



SGI Short Term Interest Rate Trend Following Index  
(USD-Excess Return)

**CONFIDENTIAL**

**SGI Short Term Interest Rate Trend  
Following Index  
(USD-Excess Return)**

**Index Rules**

Version as of May 8, 2023

## 1. Index Rules Summary

### 1.1 Index Description

The SGI Short Term Interest Rate Trend Following Index (USD-Excess Return) (the "Index") aims to capture trends across interest rates markets by taking long and short positions on futures of 3-month USD and EUR interest rates.

The Index is calculated and published by Singapore Exchange Limited ("SGX") (the "Index Calculation Agent") and is sponsored by Société Générale (the "Index Sponsor").

#### Main Characteristics

Index Name	Bloomberg Ticker	Return Type
SGI Short Term Interest Rate Trend Following Index (USD-Excess Return)	SGIXTFMM <Index>	Excess Return
Calculation Frequency:	Daily	
Publication Time:	End of Day	
Currency:	USD	
Index Launch Date:	9 February 2023	
Fees and Costs:	As specified under the "Index Fees and Costs" section below	
Index Asset Class:	Interest Rate	
Index Components:	Market Data, Underlying SGI Indices	

### 1.2 Mechanism

#### 1.2.1 Index Composition

The Index is composed of a hypothetical basket of futures of 3-month USD and EUR interest rates, (each, an "Underlying Basket Component", together the "Underlying Basket") where the weightings are systematically determined based on trend signal.

#### 1.2.2 Composition of the Underlying Basket

Dynamic weightings are applied to the Underlying Basket Components so as to determine the composition of the Underlying Basket.

#### 1.2.3 Daily "Vol Target" Mechanism

The Index is constructed pursuant to a daily Vol Target process where the deemed exposure of the Index to the Underlying Basket (the "Exposure") is based on a formula using the following input parameters:

- (i) the historical volatility of the Underlying Basket (the "Historical Volatility");
- (ii) a target volatility of 5%; and
- (iii) the historical volatility of the Index itself

so that:

- when the Historical Volatility exceeds 5%, the Exposure will generally be less than 100% (subject to a minimum Exposure of 0%)
- when the Historical Volatility falls below 5%, the Exposure will generally be greater than 100% (subject to a maximum Exposure of 250%)

### 1.3 Index Fees and Costs

The Index is calculated net of the following fees and costs:



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<b>Fixed transaction Costs:</b>	As defined in the SGI Global Methodology. The Fixed Transaction Costs are specified in Appendix A.
<b>Fixed replication Costs:</b>	As defined in the SGI Global Methodology. The Fixed Replication Costs are specified in Appendix A.
<b>Structuring Fee:</b>	As defined and specified in Section 2.2 of the Index Rules.

### 1.4 SGI Global Methodology

The Index is computed and maintained pursuant to these Index Rules which incorporate by reference the SGI Indices Global Methodology (version dated 20 July 2020, as supplemented, amended and restated or replaced from time to time, the "SGI Global Methodology"). The SGI Global Methodology is published on the SGI website under the link "SGI Cross Asset Methodology" at <https://sgi.sgmarkets.com>. These Index Rules should be read together with the SGI Global Methodology.

Capitalized terms used but not defined herein shall have the respective meanings ascribed to such terms in the SGI Global Methodology.

**In the event of any inconsistency between the SGI Global Methodology and the Index Rules, for purposes of the Index, the Index Rules will prevail.**

**The SGI Global Methodology notably includes important events applicable in respect of the Index Components selected in section 1.1 above.**

The SGI Global Methodology shall be reviewed at least annually and is expected to be updated and revised from time to time where necessary or desirable, pursuant to legal developments and for the purpose of enhanced disclosure and technical improvement. The Index Sponsor may also act in good faith and a commercially reasonable manner to amend the SGI Global Methodology in order to cure ambiguities, errors and omissions thereunder. SGI Global Methodology subsequently updated and revised shall be (i) approved in accordance with the Index Sponsor's internal index procedures, (ii) announced under the heading "News" on the SGI website <https://sgi.sgmarkets.com> and (iii) published in full on such SGI website under the link "SGI Cross Asset Methodology"; upon such publication, the updated SGI Global Methodology shall apply to the Index and these Index Rules.

### 1.5 Technical Rectification of Index Rules

The Index Rules may be amended from time to time, consistent with the economic strategy of the Index, by the Index Sponsor acting in good faith and a commercially reasonable manner to cure ambiguities, errors and omissions.

For convenience, the Index Sponsor may from time to time replace a data provider, publisher or source of Market Data or Index Data (a "Data Provider"), provided that the relevant data content remains equivalent. In any case where the Index Sponsor reasonably determines that the replacement of a Data Provider is necessary or desirable whilst the data content may not remain strictly equivalent, the Index Sponsor shall select such replacement Data Provider (a) in a commercially reasonable manner, in order to achieve similar Index performance; (b) consistent with the objectives of the Index; and (c) in compliance with the Index Sponsor's internal procedures for Index Rules modification.

### 1.6 References to ISDA Definitions

Notwithstanding the incorporation of the definitions below in these Index Rules, the Index Calculation Agent, upon instruction of the Index Sponsor, may from time to time adjust such definitions in order to



take into account further or alternative documents or protocols published by the International Swaps and Derivatives Association, Inc. with a view toward (i) aligning the definitions applicable to the Index and/ or its Index Components with the then current market practice (provided the Index is linked only to products marketed exclusively outside of the United States of America), (ii) eliminating any mismatch or discrepancy between the Index and its Index Components on the one hand, and the Hypothetical Hedge Positions, (that is, hypothetical transactions entered into by any Hypothetical Replicating Party in order to replicate the Index) on the other hand.

**(A) Foreign Exchange**

These Index Rules incorporate by reference the definitions and provisions contained in [(a) in the 2006 ISDA Definitions as published by the International Swaps and Derivatives Association, Inc (as supplemented and revised and updated from time to time, the **"2006 Definitions"**) and (b)] the 1998 FX and Currency Option Definitions, as published by the International Swaps and Derivatives Association, Inc., the Emerging Markets Traders Association and The Foreign Exchange Committee (as supplemented and revised and updated from time to time, the **"FX Definitions"**, and together with the 2006 Definitions, the **"Definitions"**). In the event of any inconsistency between the Definitions and the Index Rules, the Index Rules will govern. In the event of any inconsistency between the Definitions and the SGI Global Methodology, for purposes of the Index, the SGI Global Methodology shall govern.

**(B) Credit**

These Index Rules incorporate by reference the definitions and provisions contained in [(a) the 2006 ISDA Definitions ([excluding Supplement number 5 thereto published 14 April 2008, [but otherwise] as supplemented and revised and updated from time to time,] the **"2006 Definitions"**)] and (b) [the 2014 ISDA Credit Derivatives Definitions (as supplemented and revised and updated from time to time, the **"2014 Definitions"**,] [the 2003 ISDA Credit Derivatives Definitions as supplemented by the May 2003 Supplement, the 2005 Matrix Supplement and the 2009 ISDA Credit Derivatives Determinations Committees, Auction Settlement and Restructuring Supplement (published on 14 July 2009) to the 2003 ISDA Credit Derivatives Definitions,] the **"2003 Definitions"**,] and together with the 2006 Definitions, the **"Definitions"**) in each case as published by the International Swaps and Derivatives Association, Inc. In the event of any inconsistency between the Definitions and the Index Rules, for purposes of the Index, the Index Rules will govern. In the event of any inconsistency between the Definitions and the SGI Global Methodology, for purposes of the Index, the SGI Global Methodology shall govern.

**(C) Rates**

These Index Rules incorporate by reference the definitions and provisions contained in the 2006 ISDA Definitions (as supplemented and revised and updated from time to time, the **"2006 Definitions"**) as published by the International Swaps and Derivatives Association, Inc. In the event of any inconsistency between the 2006 Definitions and the Index Rules, for purposes of the Index, the Index Rules will govern. In the event of any inconsistency between the 2006 Definitions and the SGI Global Methodology, for purposes of the Index, the SGI Global Methodology shall govern.

**(D) Commodities**

These Index Rules incorporate by reference the definitions and provisions contained in (a) the 2006 ISDA Definitions (as supplemented and revised and updated from time to time, the **"2006 Definitions"**) and (b) the 2005 ISDA Commodity Definitions (as supplemented and revised and updated from time to time, the **"Commodity Definitions"** and together with the 2006 Definitions, the **"Definitions"**) as published by the International Swaps and Derivatives Association, Inc. In the event of any inconsistency between the Definitions and the Index Rules, for purposes of the Index, the Index Rules will govern. In the event of any inconsistency between the Definitions and the SGI Global Methodology, for purposes of the Index, the SGI Global Methodology shall govern.

**(E) Equity**

These Index Rules incorporate by reference the definitions and provisions contained in (a) the 2006 ISDA Definitions (as supplemented and revised and updated from time to time, the **"2006 Definitions"**) and (b)



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the 2002 ISDA Equity Derivatives Definitions (the "**Equity Definitions**") and together with the 2006 Definitions, the "**Definitions**") as published by the International Swaps and Derivatives Association, Inc. In the event of any inconsistency between the Definitions and the Index Rules, for purposes of the Index, the Index Rules will govern. In the event of any inconsistency between the Definitions and the SGI Global Methodology, for purposes of the Index, the SGI Global Methodology shall govern.



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**IMPORTANT:**

The Index seeks to track hypothetical positions in Underlying Basket; however, the Index does not actually invest in or hold any Underlying Basket Component or any other instruments. An investor in any product linked to the performance of the Index (if any) will have no rights whatsoever to any Underlying Basket Component or any other instruments underlying the Index. The Index is a statistical measure of the value of a hypothetical portfolio of the Index Components based on the index strategy; it is not an investment fund, pool or any other investment vehicle.

The strategy tracked by the Index is not guaranteed to be successful.

**2.1. Terms and definitions relating to Dates:**

<b>ACT(t-1,t)</b>	means the number of calendar days between Calculation Date (t-1) (included) and Calculation Date (t) (excluded).
<b>Calculation Date (t)</b>	means any Scheduled Calculation Date on which no Index Disruption Event exists.
<b>Scheduled Calculation Date</b>	means, any day on which all the Underlying Basket Components are scheduled to be published
<b>Valuation Time</b>	means 8:00 p.m. (New York time)

**2.2. Terms and definitions relating to the Index:**

<b>Index Start Date, “ts”</b>	Jan 2, 2001
<b>Index</b>	means the SGI Short Term Interest Rate Trend Following Index (Bloomberg Ticker: SGIXTFMM <Index>)
<b>Index Calculation Agent</b>	Singapore Exchange Limited (“SGX”)
<b>Index Component</b>	means Market Data, Underlying SGI Indices
<b>Index Currency</b>	US Dollar (“USD”)
<b>Index Launch Date</b>	9 February 2023
<b>Index Level “IL(t)”</b>	means, in respect of any Calculation Date (t), the level of the Index calculated and published by the Index Calculation Agent on such date at the Valuation Time, pursuant to the Index Rules set out in Section 2.6.
<b>Intermediate Index Level “IIL(t)”</b>	means, in respect of any Calculation Date (t), the intermediate level of the Index calculated by the Index Calculation Agent on such date, pursuant to the Index Rules set out in Section 2.7.
<b>Index Sponsor</b>	Société Générale (“SG”).
<b>Index Disruption Event</b>	As defined in the SGI Global Methodology
<b>Index Extraordinary Event</b>	As defined in the SGI Global Methodology
<b>Underlying Basket</b>	means the basket comprising the Underlying Basket Components and as specified in Appendix A
<b>Aggregate Transaction Cost, “ATC(t)”</b>	means, in respect of Calculation Date (t), the aggregate transaction costs as determined pursuant to the Index Rules set out in Section 2.21
<b>Aggregate Replication Cost, “ARC(t)”</b>	means, in respect of Calculation Date (t), the aggregate replication cost as determined pursuant to the Index Rules set out in Section 2.22



<b>Index Transaction Cost “ITC(t)”</b>	means in respect of Calculation Date (t), the cost expressed in basis points that would be charged in relation to the deemed purchase or sale of the Index on such date. The Index Transaction Cost is determined by the Calculation Agent pursuant to the formula set out in Section 2.23 and is published with two decimals on the Bloomberg page SGIXTFMC <Index>
<b>Structuring Fee, “SF”</b>	means, a fee that is expressed as a percentage of the Index Level and reflects Index Sponsor's compensation for structuring and maintaining the Index. The Structuring Fee is set to 0.30% p.a.

**2.3. Terms and definitions relating to the Vol Target Mechanism:**

<b>Exposure, “E(t)”</b>	means, in respect of any Calculation Date (t), the hypothetical exposure of the Index to the Underlying Basket determined pursuant to Section 2.12.
<b>Historical Volatility, “HV(t)”</b>	means in respect of a Calculation Date (t), the annualized historical volatility of the Notional Underlying Basket (t) determined pursuant to Section 2.13.
<b>Index Historical Volatility, “IHV(t)”</b>	means, in respect of any Calculation Date (t), the annualized historical volatility of the determined pursuant to Section 2.15.
<b>Notional Underlying Basket (t)</b>	means, in respect of a Calculation Date (t), the daily rebalanced notional synthetic basket denominated in US Dollar of Underlying Basket Components as defined using the Underlying Basket Component Weights on such date.
<b>Notional Underlying Basket Level, “NUBL(t,t-k)”</b>	means, in respect of Calculation Dates (t) and (t-k), the level as of k Calculates Dates preceding Calculation Date (t) of the Notional Underlying Basket (t) determined pursuant to Section 2.14.
<b>Target Volatility, “TV”</b>	5%.

**2.4. Terms and definitions relating to the Underlying Basket Components:**

<b>Underlying Component (i)</b>	<b>Basket</b>	means, component (i) of the Underlying Basket as provided in Appendix A.
<b>Underlying Component Currency (i)</b>	<b>Basket</b>	means in respect of an Underlying Basket Component (i), the default currency of such component, as provided in Appendix A.
<b>Underlying Component Return Type (i)</b>	<b>Basket</b>	means, in respect of an Underlying Basket Component (i), its return type as provided in Appendix A.
<b>Underlying Component Type (i)</b>	<b>Basket</b>	means, in respect of an Underlying Basket Component (i), its type as provided in Appendix A.
<b>Underlying Component Asset UBCAC(i)</b>	<b>Basket Category,</b>	means, in respect of an Underlying Basket Component (i), its asset category as provided in Appendix A.



<b>Underlying Component Closing Price, “CP(i,t)”</b>	<b>Basket Price,</b>	means, in respect of a Calculation Date (t) and Underlying Basket Component (i) the official closing level of such Underlying Basket Component for such Calculation Date as published on the respective Bloomberg page specified in Appendix A.
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<b>Underlying Component Exponential Weighted Moving Average, “EWMA(i,t,j)”</b>	<b>Basket Exponential Moving Average,</b>	means, in respect of a Calculation Date (t), Trend Lookback Period (j) and Underlying Basket Component (i), the exponential weighted moving average of Underlying Basket Component Level Excess Return in USD, determined pursuant to Section 2.20.
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<b>Underlying Component Trend, “T(i,t,j)”</b>	<b>Basket Trend,</b>	means, in respect of a Calculation Date (t), Trend Lookback Period (j) and Underlying Basket Component (i), the trend determined pursuant to Section 2.19.
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**Trend Lookback Period (j)** Means, the  $j^{\text{th}}$  historical time window to be used to compute the Underlying Basket Component Trend  $T(i,t,j)$ .

Here,  $j \in \{1,2,3\}$  and,

$$\text{Trend Lookback Period } (j) = \begin{cases} 125 & \text{for } j = 1 \\ 250 & \text{for } j = 2 \\ 500 & \text{for } j = 3 \end{cases}$$

<b>Underlying Component Signal, “S(i,t)”</b>	<b>Basket Signal,</b>	means, in respect of a Calculation Date (t) and Underlying Basket Component (i), the signal determined pursuant to Section 2.18.
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<b>Underlying Component Volatility, “<math>\sigma(i,t)</math>”</b>	<b>Basket Volatility,</b>	means, in respect of a Calculation Date (t) and Underlying Basket Component (i), the volatility of such Underlying Basket Component as of such date as determined pursuant to Section 2.17
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<b>Underlying Component Final Weight, “W(i,t)”</b>	<b>Basket Final Weight,</b>	means, in respect of a Calculation Date (t) and Underlying Basket Component (i), the final weight of such Underlying Basket Component as of such date as determined pursuant to Section 2.10
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<b>Underlying Component Adjusted Target Weight, “ATW(i,t)”</b>	<b>Basket Adjusted Target Weight,</b>	means, in respect of a Calculation Date (t) and Underlying Basket Component (i), the adjusted target weight of such Underlying Basket Component as of such date as determined pursuant to Section 2.11
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<b>Underlying Component Target Weight, “TW(i,t)”</b>	<b>Basket Target Weight,</b>	means, in respect of a Calculation Date (t) and Underlying Basket Component (i), the target weight of such Underlying Basket Component as of such date as determined pursuant to Section 2.16
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**Underlying Basket Component Quantity, “Q(i,t)”** means, in respect of a Calculation Date (t) and Underlying Basket Component (i), the quantity of such component in the Index determined pursuant to Section 2.9.

**Underlying Basket Component Level Excess Return in USD, “BCLERU(i,t)”** means, in respect of a Calculation Date (t) and Underlying Basket Component (i), the excess return level of the Underlying Basket Component in USD, determined pursuant to Section 2.8.

**Underlying Basket Component Replication Cost, “RC(i)”** means, in respect of Underlying Basket Component (i), the replication cost (expressed in percentage) incurred by a hypothetical investor for holding such Underlying Basket Component. Such replication cost is specified in Appendix A.

**Underlying Basket Component Transaction Cost, “TC(i)”** means, in respect of Underlying Basket Component (i), the transaction cost (expressed in percentage) incurred by a hypothetical investor in buying or selling of such Underlying Basket Component. Such transaction cost is specified in Appendix A.

## 2.5. Terms and definitions relating to the Market Data

**Forex, “FX(i,t)”** means, in respect of a Calculation Date (t) and Underlying Basket Component (i), the foreign spot exchange rate to convert in USD one unit of the Underlying Basket Component Currency (i) obtained using the Bloomberg page as specified in Appendix A on such Calculation Date, or any successor service or page for the purpose of displaying such foreign spot exchange rate, as determined by the Index Calculation Agent after instruction from the Index Sponsor

## 2.6. Determination of the Index Level, “IL(t)”:

The Index Level, in respect of Calculation Date (t), is calculated by the Index Calculation Agent at the Valuation Time, subject to the occurrence or existence of an Index Disruption Event or an Index Extraordinary Event, according to the following formula:

(a) For any Date (t) > t<sub>s</sub>+1:

$$IL(t) = IL(t-1) \times \left( 1 + \left( \left( \frac{IIL(t)}{IIL(t-1)} - 1 \right) - SF \times \frac{ACT(t-1, t)}{365} \right) \right)$$

(b) Otherwise :

$$IL(t) = 100$$

And the published levels are rounded to 4 decimal places.

## 2.7. Determination of the Intermediate Index Level, “IIL(t)”:

The Intermediate Index Level, in respect of Calculation Date (t), is calculated by the Index Calculation Agent at the Valuation Time, subject to the occurrence or existence of an Index Disruption Event or an Index Extraordinary Event, according to the following formula:

(c) For any Date (t) > ts+1:

$$IIL(t) = IIL(t-1) + \sum_{i=1}^8 [Q(i, t-1) \times (BCLERU(i, t) - BCLERU(i, t-1))] - ATC(t) - ARC(t)$$

(d) Otherwise :

$$IIL(t) = 100$$

**2.8. Determination of the Underlying Basket Component Excess Return Level in USD, “BCLERU(i,t)”:**

The Underlying Basket Component Level Excess Return in USD, in respect of Underlying Basket Component (i) and Calculation Date (t), is determined as follows:

(a) For any (t) > ts-24:

$$BCLERU(i, t) = BCLERU(i, t-1) \times \left[ 1 + \left( \frac{CP(i, t)}{CP(i, t-1)} - 1 \right) \times \frac{FX(t)}{FX(t-1)} \right]$$

(b) Otherwise :

$$BCLERU(i, t) = 100$$

**2.9. Determination of the Underlying Basket Component Quantity, “Q(i,t)”:**

The Underlying Basket Component Quantity, in respect of Underlying Basket Component (i) and Calculation Date (t), is determined as follow:

(a) For any Date (t) ≥ ts+1

$$Q(i, t) = \frac{IIL(t-1) \times W(i, t-1)}{BCLERU(i, t-1)}$$

(b) Otherwise :

$$Q(i, t) = 0$$

**2.10. Determination of the Underlying Basket Component Final Weight, “W(i,t)”:**

The Underlying Basket Component Final Weight, in respect of Underlying Basket Component (i) and Calculation Date (t), is determined as follows:

(a) For any Date (t) > ts,

$$W(i, t) = \text{Min}(250\%, \text{Max}(-250\%, W(i, t-1) + \text{Min}(25\%, \text{Max}(-25\%, ATW(i, t) - W(i, t-1))))$$

(b) For any Date (t) = ts,

$$W(i, t) = ATW(i, t)$$

**2.11. Determination of the Underlying Basket Component Adjusted Target Weight, “ATW(i,t)”:**

The Underlying Basket Component Adjusted Target Weight, in respect of Underlying Basket Component (i) and Calculation Date (t), is determined as follows:

(a) For any Date (t)  $\geq t_s$ ,

$$ATW(i, t) = TW(i, t) \times E(t)$$

**2.12. Determination of the Exposure “E(t)”:**

The Exposure, in respect of Calculation Date (t), is determined as follows:

(a) For  $t < t_s$  ;

$$E(t) = 0$$

(b) For  $t \geq t_s$

$$E(t) = \min \left( 250\%, \frac{TV}{HV(t)} \times \min \left( 1.2, \max \left( 0.8, \frac{TV}{IHV(t)} \right) \right) \right)$$

Where, **MIN(x1, x2)** gives the lowest value amongst x1 and x2

And **MAX(x1, x2)** gives the highest values amongst x1 and x2

**2.13. Determination of the Historical Volatility “HV(t)”:**

The Historical Volatility of the Notional Underlying Basket is, in respect of Calculation Date (t), determined as follows:

(a) For  $t \geq t_s$

$$HV(t) = \sqrt{\frac{1}{25} \sum_{k=0}^{24} \left[ \sqrt{\frac{365}{ACT(t-k-1, t-k)}} \times \ln \left( \frac{NUBL(t, t-k)}{NUBL(t, t-k-1)} \right) \right]^2}$$

(b) For  $t < t_s$ ,

$$HV(t) = 0$$

**2.14. Determination of the Notional Underlying Basket Level “NUBL(t,t-k)”:**

In respect of a Calculation Date k days preceding the Calculation Date (t) the Notional Underlying Basket Level defined on such date calculated using the Underlying Basket Component Target Weight  $TW(i, t)$ , is determined as follows:

For any  $k \geq 0$  :

$$NUBL(t, t-k) = NUBL(t, t-k-1) \times \left[ 1 + \sum_{i=1}^8 TW(i, t) \times \left( \frac{BCLERU(i, t-k)}{BCLERU(i, t-k-1)} - 1 \right) \right]$$

Where



$$NUBL(t, t - 0) = 100$$

**2.15. Determination of the Index Historical Volatility, "IHV(t)":**

In respect of the Calculation Date (t), the Index Historical Volatility is determined as follows:

(a) For  $t > t_s + 125$

$$IHV(t) = \sqrt{\frac{1}{\alpha(t)} \sum_{k=0}^{\alpha(t)-1} \left[ \sqrt{\frac{365}{ACT(t-k-1, t-k)}} \times \ln \left( \frac{IIL(t-k)}{IIL(t-k-1)} \right) \right]^2}$$

Where

$$\alpha(t) = \text{MIN}(N(t_s + 1, t), 125)$$

"MIN(x<sub>1</sub>, x<sub>2</sub>, ...)" is the function that returns the smallest value in a set of values.

(b) Otherwise :

$$\begin{aligned} IHV(t) &= TV \\ \alpha(t) &= 0 \end{aligned}$$

**2.16. Determination of the Underlying Basket Component Target Weight, "TW(i,t)":**

The Underlying Basket Component Target Weight, in respect of Underlying Basket Component (i) and Calculation Date (t), is determined as follows:

(a) For any Date (t)  $\geq t_s$ ,

$$TW(i, t) = \frac{TV}{\sqrt{250} \times \sigma(i, t)} \times \frac{1}{8} \times S(i, t)$$

**2.17. Determination of the Underlying Basket Component Volatility "σ(i, t)":**

The Underlying Basket Component Volatility, in respect of Underlying Basket Component (i) and Calculation Date (t), is determined as follows:

(a) For any Date (t)  $> t_s$ ,

$$\sigma(i, t) = \sqrt{\lambda \times \sigma(i, t-1)^2 + (1 - \lambda) \times R(i, t)^2}$$

(b) For any Date (t) = t<sub>s</sub>,

$$\sigma(i, t) = \text{ABS}(R(i, t))$$

where,

ABS(x) gives the absolute value of the number 'x'.

$$R(i, t) = \frac{BCLERU(i, t)}{BCLERU(i, t-1)} - 1$$

$$\lambda = 0.96$$

**2.18. Determination of the Underlying Basket Component Signal, “S(i,t)”:**

The Underlying Basket Component Signal, in respect of Underlying Basket Component (i) and Calculation Date (t), is determined as follow:

(a) For any Date (t) ≥ ts,

$$S(i,t) = \frac{\sum_{k=0}^{\beta(t)-1} \left( \frac{\sum_{j=1}^3 T(i,t-k,j)}{3} \right)}{\beta(t)}$$

Where,

$$\beta(t) = \text{MIN}(N(t_s - 1, t), 10)$$

**2.19. Determination of the Underlying Basket Component Trend, “T(i,t,j)”:**

The Underlying Basket Component Trend, in respect of Underlying Basket Component (i), Trend Lookback Period (j) and Scheduled Calculation Date (t), is determined as follow:

(a) For any Date (t) ≥ ts

$$T(i,t,j) = \begin{cases} 1 & \text{if } BCLERU(i,t) > EWMA(i,t,j) \\ -1 & \text{if } BCLERU(i,t) < EWMA(i,t,j) \\ 0 & \text{if } BCLERU(i,t) = EWMA(i,t,j) \end{cases}$$

**2.20. Determination of the Underlying Basket Component Exponential Weighted Moving Average, “EWMA(i,t,j)”:**

The Underlying Basket Component Exponential Weighted Moving Average, in respect of Underlying Basket Component (i), Trend Lookback Period(j) and Calculation Date (t), is determined as follow:

(a) For any Date (t) ≥ ts,

$$EWMA(i,t,j) = \left( \frac{2}{Trend\ Lookback\ Period(j) + 1} \right) \times BCLERU(i,t) + \left( 1 - \frac{2}{Trend\ Lookback\ Period(j) + 1} \right) \times EWMA(i,t-1,j)$$

(b) For any Date (t) = ts-1,

$$EWMA(i,t,j) = BCLERU(i,t)$$

**2.21. Determination of the Aggregate Transaction Cost, “ATC(t)”:**

In respect of the Calculation Date (t), the Aggregate Transaction Cost is determined as follows:

(a) For t > ts+1

$$ATC(t) = \sum_{i=1}^8 [ABS(Q(i,t) - Q(i,t-1)) \times BCLERU(i,t) \times TC(i)]$$

(b) Otherwise :

$$ATC(t) = 0$$

where, ABS(x) gives the absolute value of the number 'x'

**2.22. Determination of the Aggregate Replication Cost, "ARC(t)":**

In respect of the Calculation Date (t), the Aggregate Replication Cost is determined as follows:

(a) For  $t > t_{s+1}$

$$ARC(t) = \sum_{i=1}^8 \left[ ABS(Q(i, t-1)) \times BCLERU(i, t) \times RC(i) \times \frac{ACT(t-1, t)}{360} \right]$$

(b) Otherwise :

$$ARC(t) = 0$$

where, ABS(x) gives the absolute value of the number 'x'

**2.23. Determination of the Index Transaction Cost, "ITC(t)":**

In respect of the Calculation Date (t), the Index Transaction Cost is determined as follows:

(a) For  $t \geq t_{s+1}$

$$ITC(t) = \frac{\sum_{i=1}^8 [ABS(Q(i, t)) \times BCLERU(i, t) \times TC(i)]}{IIL(t)} \times 10000$$

where, ABS(x) gives the absolute value of the number 'x'

### 3. Disclaimers

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# SGI Shot Term Interest Rate Trend Following Index (USD-Excess Return)

## Appendix A – Underlying Basket Components

(i)	Underlying Basket Component (i)	Bloomberg Ticker (i)	Underlying Basket Component Currency (i)	FX(i)	Underlying Basket Component Type (i)	Underlying Basket Component Return Type (i)	Underlying Basket Component Asset Class (i)	TC(i)	RC(i)
1	SGI First Quarter USD 3M Future Rolling Index	SGIXSF01	USD	1	Underlying SGI Index	Excess Return	Interest Rate	0.01%	0.04%
2	SGI Second Quarter USD 3M Future Rolling Index	SGIXSF02	USD	1	Underlying SGI Index	Excess Return	Interest Rate	0.01%	0.04%
3	SGI Third Quarter USD 3M Future Rolling Index	SGIXSF03	USD	1	Underlying SGI Index	Excess Return	Interest Rate	0.01%	0.04%
4	SGI Fourth Quarter USD 3M Future Rolling Index	SGIXSF04	USD	1	Underlying SGI Index	Excess Return	Interest Rate	0.01%	0.04%
5	SGI First Quarter EUR 3M Future Rolling Index	SGIXER01	EUR	EURUSD WMCO Currency	Underlying SGI Index	Excess Return	Interest Rate	0.01%	0.04%
6	SGI Second Quarter EUR 3M Future Rolling Index	SGIXER02	EUR	EURUSD WMCO Currency	Underlying SGI Index	Excess Return	Interest Rate	0.01%	0.04%
7	SGI Third Quarter EUR 3M Future Rolling Index	SGIXER03	EUR	EURUSD WMCO Currency	Underlying SGI Index	Excess Return	Interest Rate	0.01%	0.04%
8	SGI Fourth Quarter EUR 3M Future Rolling Index	SGIXER04	EUR	EURUSD WMCO Currency	Underlying SGI Index	Excess Return	Interest Rate	0.01%	0.04%

