



Swiss Index

Methodology Rulebook Governing the SMI TR Decrement
Indices

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1 Index Structure

1.1 Introduction

SMI Dividend Decrement Indices replicate an investment in the SMI TR (Total Return) index less a constant Decrement in form of a fixed annualized Percentage Value or a fixed annualized Index Point Value. The performance reduction is applied on a daily base and as per the Actual/365 day count convention. In this context, the Decrement is also often called "synthetic" Dividend and the Decrement indices are called synthetic Dividend Indices.

1.2 General Principles

In order to achieve the stated index objective, SIX defines the general principles that govern the index methodology. SIX publishes the index objective and rules for all indices.

- **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 Index Calculation

2.1 Calculation Formula

Calculation of Index with fixed point Decrements

$$DecrIndex_t = \left(DecrIndex_{t-1} \times \frac{IndexTR_t}{IndexTR_{t-1}} \right) - \left(D \frac{Act(t-1, t)}{365} \right)$$

Comment:

DecrIndex_t:	Decrement Index value on calculation day t
DecrIndex_{t-1}:	Decrement Index value on previous close t-1
IndexTR_t:	Value of the underlying Total Return Index on calculation day t
IndexTR_{t-1}:	Value of the underlying Total Return Index on previous close t-1
D:	Decrement Amount in fixed index points
Act(t-1, t):	Number of calendar days between calculation day t and calculation day t-1

The Decrement Index is subject to the restriction that it may not fall below zero:

$$MAX(DecrIndex_t, 0)$$

Calculation of Index with fixed percentage Decrements

$$DecrIndex_t = DecrIndex_{t-1} \times \left(\frac{IndexTR_t}{IndexTR_{t-1}} - D \frac{Act(t-1, t)}{365} \right)$$

Comment:

DecrIndex_t:	Decrement Index value on calculation day t
DecrIndex_{t-1}:	Decrement Index value on previous close t-1
IndexTR_t:	Close of the underlying Total Return Index on calculation day t
IndexTR_{t-1}:	Close of the underlying Total Return Index on previous close t-1
D:	Decrement Amount in fixed percentage points
Act(t-1, t):	Number of calendar days between calculation day t and calculation day t-1

The Decrement Index is subject to the restriction that it may not fall below zero:

$$MAX(DecrIndex_t, 0)$$

2.2 Basis

The underlying Total Return index is the Swiss Market Index with dividends included (SMI TR, CH0000222130). The index includes gross regular as well as special dividends. This contrasts with the SMI PR which does not include Dividends (SMI PR, CH0009980894). The Swiss Market Index (SMI) is the main blue chip index of the Swiss equity market. It tracks the 20 most liquid and largest components of the Swiss Performance Index (SPI).

2.3 Index Family Overview

Decrement	Description	ISIN	Underlying TR Index	Index Base
2.50 Percent	SMI TR Decrement 2.50%	CH1151583031	SMI TR (CH0000222130)	12'875.66
3.00 Percent	SMI TR Decrement 3.00%	CH1151583056	SMI TR (CH0000222130)	12'875.66
3.50 Percent	SMI TR Decrement 3.50%	CH1151583049	SMI TR (CH0000222130)	12'875.66
4.00 Percent	SMI TR Decrement 4.00%	CH1151583064	SMI TR (CH0000222130)	12'875.66
4.50 Percent	SMI TR Decrement 4.50%	CH1151583072	SMI TR (CH0000222130)	12'875.66

Decrement	Description	ISIN	Underlying TR Index	Index Base
5.00 Percent	SMI TR Decrement 5.00%	CH1151583080	SMI TR (CH0000222130)	12'875.66
320 Index Points	SMI TR Decrement 320 Points	CH1154162064	SMI TR (CH0000222130)	12'875.66
390 Index Points	SMI TR Decrement 390 Points	CH1154162072	SMI TR (CH0000222130)	12'875.66
450 Index Points	SMI TR Decrement 450 Points	CH1154162080	SMI TR (CH0000222130)	12'875.66
520 Index Points	SMI TR Decrement 520 Points	CH1154162098	SMI TR (CH0000222130)	12'875.66
580 Index Points	SMI TR Decrement 580 Points	CH1154162106	SMI TR (CH0000222130)	12'875.66
640 Index Points	SMI TR Decrement 640 Points	CH1154162114	SMI TR (CH0000222130)	12'875.66

The Index Base for the Decrement Indices is the Close of the SMI PR (CH0009980894) on the 30th of December 2021. The respective Index History is calculated backwards based on the calculation formulas in section 2.1. As the above Decrement Indices implicate a reduction of the SMI TR (CH0000222130) by the synthetic Dividend/Decrement, these indices should be compared to SMI PR.

2.4 Calculation and Publication

Decrement Indices are calculated and published once a day shortly after the close. The calculation is provided by SIX Index Ltd and the distribution is made by SIX Exfeed Ltd. The applicable calendar is the Trading Holiday Calendar of the Swiss Stock Exchange. ¹ No publication is made on non-trading days.

Decrement Indices that are updated real time (intraday) during trading are planned for 2022.

2.5 Information on Index Events

Any relevant forthcoming extraordinary corporate events that result in an adjustment to the indices are published by e-mail via Investor Service. The registration form is available on the website. ² SIX Swiss Exchange accepts no liability for Investor Service Equity.

¹ <https://www.six-group.com/en/products-services/the-swiss-stock-exchange/market-data/news-tools/trading-currency-holiday-calendar.html#/>

² <https://www.six-group.com/de/services/newsletter/the-swiss-stock-exchange/indices.html>

3 Correction Policy

3.1 Unavailable Data

If data 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. 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.

3.2 Wrong Data

Data errors are 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.

4 Governance

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

4.1 Index Commission

The Management Committee of SIX Index Ltd is supported by the Index Commission (advisory board) in all 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 Index Commission convenes at least twice a year. It provides valuable input on how existing products can be improved and new ones created.

4.2 Review of Index Concept

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. 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 changes i.e. rule clarifications
- To align with the periodic review dates and the rebalancing of the index review dates and the rebalancing of the index.

4.3 Market Consultations

Where feasible, SIX aims to consult on all material methodology changes and index cessations/terminations with representatives of relevant clients and other stakeholder groups. A material methodology change comprises a change that "significantly modifies the procedures applied to the determination of an index benchmark" and, therefore, the benchmark index value compared to an unchanged scenario.

The timing and duration of the consultation period is dependent on the materiality of the proposed changes of the methodology. The default length of a market consultation for material changes is one month.

A summary of the market consultations' comments and SIX' summary response to those comments will be made accessible to clients and stakeholders after any given consultation period, except where the originator of the comments has requested confidentiality

4.4 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.

4.5 Determination of an Index

All indices in this rulebook use closing prices ("Input Data") received from SIX Swiss Exchange shortly after the close. The index methodology do not use extrapolation to determine the index value.

The minimum data needed for each Decrement Index is the closing price of the underlying SMI TR Index and the applied Decrement value. No threshold is defined as to the frequency or the number of price updates of the underlying instrument, as the as the Decrement index derived from the underlying index by a formula.

4.6 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.

4.7 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 website.³ Based on the general principles outlined in section 1.2, SIX reserves the right to adjust index compositions, component weightings or notification periods.

³ <https://www.six-group.com/en/products-services/financial-information/indices/benchmark-regulation.html>

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6 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

<mailto:indexdata@sixgroup.com>

Technical Support

Index Operations

T +41 58 399 22 29

indexsupport@six-group.com

⁴ <https://www.six-group.com/de/products-services/the-swiss-stock-exchange/market-data/indices/index-operation/licensing.html>

SIX
Pfingstweidstrasse 110
8005 Zurich
Switzerland

T +41 58 399 2111

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