



SIX Currency Hedged Indices

Rulebook Governing SIX Currency Hedged Indices

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1 Introduction

Different investor groups have different risk and return objectives for their investments. These objectives are often expressed in a benchmark, which serves as a comparison portfolio to judge an asset manager's performance.

The Currency Hedged Indices address the needs of investors who wish to replicate the returns of foreign currency denominated investment instruments in their own reference currency, i.e. without incurring the currency risk. For instance, if the investor's reference currency is Euro, a portfolio denominated in CHF can be fully hedged in EUR to deliver the underlying returns in Euro and unaffected by the Euro-Swiss Franc exchange rate.

This means that FX fluctuations do generally not affect the benchmark returns. The underlying assets' risk and return remain therefore the main driver of performance for the investor with the reference currency in the hedged currency. An unhedged benchmark, by contrast, does not hedge currency exposures and the benchmark returns are driven by both the currency movement and the underlying assets' performance.

The hedging of the underlying Index is performed via one month currency forwards. This means that an amount equivalent to the value of underlying assets in their foreign currency is sold at the one-month forward rate against the hedged currency (typically, the investor's home currency).

2 Revision History

Version/Date	Description
1.00/19.09.2023	Initial version

3 General Principles

This rulebook is based on the following basic principles. SIX follows the basic principles when situations arise that are not foreseen in the rulebook or in case of doubt.

- **Representative:**
The development of the market is represented by the index.
- **Tradable:**
The index components are the result of active trading in the Swiss Repo Market.
- **Replicable:**
The development of the index can be replicated.
- **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 business days) – no retrospective rule changes.
- **Transparent:**
Decisions are based on public information.

4 Calculation Method

The returns of the unhedged index are hedged into the desired currency as described by the following formula. The calculation method of the underlying index is described in the respective Rulebook.

Monthly hedging of an Index

Index formula:

$$HIX_t = HIX_0 \times \left[\frac{UNHIX_t}{UNHIX_0} + \sum_{c=1}^c Weight_{c,0} \times HR \times \left(\frac{FX_{c,0}}{FW_{c,0}} - \frac{FX_{c,0}}{FIR_{c,t}} \right) \right]$$

WO:

$$FIR_{c,t} = FX_{c,t} + \left[\frac{(T-t)}{T} \times (FW_{c,t} - FX_{c,t}) \right]$$

Definitions:

HIX_t	Hedged Index value on day t
UNHIX_t	Unhedged underlying index on day t expressed in hedged currency (i.e. converted and not hedged)
t = 0	Reset date, last calculation day of preceding month
t	Day of index calculation, i.e. calendar day on which an index calculation takes place. 2nd of May => t = 2, 3rd of May t = 3, etc
T	Number of calendar days in the calculation month (until and including last business day). E.g. April has 30 calendar days, but if 29 th and 30 th fall on a Saturday/Sunday, the month has only 28 days.
c	Number of foreign currencies in underlying index
Weight_{c,0}	Weight of the currency c in the unhedged underlying index on the Reset date. If there is only one currency in the index, its weight is 100%.
HR	The hedge ratio is the proportion of the currency exposure that is hedged. It is determined at the beginning when setting up the Index. In most cases this is 100%.
FX_{c,t}	Spot exchange rate for currency c on day t
FW_{c,t}	1-month currency forward exchange rate for currency c on day t
FIR_{c,t}	Interpolated forward currency rate for currency c on day t. The interpolated forward rate corrects the 1month forward premium ($FW_t - FX_t$) to reflect the approaching expiry of the hedge. The interpolated 1 month forward rate converges therefore to the spot rate as t=T comes closer

5 Maintenance of Components and Composition

Currency Hedged indices are derived from the underlying index, i.e. the index value of the underlying index is the only input. For information on the maintenance of components of the underlying index, please refer to the Rulebook governing the underlying index.

6 SIX Currency Hedged Indices

The following Currency Hedged Indices are available:

Underlying Index Name	Underlying ISIN	Underlying CCY	Hedged Index Name	ISIN Hedged Index	Hedged into	Hedging Frequency
SBI® ESG Foreign AAA-BBB 1-5 Total Return	CH0543852252	CHF	SBI® ESG Foreign AAA-BBB 1-5 TR Hedged in EUR	CH1266279756	EUR	monthly
SBI® ESG Foreign AAA-BBB 5-10 Total Return	CH1116877684	CHF	SBI® ESG Foreign AAA-BBB 5-10 TR Hedged in EUR	CH1266279764	EUR	monthly

7 Primary Data Sources

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

Information	Source
Price Information and Quotes	SIX Swiss Exchange
FX-Spot and FX-Forward data	Refinitiv/Worldmarket

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 SIX does not have data necessary to determine the price or weighting of an index component due trading suspensions or market distortions the latest available data will be used. Such cases may lead to a deviation from the basic principles of the indices defined in the respective rulebooks. These changes may relate to review schedules, ordinary reviews as well as adjustments in the index composition or weighting outside the ordinary reviews and will be publicly announced considering an announcement period of at least two trading days.

8.2 Incorrect Data

Incorrect required data may result from calculation errors or incorrect input data.

Calculation errors which are detected within one trading day will be corrected immediately. Intraday tick data will not be corrected retrospectively. Calculation errors older than one trading day and incorrect input data will only be corrected as far as technically possible and economically reasonable. If the correction leads to a significant deviation of the index values, these can also be corrected retrospectively.

9 Governance

The Index Team at SIX is responsible for managing the indices. The team ensures that the index rules are adhered to and that the indices meet the required quality standards. The Index Team is subject to a regulatory framework, with structured processes in place to ensure compliance. The main elements and concepts are as follows:

In case of doubt, the German language version of the rule books shall be decisive.

Index Commission

SIX is supported by the Index Commission. The Index Commission provides input on index-related matters, in particular in connection with changes to the index rules as well as adjustments, inclusions and exclusions outside the defined periodic reviews.

The Commission meets at least twice a year and provides valuable input on how to improve existing products and create new ones.

Review of the Index Concepts

The validity of the index concepts and the rules is reviewed on a regular basis and at least once a year. In exceptional cases, a broad market consultation may be conducted for this purpose. Changes to index rules are made in accordance with the relevant governance processes.

The effective date of changes to index rules will be aligned with the regular index review where possible to avoid any exceptional impact on clients and other stakeholders. Significant changes to the index rules should be publicly announced as standard three months prior to their implementation. SIX may decide to shorten the announcement period in some cases:

- In exceptional or urgent cases, or in situations that have no impact on clients or other stakeholders and where immediate communication is not possible. For example, when an investor can no longer replicate index performance with their portfolio. In such cases, changes or additions to the rules must be announced on the same day the new index rule or change is implemented.
- For immaterial changes to the index rules, i.e. clarifications of the rules.
- To coordinate with the dates of the regular index review and rebalancing of the index.

Market Consultations

Where possible, SIX consults with representatives of affected clients and other stakeholders for all material changes to index rules and 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.

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' summary 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.

Discontinuation of Indices

SIX will publicly announce a decision to discontinue an index with reasonable advance notice. The period depends on the impact. By default, a period of one month is scheduled.

SIX is not responsible for determining or offering an alternative index when an index is discontinued.

If there are financial products on the index of which SIX is aware, a market consultation will be conducted in advance and a transition period will be granted in the event of a final discontinuation. Otherwise, no market consultation will be carried out.

Determination of an Index

All indices in this rulebook use available index values and Spot- and Forward-FX rates.

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

No threshold is set for the frequency or number of data updates because this contradicts the objective of measuring the market defined per index as described in the relevant sections of this document. This includes the use of the last available price.

Potential Limitations in the Determination of an Index

If data necessary to determine the index value is not available to SIX due to trading suspensions or market distortions, the last available data will be used. Such cases may lead to a deviation from the basic principles of the indices. Such deviations will be publicly announced considering an announcement period of at least two trading days, if feasible.

In the event of structural changes in the market or economic environment, or if interest in a market has waned or is not functioning, the reliability of a methodology can no longer be guaranteed. SIX reviews the rulebooks at least once a year to anticipate such changes and mitigate their impact by making appropriate adjustments to the methodology.

Controls and Rules for the Exercise of Expert Judgement

The rules for the individual indices have been designed to eliminate discretionary or expert judgement in the index calculation as far as possible. Due to unforeseen market events or unavailable data, the following situations may occur:

- unexpected events, such as complex corporate actions, macroeconomic shocks, market disruptions, natural catastrophes
- technical reasons, such as missing closing prices due to a computer failure on the stock exchange or the inability of a data provider to deliver certain data points in a timely manner
- when a rule allows for multiple interpretations (“unclear rule”)
- the absence of a rule that could potentially lead to a reduction in the meaningfulness of an index (“insufficient rule”)
- Incorrect assessment of materiality in the case of changes to index rules
- determination of prices in the case of rights issues

An escalation process has been implemented for such unexpected cases. As part of this process, SIX will evaluate and document the use of discretion. To the extent possible, the current rulebook will be updated to cover such unexpected cases with a new transparent rule.

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

Further documentation on regulation and processes can be found on the SIX website¹. SIX reserves the right to adjust the index composition, the weightings of the components or the announcement periods based on the basic principles mentioned in section 3.

10 External Communication

SIX uses the following tools to inform the market about index changes. These include changes to index compositions, the weighting of indices as well as ordinary and extraordinary index adjustments.

¹ www.six-group.com/swiss-indices > Benchmark Regulation

Reports

SIX creates and maintains reports containing information on index compositions, weighting of index components, corporate action announcements and other index-related information. SIX publishes the reports on its website, whereby the majority, however, is only made available to licensees. Some reports contain index-specific information, which is why the number of relevant reports varies from index to index. Depending on the timeliness of their information, the reports are updated with varying frequencies from daily to annual.

Vendor Code Sheet

The Vendor Code Sheet contains information on the current ticker symbols, normalizations, launch dates and calculation parameters of the indices and is published on the SIX website².

Newsletter Email Service

SIX provides detailed information on equity and real estate indices, historical index values, corporate actions and index composition through the newsletter option "Swiss Index Service Equity". Interested parties can register for the newsletter e-mail service on the SIX website³. Through this channel, SIX distributes all index-related communications. These include, among others:

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

Index Messages

The index messages of the newsletter e-mail service in connection with index adjustments are published on the SIX website⁴. The index messages are publicly available and do not require a subscription or license agreement.

Media Release

For index messages that are of broad public interest, SIX may publish a media release to inform the public about the index adjustment. In addition, media releases may be used for marketing purposes that are not related to index adjustments.

11 Trademark Protection, Use and Licensing

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² <https://www.six-group.com/dam/download/market-data/indices/six-calculated-indices.xls>

³ www.six-group.com/swiss-indices > Request account

⁴ www.six-group.com/swiss-indices > Index messages

⁵ www.six-group.com/swiss-indices > Licensing

12 Contact

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