_i$$

where w_i' is the nominal amount of bond i effective at the next index review

The change in the nominal amount is adjusted on the next ordinary index review.

	Price Return Index	Gross Return Index
Index adjustment capital increase	$\Delta M_i = (w_i' - w_i) * p_i$	$\Delta M_i = (w_i' - w_i) * p_i$
Effect on divisor of capital increase	↗	↗
Effect on divisor of capital decrease	↘	↘

In addition to the two standard corporate actions mentioned above, there are also extraordinary adjustments. These include, for example, the early redemption of a bond.

Early Redemption of a Bond

If a bond is called outside the predefined dates, for example due to a takeover or another exceptional event, it is kept in the index until the next ordinary index review. For the period after the call the redemption price is used, if possible. In addition, the yield and duration of the bond are set to zero.

3.2 Specific Fixed Income Indices

3.2.1 Yield Index

The yield is used to calculate the returns of an investment into a bond based on today's market price if it was held until Maturity or First Call. On an index level the weighted average yield over all bonds in the index is considered.

For the Yield Index calculation only the Yield to Worst (YTW) is considered which is the lower of Yield to Maturity (YTM) and Yield to First Call (YTC). The problem to be solved therefore can be expressed in the following equation where the current price including accrued interest is set into relation to the expected cash flows of the bond:

$$p_{i,t} + \tau_{i,t} C_{i,T=1} = \left(\sum_{T=1}^{R_{i,t}} \frac{\frac{C_{i,T}}{n}}{\left(1 + \frac{YTW_{i,R}}{n}\right)^{T-\tau_{i,t}}} \right) + \frac{FV_i}{\left(1 + \frac{YTW_{i,R}}{n}\right)^{R_{i,t}-\tau_{i,t}}}$$

Legend:

- R Residual Term
- C Coupon in %
- n Coupon payments per year
- τ Fraction of current coupon period in %
- FV Face value
- p Price of bond listed at SIX Swiss Exchange

Subject to

R is either TTM or TTC so that YTW is minimal.

To resolve this equation to YTW, SIX uses standard approximation techniques. For bonds with more than one coupon payment per year, the YTW is annualized with the following method before considered in the index calculation:

$$YTW_{a,i,R} = \left(1 + \frac{YTW_{i,R}}{n}\right)^n - 1$$

Based on the Yield to Worst and the Duration to Worst, which is introduced in the section below, the Average Yield is calculated as follows:

$$I_t = \sum_{i=1}^n YTW_{i,t} G_{i,t}$$

Where:

$$G_{i,t} = \frac{M_{i,t} D_{i,t}}{\sum_{i=1}^n M_{i,t} D_{i,t}}$$

and

$$M_{i,t} = w_{i,t} (p_{i,t} + \tau_{i,t} C_i)$$

Legend:

<i>I</i>	Yield Index value
<i>G</i>	Residual Term
<i>M</i>	Market value of the bond
<i>D</i>	Duration of the bond
<i>w</i>	Nominal amount
τ	Fraction of current coupon period in %

3.2.2 Duration Index (Macaulay Duration)

The Macaulay duration is the weighted average of the time until all cash flows are received measured in years. The Duration Index weights the durations of all bonds in the index by their market capitalization.

SIX calculates the Duration to Worst with the following expression:

$$D_{i,t} = \frac{\left(\sum_{T=1}^{R_{i,t}} \frac{(T - \tau_{i,T}) \frac{C_{i,T}}{n}}{\left(1 + \frac{YTW_{i,t}}{n}\right)^{T - \tau_{i,T}}} \right) + \frac{(R_{i,T} - \tau_{i,T}) FV_i}{\left(1 + \frac{YTW_{i,t}}{n}\right)^{R_{i,T} - \tau_{i,T}}}}{n(p_{i,t} + \tau_{i,t} C_{i,1})}$$

Legend:

<i>D</i>	Duration
<i>R</i>	Residual Term
<i>YTW</i>	Yield to Worst
<i>C</i>	Coupon in %
<i>n</i>	Coupon payments per year
<i>FV</i>	Face value

Based on the duration of the bonds the Average Duration on index level is calculated as follows:

$$I_t = \sum_{i=1}^N D_{i,t} G_{i,t}$$

Where:

$$G_{i,t} = \frac{w_{i,t} (p_{i,t} + \tau_{i,T} C_i)}{\sum_{i=1}^n w_{i,t} (p_{i,t} + \tau_{i,T} C_i)}$$

Legend:

<i>G</i>	Weight of the Bond Duration in the index
<i>w</i>	Nominal amount
<i>C</i>	Coupon in %
<i>n</i>	Coupon payments per year

3.2.3 Spread Index

The riskiness of a fixed income instrument can be expressed by the additional yield ("Risk Premium") that the instrument offers compared to a (nearly) risk-free reference asset. Within the fixed income space, this reference asset is normally a government bond or a swap rate.

Over time the riskiness of bonds varies and the additional "Risk Premium" extends or contracts. The risk is measured relative to a Yield Curve (typically a Government Curve or a Swap Curve), i.e. the yield difference between the individual bond and the respective Yield Curve at the maturity point of the bond reflects its individual "Risk Premium". For the spread indices in this section, the risk premium measured against the Swiss Government Curve is referred to as "Spread to Government" and measured against the CHF SARON based Swap Curve as "Spread to Swap".

3.2.3.1 Yield Curve Data

Yield Curve data for Swiss government bonds and CHF SARON based swaps is sourced from an external provider (see section 9), who creates such curves by fitting bond and swap price data from SIX Swiss Exchange and other trading venues to the suitable yield and maturity profiles.

To calculate the reference price point for any given Swiss government bond, an average is calculated from the various trading venues. All price data will be determined at 17:30 CET on each business day.

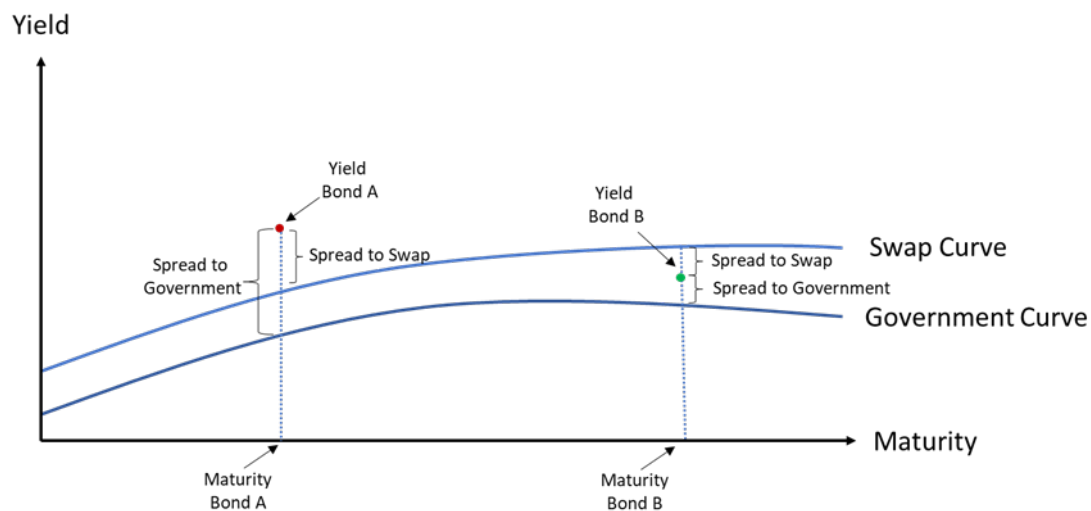
SIX uses data points of these Yield Curves up to a maturity of 30 years, with an accuracy of 0.25 years.

3.2.3.2 Calculation of Spreads

To calculate the spread measure (“Risk Premium”) of an individual bond, it is necessary to have the respective yields of the Government- and Swap-Curve at the maturity point of the individual bond. If the maturity of a bond lies between 0.25-year increments of the provided Yield Curve, SIX calculates the corresponding yield by linear interpolation of the two data points that are on the Yield Curve immediately before and after the maturity to be determined (Example: if a bond has a remaining maturity of 17.7 years, the data points on the respective curve for 17.5 years and for 17.75 years will be used to determine the yield of the curve for a maturity of 17.7years).

If the maturity of a bond is 30 years or longer, SIX will use the 30 year data point on the Yield Curve as the corresponding yield for the spread calculation.

The spread is then calculated by a simple subtraction and is shown in the graph below:



$$Spread\ to\ Government_{Bond\ B} = Yield_{Bond\ B} - Government\ Curve_{Maturity\ Point\ Bond\ B}$$

$$Spread\ to\ Swap_{Bond\ A} = Yield_{Bond\ A} - Swap\ Curve_{Maturity\ Point\ Bond\ A}$$

3.2.3.3 Calculation of Spread Index

Spread Indices based on the Swiss Bond Index Family aim to measure the change in this “Risk Premium” for a given Index Composition and are calculated as follows:

$$SSIndex_t = \sum_{i=1}^n \frac{M_{i,t}}{\sum_{i=1}^n M_{i,t}} \times SS_{i,t}$$

$$SGIndex_t = \sum_{i=1}^n \frac{M_{i,t}}{\sum_{i=1}^n M_{i,t}} \times SG_{i,t}$$

Where:

$$M_{i,t} = w_{i,t} (p_{i,t} + \tau_{i,t} C_i)$$

Legend:

<i>SSIndex</i>	Spread to Swap Index value (in bps)
<i>SGIndex</i>	Spread to Government Index value (in bps)
<i>SS</i>	Spread to Swap of an individual bond
<i>SG</i>	Spread to Government of an individual bond
<i>w</i>	Nominal amount
<i>p</i>	Price of bond listed at SIX Swiss Exchange
<i>τ</i>	Fraction of current coupon period in %
<i>C</i>	Coupon in %

4 Maintenance of Components

4.1 Review of Filter Attributes

One of the features of the SIX bond indices is that the broad SBI index can be sliced according to several criteria. To select an Index Composition derived from the SBI, six attributes are reviewed on a monthly basis.

The outcome of the component review is adjusted to be effective at the first trading day of every month. All necessary information for such a review is communicated to the market by the 20th day of every month, based on the availability to SIX until end of that business day. If that day falls on a weekend or a public holiday, the cut-off date is the last working day before 20th. Such communication concerns:

- Segment Classification: The classification criterion of the Segment Scheme follows the business activity and domicile of the bond issuer. Both of them are determined by using the ICB FI code of the bond. Further details can be found in Appendix B.
- Guarantee and Collateral Classification Code: The Guarantee and Collateral Code is a five digit code and based on the warranty of the bond. Further information on the scheme can be found in Appendix C.
- Nominal Amount: The Nominal Amount of a bond may be increased or decreased during its term.
- Residual Term: The Residual Term is used as a filter criterion to assign a bond to SBI maturity subindices.
- SBI Composite Rating: If there is a change in the underlying bond rating which impacts the SBI Composite Rating, it is adjusted accordingly.
- ESG eligibility: If there is a change in the assessment of an Issuer in terms of its ESG eligibility it is adjusted accordingly. Further details can be found in Appendix E.

4.2 Priority of Prices Used in Reference Values

As bond markets tend to be less liquid compared to the markets of other asset classes, the indices either consider the bid or mid-prices of the bonds. Only prices received via the electronic order book of SIX Swiss Exchange are used.

In the case of a new bond issue, the binding ask price is used for the inclusion of the bond to the index. If there is no ask price of the bond available, the bid price of the bond is used and if there is no bid price of the bond available, the par value of the bond is used. The bid and ask price are both clean prices which do not take into account the accrued interest of the bond.

Bid Price Indices

For the index calculation binding bid prices are used. If no bid price is available on the day of the calculation, the last available bid price is used.

Mid-Price Indices

The mid-price is the arithmetic mean of bid and ask price. Only bid and ask prices of the current trading day are used. If there is no mid-price available, the last mid-price of the trading day before is used which is a closing-inside-market price calculated after the close of trading on the previous trading day.

A new mid-price is only calculated if the spread between the bid and ask price is smaller than 600 basis points and if the ask price is bigger than the bid price.

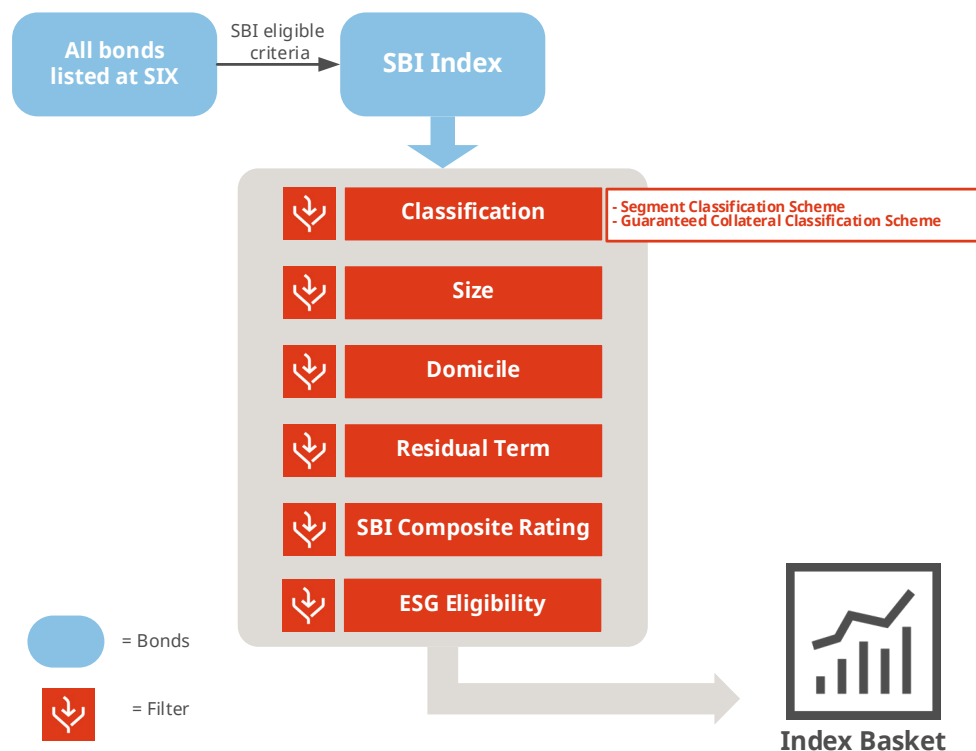
Spread Indices

If no data for the Government Curve or the Swap Curve is available on the day of the calculation, the previous day's Yield Curve data is used.

5 Maintenance of Index Composition

5.1 Index Dependencies

The SIX bond index family is derived from the SBI. The SBI is selected from all bonds listed at SIX Swiss Exchange with the eligibility criteria below. Once the SBI is selected, a set of filters on bond attributes is applied to select specific subsets of bonds to gain exposure to defined characteristics. The following graph gives an overview of filters which are available today:



5.2 Ordinary Index Review

Changes due to the component review described in Section 4.1 have automatic effects on the indices based on the filters described above. As component attribute changes take effect on the first trading day of the month, so do the Index changes for indices based on the filters. This also includes bonds which are newly added to SBI.

6 SBI Index

6.1 Overview

The bond indices offered by SIX reflect the development of the CHF bond market. By providing information on domestic interest rates, they supply valuable information on the Swiss capital market. SBI is the broadest of all SIX bond indices and all other SIX bond indices are currently derived from the SBI.

6.2 Index Composition

The universe from which the SBI index components are selected is represented by all bonds listed at SIX Swiss Exchange. Based on this universe, a bond needs to fulfill all of the following eligibility criteria to be selected as a component of the SBI:

- Listing: Only a bond which is listed at SIX Swiss Exchange can be a component of an index.
- Currency: The bond needs to be listed in CHF to be eligible for an index.
- Nominal amount: A bond must have a total nominal amount of at least CHF 100 million to be included into the SBI. For SDX Listed Bonds, the aggregate nominal amount is used, as indicated in section 2 “Definitions” at the beginning of the document.
- Coupon Structure: Generally, only Bonds with a fixed coupon structure can be part of the SBI index universe. An exception to this rule are callable bonds. These instruments are only part of the universe up to one year before the call date, even if the coupon is adjusted at the call date (Fixed-to-Fixed, Fixed-to-Float). Additionally, step-up bonds and zero coupon bonds are also eligible.
- Seniority: Bonds in the SBI index universe may generally be senior or subordinated. However, the primary purpose of such bonds should be to raise debt capital and not to source equity or risk-capital. Therefore, so called “Going Concern” capital instruments with equity-like characteristics such as deferring/suspending the coupon, equity conversion or principal reduction that apply prior to a restructuring measure initiated by the competent financial supervisory authority are not eligible. However Bail-in or Tier 2 bonds are part of the index universe. Further, bonds that are not sold in the primary market and are withheld by the issuer (e.g. “retained Covered Bonds”) are not part of the SBI index universe.
- Residual Term: Each bond in the SBI index universe must have a remaining Residual Term of at least one year, with one exception as outlined in section 7.5. Callable bonds are part of the index universe up to one year before their first call date. Perpetual bonds are not part of the SBI index universe.
- SBI Composite Rating: A bond must have the necessary underlying ratings to allow SIX to assign a Composite Rating. To be eligible for the SBI selection a minimum rating of at least BBB is required. If the underlying bond rating is worse than the minimum SBI Composite Rating of BBB no SBI Composite Rating is assigned to the bond.

Nominal Amount, Residual Term and SBI Composite Rating are reviewed on a monthly basis. Changes are made effective in course of the Maintenance of Index Composition described in section 5. Also, additions are included according to the schedule mentioned in that section.

7 Derived Indices from SBI Using Filters

7.1 Overview

SIX provides a range of six filters on attributes that can be applied independently from each other on the SBI to select sub-indices. Those sub-indices enable the measurement of markets with a focus on very specific characteristics.

The six filters available are: 'Classification', 'Nominal Amount', 'Domicile', 'Residual Term', 'SBI Composite Rating', and 'ESG eligibility'. Accordingly the SBI can be refined for any combination of filters. If a filter is not applied, all the filter options are considered for the component selection. An overview of available filter combinations can be found in Appendix F.

7.2 Classification

SIX uses two schemes with different classification criteria to classify the bonds of the SBI universe. Those schemes are applied exclusively in the sense that only one of the schemes is combined with the other filters at a time.

7.2.1 Segment Scheme

The classification criterion of the Segment Scheme follows the business activity and domicile of the bond issuer. Both of them are determined by using the ICB FI code of the bond. Further details can be found in Appendix B.

7.2.2 Guarantee and Collateral Scheme

The Guarantee and Collateral Code is a five digit code and based on the warranty of the bond. Further information on the scheme can be found in Appendix C.

7.3 Nominal Amount

In addition to the minimum Nominal Amount defined to be eligible for the SBI, more stringent figures may be applied. Currently, there are indices in place where a bond needs to have a size of CHF 400 Million to be included into the respective Index Composition. Should the nominal amount of a bond change and move above/below the respective threshold, it will be reassigned accordingly at the next ordinary index review.

7.4 Domicile

The bond indices are divided by domicile into the following two groups:

- Domestic: All Swiss and Liechtenstein domiciled bonds.
- Foreign: All bonds domiciled outside of Switzerland and Liechtenstein.

7.5 Residual Term

There are indices available for the following groups of Residual Terms:

		Residual Term (Years)						
		0	1	3	5	7	10	15
		→						
	≥ 1mth, <3yrs*							
	≥1yr, <3yrs							
	≥ 1yr, <5yrs							
	≥1yr, <10yrs							
	≥1yr, <15yrs							
	≥3yrs, <5yrs							
	≥3yrs, <7yrs							
	≥5yrs, <7yrs							
	≥5yrs, <10yrs							
	≥5yrs							
	≥7yrs, <10yrs							
	≥7yrs, <15yrs							
	≥7yrs							
	≥10yrs, <15yrs							
	≥10yrs							
	≥15yrs							

If an index does not have a defined Residual Term, all terms are considered.

* This residual term is only available for the SBI® Domestic Government Mid Price 1M-3Y index, which includes Swiss government bonds with a maturity of between 1 month and 3 years. For admissions to this index, the general SBI Eligibility Criteria apply, however, bonds that have entered this index will be deleted only when their residual term is below 1 month.

7.6 SBI Composite Rating

The SBI can be filtered according to the SBI Composite Rating of its components. Those ratings are combined into groups, e.g. AAA-BBB or AAA-A. For a complete list, please consult the Data Vendor Code Sheet (see section 11). Details on the assignment of ratings can be found in Appendix A.

7.7 ESG Eligibility

The SBI can be filtered according to the ESG eligibility of the Issuers of the Index Components. Issuers are researched and assessed by Inrate using several attributes. In addition, the SVVK-ASIR's recommendations for exclusion are taken into consideration. More details about these filters can be found in Appendix E.

For a complete list of SBI ESG indices, please consult the Data Vendor Code Sheet (see section 11).

8 Correction Policy

An index-related correction is made if necessary data is or has not been available or it has been wrong.

8.1 Unavailable Data

If data to determine the price, weight or spread of an index component is not available to SIX due to trade suspensions or market distortions, the latest available data is used. These changes may be related to review schedules, ordinary reviews and component and weighting changes outside of ordinary index reviews and are publicly announced with a notification period of at least 2 trading days.

Information which is not known to SIX at the cut-off date may lead to an update of the bond index forecast. Such information is considered under a notice period of at least 3 trading days before the effective date of the index review.

8.2 Wrong Data

Data errors caused by calculation errors or by incorrect inbound data.

Calculation errors which are detected within a trading day are immediately corrected. Intraday tick data is not corrected retrospectively. Calculation errors that are older than a trading day and incorrect inbound data are only corrected if technically possible and economically viable. If the correction leads to a significant difference in the index levels, those can be corrected retrospectively.

9 Primary Data Sources

Structured information is used to calculate the SIX bond indices. The following table provides an overview of the primary data sources used.

Information	Source
Price information and Quotes	SIX Swiss Exchange
Corporate Actions	SIX Swiss Exchange
ESG Critical Sector Revenues, UNGC and Impact Ratings	Inrate
Collateral Classification	SIX Index AG
Sector Classification (ICB)	FTSE Russell
Yield Curve data	Vitec Scanrate A/S

10 Governance

The indices are managed by the index team of SIX. The team ensures that the index rules are applied correctly, and the indices fulfil the required quality standards. The index team works against structured processes to ensure compliance with a regulatory framework. The main bodies and concepts of that framework are:

Index Commission

SIX is supported by the Bond Index Commission. The Index Commission provides inputs on index-related matters, notably in connection with changes to the index rules and adjustments, additions and exclusions outside of the established review and acceptance period.

The Commission convenes at least twice a year and provides valuable input on how existing products can be improved and new ones created.

Review of Index Concepts

The validity of the index concepts and rules is reviewed on a regular basis and at least annually by SIX. For material changes a broad market consultation is conducted. A change of an index methodology requires approvals according to the governance processes.

The effective date for index methodology changes is aligned, where feasible, with the periodic "index review" when the Index Composition is changed, and a rebalancing is triggered to avoid extra ordinary impact for clients and other stakeholders. Material methodology changes should generally be publicly announced three months prior to implementation. SIX may decide to shorten the notice period:

- In exceptional or urgent cases or in situations where there is no client or other stakeholder impact and where immediate communication is not possible. A case that requires urgent action is for example a situation in which the investor's ability to replicate the index performance with his or her portfolio is no longer ensured. In such cases, changes or amendments to the methodology documents must be made on the same day the new methodology or change is implemented.
- For non-material methodology changes i.e. rule clarifications.
- To align with the periodic index review dates and the rebalancing of the index.

Market Consultations

Where possible, SIX consults representatives of the affected clients and other stakeholders on all material changes to index rules and on the discontinuation of indices. In this context, a material change to the index rules means a change that "significantly alters the procedures used to determine an index" and thus materially affects the index value compared to an unchanged scenario.

At the beginning of a market consultation SIX will provide the following:

- Information about the key elements of the methodology that is considered to be affected by the proposed material change.
- An assessment whether the representativeness of the benchmark or family of benchmarks, and its appropriateness as a reference for financial instruments and contracts, would be put at risk if the change were not made.
- The time frame of the consultation The timing and duration of the consultation period depends on the materiality of the proposed changes to the index rules. By default, a market consultation for material changes lasts one month.

A summary of the market consultation comments and SIX' response to those comments will be made available to clients and stakeholders after each consultation period, unless the originator of the comments has requested confidentiality.

Termination of Indices

A decision to discontinue an index will be publicly announced with appropriate lead time. The time frame is dependent on the impact of the cessation. The default notice period is one month.

- SIX is not responsible for determining or offering an alternative index when an index is decommissioned. In case of existing financial products linked to the index of which SIX is aware a market consultation is conducted in advance and a transition period is introduced before the definitive termination. Otherwise no market consultation will be carried out.

Determination of an Index

All indices in this rulebook use readily available prices ("Input Data") received from SIX Swiss Exchange during the official trading hours.

The index methodologies do not use extrapolation to determine the index value.

The minimum data needed for each instrument to be potentially considered for an index inclusion are the instrument reference data and a listing at SIX Swiss Exchange, which means a price for the instrument is regularly determined. No threshold is defined as to the frequency or the number of price updates per instrument, as the goal

of the index is to measure the market of CHF denominated bonds. This includes using last available prices for less liquid bonds, as mentioned below.

Where an index is calculated intraday, prices are used as defined in section 4.2 in this rulebook, for example last available bid price.

The constituents of indices in the rulebook are rebalanced monthly, as outlined in section 5.2.

The spread indices, as outlined in section 3.2.3, use Yield Curve data to determine the spread for each index constituent. For spread indices, the minimum data section above therefore has to be extended to a regular determination of a Swiss Government Curve and a CHF SARON based Swap Curve. As described in section 3.2.3.1, Yield Curve data is usually used once per calculation day, however, no threshold is defined as to the minimum frequency. In case Yield Curve data is missing on a particular day, the previous day's Yield Curve data will be used.

Potential Limitations of an Index

If data which is necessary to determine the price or weight of an index component is not available to SIX due to trade suspensions or market distortions the latest available data is used. Such cases may lead to a deviation from the general principles of the indices defined in the respective methodology rulebooks. These changes may be related to review schedules, ordinary reviews as well as component and weighting changes outside of ordinary index reviews and are publicly announced with a notification period of at least 2 trading days.

In case of structural changes of the market or economic reality or in cases where the interest in a market has diminished or is non-functioning, the reliability of a methodology can no longer be ensured. SIX reviews the methodology rulebooks at least annually to anticipate any such changes and mitigate its consequences by adjusting the methodology accordingly.

Controls and Rules for the Exercise of Expert Judgement

The rules for each of the indices have been designed to eliminate discretion or expert judgement for the index calculation to the greatest extent possible. However, due to unforeseen market events or the unavailability of data the following situations may materialize:

- unexpected events, such as complex corporate actions
- technical reasons, for example the inability of a stock exchange to provide a close price due to a computer outage or the inability of a data provider to deliver certain data points on time
- where a rule allows for several interpretations ("unclear rule")
- the absence of a rule in the methodology which potentially leads to a benchmark value which does not properly reflect the nature of the index ("insufficient rule")
- determination of materiality of changes to the index methodology

In such unexpected cases, a pre-defined incident and escalation process has been established. SIX will evaluate and document the use of discretion as part of the incident management process. To the extent possible, this rulebook will be updated to capture such unexpected cases with a new transparent rule.

In addition, any feedback from market participants about the use of discretion will usually be discussed in the upcoming Index Commission meeting.

Further documentation on regulation and processes can be found on the SIX website¹. Based on the general principles outlined in section 1.3, SIX reserves the right to adjust Index Compositions, component weightings or notification periods.

¹ <https://www.six-group.com/en/products-services/the-swiss-stock-exchange/market-data/indices.html>

11 External Communication

SIX uses the following tools to inform the market about index changes. Index changes are changes in Index Compositions and component weightings as well as ordinary and extraordinary index adjustments.

Reports

The index team creates and maintains reports containing Index Compositions, component weightings, corporate action forecasts and other index-relevant information. SIX publishes the reports on its website. The majority of the reports is only made available to license holders, however. Since the information of some reports is index-specific, the number of reports which are relevant for an index varies from index to index. Depending on the recency of their information, the reports are updated with different frequencies ranging from daily to annual.

Data Vendor Code Sheet

Information on the actual ticker symbols, index standardizations, launch dates and calculation parameters of the indices can be found in the Data Vendor Code Sheet which is published under [All indices calculated by SIX](#) on the website of SIX.

Newsletter Email Service

SIX provides the Index Service Bond to inform in depth on bond indices including historical index values, corporate actions, and information regarding the Index Composition. Interested parties may subscribe to the newsletter email service on the SIX website. SIX distributes all notifications regarding indices over this channel. This may include but is not limited to

- Changes in corporate actions
- Updates to the periodic index reviews
- Problems and error in the index calculation
- The launch or discontinuation of indices
- Market consultations
- Issuer surveys

Index Messages

The messages from the newsletter email service with regards to index adjustments are uploaded on the SIX website. Those index messages are publicly available and do neither need a subscription nor a licensing agreement.

Media Release

If an index message is of broad public interest, SIX can decide to publish a media release to inform the public about the index adjustment. Furthermore, media releases can be made for marketing purposes which do not refer to index adjustments.

12 Trademark Protection, Use of Licensing

The Trademarks are the intellectual property (including registered trademarks) of SIX Index AG, Zurich, Switzerland. SIX Index AG does not give any warranty, and exclude any liability (whether in negligence or otherwise) with respect to their usage. The use of SIX Index AG Indices and their registered trademarks (®) as well as the access to restrictive index data are governed by a licensing agreement. Information about licensing and the format of the disclaimer can be found on the SIX website².

13 Contact

Any requests with respect to the indices may be directed to one of the following addresses:

Index Business Support

Index Sales, Licensing and Data

T +41 58 399 26 00

indexdata@six-group.com

Technical Support

Index Operations

T +41 58 399 22 29

indexsupport@six-group.com

² www.six-group.com/indices > Market Data > Indices > Licensing

Appendix A SBI Composite Rating

A.1 Sources for the SBI Composite Rating

To assess its creditworthiness, each bond is assigned a SBI Composite Rating. The rating is published by SIX as part of the index data. Bonds can be assigned a SBI Composite Rating of either AAA, AA, A or BBB.

The following table describes the mapping of external rating scales to the SBI Composite Rating scale:

Spectrum of Considered Ratings		Corresponding SBI Composite Rating
High	Low	
Aaa / AAA	Aaa / AAA	AAA
Aa1 / AA+	Aa3 / AA-	AA
A1 / A+	A3 / A-	A
Baa1 / BBB+	Baa3 / BBB-	BBB

A.2 Determination of the SBI Composite Rating

To calculate the SBI Composite Rating, a two-step approach is in place. As a first priority to determine the SBI Composite Rating, the issue and issuer ratings of Moody's, Fitch and Standard & Poor's (S&P) are used. If a bond is not rated by any of the three rating agencies, as a second priority ratings of the Swiss rating agency Fedafin³ and the Swiss banks UBS and Zürcher Kantonalbank are used. In the second priority case, the SBI Composite Rating is only determined if a bond is rated by at least two of the named Swiss institutions. If a Swiss bank is restricted from rating a specific issuer, SIX will continue using the rating which was valid prior to the restriction. The previously valid rating will be used for the shorter of six months and the time when the restriction is lifted. If, six months after SIX was first made aware of the restriction, the Swiss bank is still restricted from rating that issuer, the SBI Composite Rating will be calculated without the previously valid rating from the Swiss bank.

To determine the SBI Composite Rating, the following approach is applied: With two available ratings, the worst rating is used as SBI Composite Rating, and with three available ratings, the median is used.

From the available sources described above, the ratings can be used in the determination process as described according to the following procedures:

- If a bond is not rated on its own, the rating of **its issuer or guarantor** (incl. joint guarantees) is used. If there is a rating for both, the **guarantor** and the **issuer**, the rating of the **guarantor** is used.
- If a bond is **secured or subordinated**, only bond ratings are used, leaving a potential issuer or guarantor rating aside.
- If a bond is classified as government-related⁴, the issuer rating or, in the case of guaranteed bonds, the guarantor rating is used in addition to the bond rating as follows: For each rating agency, the lower of the bond rating and the issuer rating (or in the case of guaranteed bonds the guarantor rating) is determined. The resulting ratings are used to calculate the SBI composite rating in accordance with the section above.

³ All publicly available fedafin corporate ratings that are included in the SBI Composite Rating are made available free of charge in fedafin's e-Rating under the item "SBI Corporate Ratings". Non-publicly available fedafin corporate ratings have no influence on the calculation of the SBI Composite Rating.

⁴ According to Appendix C Guarantee and Collateral Scheme

The following table provides examples of the selection process of the SBI Composite Rating:

	Rating Providers*	1 Rating	2 Ratings	3 Ratings	4 Ratings
First Priority	Moody's	Baa1	A3	Aa3	Aa3
	S&P		BBB+	A+	A+
	Fitch			BBB	BB+
Second Priority	Fedafin				A+
	UBS		A+		A-
	ZKB				BBB
	SBI composite rating	BBB	-	BBB	A

* Notches of rating providers are not considered for the determination of the SBI composite rating

Appendix B Segment Classification Scheme

The Segment Scheme classifies the bonds into the categories Government, Non-Government, Swiss Pfandbrief and Corporate. Together with information from ICB Fixed Income and the domicile of a bond the specific indices are constructed. There are bond indices for the following classifications:

Index name	Classification	Domicile	ICB FI Classification
SBI	All	All	All
SBI Domestic Swiss Government	Government	Domestic (CH/LI)	Sector 15100 Nation/Treasury
SBI Domestic Non-Government	Non-Government	Domestic (CH/LI)	All exclusive Sector 15100 Nation/Treasury
SBI Domestic Swiss Pfandbrief	Swiss Pfandbrief	Domestic (CH/LI)	Subsector 8779 Mortgage Finance
SBI Foreign Government	Government	Foreign (All excl. CH/LI)	Sector 15000 Government & Sector 16000 Agency/Semi-Government
SBI Foreign Corporate	Corporate	Foreign (All excl. CH/LI)	All Sectors <10000
SBI Foreign Supranational	Supranational	Foreign (All excl. CH/LI)	Sector 17000 Intergovernmental Organization

The allocation of a state-guaranteed bond to the appropriate sector is made according to the borrower's field of activity, regardless of the guarantee.

Appendix C Guarantee and Collateral Scheme

The Guarantee and Collateral Scheme is based on the warranty of the bond. A three level, five digit code is assigned to characterize the bonds. The following table provides an overview of the available combinations of Guarantee and Collateral Codes:

Level 1	Level 2	Level 3
- Government related (5xxxx)	- Treasury (51xxx)	- Senior (xx100)
	- Sovereign (53xxx)	- Subordinated (xx200)
	- Supranational (55xxx)	
	- Agency (57xxx)	
	- Agency ex guaranteed	
	- Agency guaranteed	
	- Local Authority (Regional & Cities) (59xxx)	
	- Local Authority (Regional & Cities) ex guaranteed	
	- Local Authority (Regional & Cities) guaranteed	
	- Securitized / Collateralized (6xxxx)	- Covered bonds backed by Public Sector Loans (61xxx)
- Covered bonds backed by Private Mortgages (62xxx)		
- Covered bonds backed by Mixed Assets (63xxx)		
- Asset backed (64xxx)		
- GICs / Funding Agreement (65xxx)		
- Unsecured/Corporate (7xxxx)	- All (71xxx)	
	- Industrials	
	- Utilities	
	- Financials	
	- Banks	
	- Insurance	
	- Financial Services	

C.1 Determination of the Level 1 Code

On the first level, a differentiation between government-related bonds, secured/collateralized bonds and unsecured bonds is made and each bond is assigned the first digit of the warranty code.

Government-Related (5xxxx)

Government-related bonds are issued by a governmental, semi-governmental or supranational borrower or are given an explicit state guarantee by a guarantor.

The issuer and guarantor are considered government-related if their ICB FI code is higher than 10000. If the guarantor does not have an ICB FI code, the bond is assigned according to the ICB FI code of the issuer.

Secured/Collateralized (6xxxx)

The interest and nominal amount of secured/collateralized bonds are covered by an asset collateralization pool. A bond is deemed to be guaranteed or the entity is deemed to be a guarantor if the payment of both the interest and principal are guaranteed in full and for the whole period of the bond maturity.

Unsecured (7xxxx)

A bond is categorized as unsecured if it is neither issued by a government-related issuer, nor is it guaranteed by a guarantor or an asset collateralization pool. Therefore, the ICB FI code of the bond issuer is smaller or equal 10000.

C.2 Determination of the Level 2 Code

On level 2 the selection of level 1 is further refined and the bond is assigned the second digit of the warranty code.

Government-Related (5xxxx)

Bonds which are assigned to the classification 'government-related' on level 1 are categorized based on their guarantor or issuer according to the table below:

Guarantee and Collateral Scheme Allocation	CB FI Code	Description of Guarantor or Issuer
Treasury (51xxx)	15100	Country's own issues in local currency.
Sovereign (53xxx)	15100	Country's own issues not in local currency.
Supranational (55xxx)	17000	Multilateral or supranational government organizations or organizations sanctioned by the UN.
Agency (57xxx) ex guaranteed	16000	An officially listed government agency (not a state sponsored entity). If there is no public enterprise that performs the same function or if the entity supports the economic or social well-being of the country or region as a whole, the entity is a genuine agency, classification as an agency is considered definitive.
Agency (57xxx) guaranteed	< 10000	Bonds with explicit state guarantee (state sovereignty).
Local Authority (Regional & Cities) (59xxx) ex guaranteed	15300	Canton, region, province, federal state
	15500	County/Parish
	15700	City, local government, municipality
Local Authority (Regional & Cities) (59xxx) guaranteed	< 10000	Bonds with explicit state guarantee (local authority sovereignty).

Secured/Collateralized (6xxxx)

On level 2 within the classification 'Secured/Collateralized' a distinction between Covered Bonds, Asset backed Securities and GICs/Funding Agreements is to be made based on which collateral the bond is covered with:

Covered Bonds (61xxx-63xxx)	
Covered bonds backed by Public Sector Loans (61xxx)	Covered by public sector collateral.
Covered Bonds backed by Private Sector Mortgages (62xxx)	Covered by mortgages for real estate (commercial and/or residential). The distinction between 'Public Sector Loans' and 'Private Sector Mortgages' relates to the cover pool of the relevant bond certificate type and not to the issuer groups 'private mortgage banks' or 'public law banks'.
Covered Bonds backed by Mixed Assets (63xxx)	Covered by a combination of loans to the public sector, mortgages and ship or aircraft loans.

Asset Backed (64xxx)

Bonds relating to payment claims against a special purpose vehicle. The special purpose vehicle uses the funds exclusively to acquire claims, mostly of several creditors, and evidences them in the form of a security. The payment claims are covered by the portfolio of claims transferred to a special purpose vehicle. These claims include automobile loans and credit card and leasing claims.

GICs/Funding Agreement (65xxx)

Secured bond issues of US life insurers. In the CHF bond market they are called funding agreements or guaranteed investment contracts. These bonds have a better credit rating compared to ordinary bonds issued by the same company. The reason for this is that in case of bankruptcy, secured bonds have a similar rank as life insurance policies which is normally higher than the ranking of an ordinary bond. The rating assessment also depends on the funding agreement of the federal state where the respective life insurer is based.

Unsecured/Corporate (7xxxx)

Based on the business activity of the issuer which is derived from the sector code, unsecured bonds can be subdivided into the categories 'Industrials', 'Utilities' and 'Financials'. The bonds of the sub-group 'Financials' can be further split up in 'Banks', 'Insurance' and 'Financial Services'. Independent of their sub-allocation, all unsecured/corporate bonds are given the same warranty code 71xxx since they are not covered by an explicit state guarantee or by an asset collateralization pool.

C.3 Determination of the Level 3 Code

Being independent from the assignment of level 1 and 2, level 3 indicates the order in which creditors are served in case of bankruptcy of the issuer. On this level, each bond is given the last three digits of the warranty code. On level 3 a bond can either be categorized as a senior bond (xx100) or a subordinated bond (xx200). Senior bonds are considered before subordinated bonds if the issuer goes bankrupt and therefore their holder is more likely to get his or her investment or a part of it back.

Appendix D ICB Fixed Income Table

The following table gives an overview of the available sector codes on the ICB Fixed Income industry classification standard. The standard is used in the determination of the Segmentation Classification Scheme explained in Appendix B.

Industry		Supersector	
0500	Oil & Gas	0500	Oil & Gas
1000	Basic Materials	1300	Chemicals
		1700	Basic Resources
2000	Industrials	2300	Construction & Materials
		2700	Industrial Goods & Services
3000	Consumer Goods	3300	Automobiles & Parts
		3500	Food & Beverages
		3700	Personal & Household Goods
4000	Health Care	4500	Health Care
5000	Consumer Services	5300	Retails
		5500	Media
		5700	Travel & Leisure
6000	Telecommunications	6500	Telecommunications
7000	Utilities	7500	Utilities
8000	Financials	8300	Banks
		8500	Insurance
		8700	Financial Services
9000	Technology	9500	Technology
10000	Special Purpose Vehicles	10100	Special Purpose Vehicles
15000	Government	15100	Nation/Treasury
		15300	Canton/Region/Provinces/State
		15500	County/Parish
		15700	City/Municipality/Town
16000	Agency / Semi-Government	16100	Agency/Semi-Government
17000	Intergovernmental Organization	17100	UN Organization
		17200	Supranational Organization

This table shows the various sectors in the ICB FI classification at 'Industry' and 'Supersector' level. The table does not include the 'Sector' and 'Subsector' levels. Therefore, the table is of broader granularity.

Appendix E ESG Eligibility and Attributes

The SBI can be filtered according to the ESG eligibility of the Issuers of the Index Components. Issuers are researched and assessed by Inrate⁵ using several attributes. In addition, the SVVK-ASIR's⁶ recommendations for exclusion are taken into consideration. The following table gives an overview of the attributes currently available for the SBI Index:

Attribute	Description
ESG Rating	<p>The ESG Rating for non-government Issuers are sourced from Inrate's ESG Impact Ratings. The rating is a measure of the environmental and social impacts a company has through its products and practices. It is also a measure of its willingness and ability to effectively address the related issues it faces.</p> <p>The ESG Rating for government or government-related Issuers are sourced from Inrate's ESG Country Ratings. The rating is based on an in-depth analysis of how a country is required to perform in order to contribute to a sustainable development nationally as well as internationally.</p> <p>The ESG Rating comprises 12 levels and starts at A+ (best rating) to D- (worst rating).</p>
ESG controversy score	<p>Inrate screens online media and non-government organization sources twice a week for potential controversies of SBI Issuers. Controversial events are scored based on an analyst's assessment of the impact and the scale of such event, the durability of the consequences, the level of involvement of a company and corrective actions taken by the company.</p> <p>The controversy score is categorized by Inrate into five levels labelled "minimal", "low", "medium", "high", and "very high".</p>
Critical Sector Revenue	<p>Inrate's critical product screening identifies the percentage of revenue a company derives from products or services of an exclusion theme, such as Adult Entertainment, Alcohol, Defense, Gambling, Genetic Engineering, Nuclear Energy, Oil Sands, Thermal Coal, and Tobacco.</p>
SVVK-ASIR's recommendations for exclusion	<p>SVVK-ASIR produces a recommendation list for excluding companies. This list is currently provided publicly on their website and lists companies with an involvement in anti-personnel mines, cluster munitions, or nuclear weapons. It also includes a category "conduct-based", which takes into consideration violations of applicable laws/standards, human rights, labor rights, etc.</p> <p>SVVK-ASIR will try to engage with a company before a decision is made for a possible exclusion. Only in the case of unsuccessful engagement, a company will be considered to be added to the exclusion list.</p>
UN Global Compact (UNGC)	<p>Inrate assesses whether an issuer incorporates the ten principles of the UN Global Compact by operating in ways that meet minimum responsibilities in the areas of human rights, labour, environment and anti-corruption. Issuers are supposed to not only uphold basic responsibilities to people and planet, but also setting the stage for long-term success.</p>

The above attributes can be combined or used individually to determine the ESG eligibility of an Issuer. There are a variety of ways to determine whether an Issuer is eligible for an ESG index or not.

⁵ More detailed information can be found on <https://www.inrate.com/>

⁶ More detailed information can be found on <https://www.svkk-asir.ch/>

The following table provides an overview of the currently available ESG eligibility criteria alongside the full requirements for Issuers to be included in such an ESG index:

	SBI ESG Indices	SBI ESG Screened AAA-BBB Index
ESG Rating	>= C+	>= C+
Controversy Score		Minimal, low, or medium
Critical Sector Revenue		
Adult Entertainment	< 5%	< 5%
Alcohol	< 5%	< 5%
Defense	< 5%	< 5%
Gambling	< 5%	< 5%
Genetic Engineering	= 0%	= 0%
Nuclear Energy ⁷	= 0% or < 15%	= 0% or < 15%
Oil Sands	= 0 % ⁸	= 0% ⁹
Thermal Coal ¹⁰	< 5%	< 5%
Tobacco ¹¹	=0% or < 5%	=0% or < 5%
SVVK-ASIR	Does not appear on list 'recommendation for exclusion'	Does not appear on list 'recommendation for exclusion'
UNGC	Compliant according to research provider	Compliant according to research provider

⁷ Generation of nuclear electric power = 0%
Minority interest generation of nuclear power = 0%
Minority interest products & services for the nuclear industry < 15%
Products & services for the nuclear industry < 15%

⁸ Monthly issuer updates since February 2021

⁹ Yearly issuer updates since July 2019, monthly issuer updates since February 2021

¹⁰ Monthly issuer updates since February 2021

¹¹ Goods related to tobacco < 5%
Retail of tobacco products < 5%
Tobacco distribution < 5%
Minority interest tobacco products = 0%
Tobacco products = 0%

Appendix F Overview of the Index Family¹²

F.1 Indices Calculated Under the Segment Classification Scheme

		Domicile								
		All	SBI Domestic				SBI Foreign			
		Overall	Overall	Swiss Government	Non-Government	Swiss Pfandbrief	Overall	Government	Corporate	Supra-national
SBI Composite Rating, Residual Terms	AAA-BBB	•	•	•	•	•	•	•	•	•
	1mth-3yrs			•						
	1-3;3-5;5-7;5-10;>10;1-5;5-10; 1-10;10-15;1-15;>15	•	•	•	•	•	•			
	3-7;7	•		•						
	AAA	•	•				•			
	1-3;3-5;5-7;7-10;>10;>15	•								
	AA	•	•				•			
	1-3;3-5;5-7;7-10;>10;>15	•								
	A	•	•				•			
	1-3;3-5;5-7;7-10;>10	•								
	BBB	•	•				•			
	AAA-A	•	•		•		•	•	•	•
	1-3;3-5;5-7;5-10;10;1-5;5-10; 1-10;10-15;1-15;>15	•	•		•		•			
	3-7;7	•								
	AAA-AA	•	•		•		•	•	•	•
	1-3;3-5;5-7;7-10;10;1-5;5-10; 10-15;1-10;1-15;>15	•	•		•		•			
	AA-BBB	•	•				•			
	AA-A	•	•				•			
	A-BBB	•	•				•			
	1-5	•								

¹² In the event of inconsistencies between the tables in F.1, F.2 and F.3 and the Data Vendor Code Sheet published on the SIX website under [All indices calculated by SIX](#), the information in the Data Vendor Code Sheet shall prevail.

F.2 Indices Calculated Under the Guarantee and Collateral Scheme

Level 1	Level 2	Domicile		
		All	Domestic	Foreign
Government related (5xxxx)	Treasury (51xxx)	●		
	Sovereign (53xxx)	●		
	Supranational (55xxx)	●		
	Agency (57xxx)	●		
	Local Authority (59xxx)	●	●	●
Securitized/ Collateralized (6xxxx)	Covered Bonds backed by Public Sector Loans (61xxx)	●		
	Covered Bonds backed by Private Sector Mortgages (62xxx)	●		
	Covered Bonds backed by Mixed Assets (63xxx)	●		
	Asset Backed Securities (64xxx)	●		
	GICs/Funding Agreement (65xxx)	●		
Unsecured/ Corporate (71xxx)	Industrials	●	●	●
	Utilities	●	●	●
	Financials	●	●	●
	Banks	●	●	●
	Insurance	●		
	Financial Services	●		
	Senior (711xx)	●		
	Subordinated (712xx)	●		

F.3 Indices Calculated with ESG Eligibility Criteria

ESG indices based on the «segment» classification scheme:

		Domizil								
		SBI ESG	SBI ESG Domestic				SBI ESG Foreign			
		Overall	Overall	Swiss Government	Non-Government	Swiss Pfandbrief	Overall	Government	Corporate	Supra-national
SBI Composite Rating, Residual Terms	AAA-BBB	•	•	•	•		•			
	1-5; 1-10	•	•				•			
	5-10			•			•			
	1-15; >10	•								
	1-3; 3-7; 7+, 7-15; >15			•						
	AAA	•								
	AA	•								
	A									
	BBB									
	AAA-A	•	•				•			
	AAA-AA	•	•		•		•	•	•	•
	1-3; 3-5; 5-7; 7-10; 10-15; >10; >15	•								
	AA-BBB									
	AA-A									
	A-BBB	•	•				•			
	SBI ESG Screened AAA-BBB	•								

Further ESG indices for corporate bonds are available, which are based on the guarantee and collateral scheme:

				Domicile		
Level 1	Level 2	Level 3		All	Domestic	Foreign
Unsecured / Corporate (7xxx)	All	All	AAA-BBB	•	•	•
	(71xxx)	(71100 & 71200)	1-5; 1-10	•		
			AAA-A	•		
			AAA-AA	•		
			A-BBB	•		

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