

# INDEX GUIDELINE

LOOMIS SAYLES ASSET SELECTOR EQUITY  
ROTATION NER JPY HEDGED INDEX

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## INTRODUCTION

This document (the "**GUIDELINE**") is to be used as a guideline with regard to the composition, calculation and maintenance of the Loomis Sayles Asset Selector Equity Rotation ER Index (the "**INDEX**"). Any amendments to the rules made to the GUIDELINE are approved by the OVERSIGHT COMMITTEE specified in Section 7.5. The INDEX is owned by Loomis Sayles (the "**INDEX SPONSOR**") and calculated, administered and published by Solactive AG ("**SOLACTIVE**") assuming the role as administrator (the "**INDEX ADMINISTRATOR**") under the Regulation (EU) 2016/1011 (the "**BENCHMARK REGULATION**" or "**BMR**"). The name "Solactive" is trademarked.

*The text uses defined terms which are formatted with "SMALL CAPS". Such Terms shall have the meaning assigned to them as specified in Section 8 (Definitions).*

**THE GUIDELINE AND THE POLICIES AND METHODOLOGY DOCUMENTS REFERENCED HEREIN CONTAIN THE UNDERLYING PRINCIPLES AND RULES REGARDING THE STRUCTURE AND OPERATION OF THE INDEX. SOLACTIVE DOES NOT OFFER ANY EXPLICIT OR TACIT GUARANTEE OR ASSURANCE, NEITHER PERTAINING TO THE RESULTS FROM THE USE OF THE INDEX NOR THE LEVEL OF THE INDEX AT ANY CERTAIN POINT IN TIME NOR IN ANY OTHER RESPECT. SOLACTIVE STRIVES TO THE BEST OF ITS ABILITY TO ENSURE THE CORRECTNESS OF THE CALCULATION. THERE IS NO OBLIGATION FOR SOLACTIVE – IRRESPECTIVE OF POSSIBLE OBLIGATIONS TO ISSUERS – TO ADVISE THIRD PARTIES, INCLUDING INVESTORS AND/OR FINANCIAL INTERMEDIARIES, OF ANY ERRORS IN THE INDEX. THE PUBLICATION OF THE INDEX BY SOLACTIVE DOES NOT CONSTITUTE A RECOMMENDATION FOR CAPITAL INVESTMENT AND DOES NOT CONTAIN ANY ASSURANCE OR OPINION OF SOLACTIVE REGARDING A POSSIBLE INVESTMENT IN A FINANCIAL INSTRUMENT BASED ON THIS INDEX.**



# 1. INDEX SPECIFICATIONS

## 1.1. SCOPE OF THE INDEX

The Loomis Sayles Asset Selector Equity Rotation ER Index (the "**INDEX**") is designed to provide a dynamic and rules-based exposure to US equities and fixed income, with a volatility target of 6% while hedging such exposure against USD/JPY currency risk. The INDEX allocates exposure between 3 indices and a cash component, as further described in Section 2

## 1.2. IDENTIFIERS AND PUBLICATION

The INDEX is published under the following identifiers:

Name	ISIN	Currency	Type	RIC	BBG ticker
Loomis Sayles Asset Selector Equity Rotation NER JPY hedged Index	DE000SLOABBO	JPY	NTR	.LASER6J	LASER6J Index

\*NTR means that the Index is calculated as Net Total Return index.

The INDEX is published on the website of the INDEX ADMINISTRATOR ([www.solactive.com](http://www.solactive.com)) and is, in addition, available via the price marketing services of Boerse Stuttgart GmbH and may be distributed to all of its affiliated vendors. Each vendor decides on an individual basis as to whether it will distribute or display the INDEX via its information systems.

Any publication in relation to the INDEX (e.g. notices, amendments to the GUIDELINE) will be available at the website of the INDEX ADMINISTRATOR: <https://www.solactive.com/news/announcements/>.

## 1.3. INITIAL LEVEL OF THE INDEX

The initial level of the INDEX on the August 3, 2006, the START DATE, is 100. Historical values from the 6<sup>th</sup> of March 2020, the LIVE DATE, will be recorded in accordance with Article 8 of the BMR. Levels of the INDEX published for a period prior to the LIVE DATE have been back-tested.

## 1.4. PRICES AND CALCULATION FREQUENCY

The closing level of the INDEX is calculated and published on each CALCULATION DAY between 6:00pm and 6:30pm New York Time. This closing level is based on the CLOSING PRICES for the INDEX COMPONENTS on the respective EXCHANGES on which the INDEX COMPONENTS are listed.



## LICENSING

Licenses to use the INDEX as the underlying for products issued by stock exchanges, banks, financial services providers and investment houses or for benchmark usage may be granted by Loomis Sayles.



## 2. THE BASE PORTFOLIO: COMPOSITION AND WEIGHTING

### 2.1. THE INDEX COMPONENTS

The INDEX is composed of the following components:

INDEX COMPONENT	Name	Description	Identifier
1	Solactive US Momentum Index NTR	The Solactive US Momentum Index NTR (" <b>SOLUMMN</b> ") is a net total return index of SOLACTIVE and is calculated and distributed by SOLACTIVE. The index aims to track 100 stocks from the US equity market that have shown strong price momentum over the past year. The securities are weighted according to an adjusted free float market capitalization (as calculated and determined by SOLACTIVE). The index is published in USD. More information regarding the index is available at <a href="https://www.solactive.com/wp-content/uploads/2018/09/SOLUMM_Guideline_v1.1.pdf">https://www.solactive.com/wp-content/uploads/2018/09/SOLUMM_Guideline_v1.1.pdf</a> . Information on such website is not part of, or incorporated by reference in, this document.	ISIN: DE000SLA5XX6
2	Solactive US Free Cash Flow Yield Index NTR	The Solactive US Free Cash Flow Yield Index NTR (" <b>SOLUFCFN</b> ") is a net total return index of SOLACTIVE and is calculated and distributed by SOLACTIVE. The index aims to track 100 stocks from the US equity market that have a high free cash flow yield (as calculated and determined by SOLACTIVE). The securities are weighted according to the inverse of volatility. The index is published in USD. More information regarding the index is available at <a href="https://www.solactive.com/wp-content/uploads/2018/09/SOLUFCF_Guideline_v1.1.pdf">https://www.solactive.com/wp-content/uploads/2018/09/SOLUFCF_Guideline_v1.1.pdf</a> . Information on such website is not part of, or incorporated by reference in, this document.	ISIN: DE000SLA5X01
3	Solactive 10-Year U.S. Treasury Future 2 Index	The Solactive 10-Year U.S. Treasury Future 2 Index (" <b>SOLUS10Y</b> ") is a total return index of SOLACTIVE and is calculated and distributed by SOLACTIVE. The Solactive 10-Year U.S. Treasury Future 2 Index aims to track the continuous rolling 10-year U.S. treasury futures performance. The index is published in USD. More information regarding the index is available at <a href="https://www.solactive.com/wp-content/uploads/2018/09/SOLUS10Y_Guideline_v1.1.pdf">https://www.solactive.com/wp-content/uploads/2018/09/SOLUS10Y_Guideline_v1.1.pdf</a> . Information on such website is not part of, or incorporated by reference in, this document.	ISIN: DE000SLA7RQ8



		content/uploads/2019/07/Methodology_SOLUS10Y.pdf Information on such website is not part of, or incorporated by reference in, this document.	
4	Cash account (hereinafter referred to as the " <b>MONEY MARKET POSITION</b> ")	A U.S. dollar cash account bearing interest at a rate equal to 3-month USD LIBOR (such rate, the " <b>NOTIONAL INTEREST RATE</b> ").	Not applicable
5	USD/YEN foreign exchange rate	The FX exchange rate fixing to convert 1 USD into Yen around 6 pm NY time (post-closing), such rate referred to as " <b>FX RATE</b> " or "FX".	Bloomberg Ticker: JPY F163 Crncy

Each of the Solactive US Momentum Index NTR, Solactive US Free Cash Flow Yield Index NTR, and Solactive 10-Year U.S. Treasury Future 2 Index is referred to as an "INDEX COMPONENT" and collectively, form the "BASE PORTFOLIO". The current guidelines relating to the INDEX COMPONENTS can be found on SOLACTIVE's website (where such information thereto is not part of, or incorporated by reference, in this document) and, specifically, the websites listed in the above table.

## 2.2. ALLOCATION OF INDEX COMPONENTS IN THE BASE PORTFOLIO

### Calculation of the exponentially weighted returns:

Allocation of the exposure of the INDEX COMPONENTS in the BASE PORTFOLIO is based on the realized variance of a selected sample of large cap U.S. equities.

The Index Calculation Agent first reviews the constituent stocks of the Solactive US Large Cap Index (GTR) (the "**REFERENCE INDEX**"). The REFERENCE INDEX is calculated and distributed by SOLACTIVE. The objective of the REFERENCE INDEX is to track the large capitalization segment of the U.S. stock market and to serve as a starting universe for smart beta indices, including the INDEX. The components of the REFERENCE INDEX are the 500 largest companies by market capitalization from the eligible universe of common stocks and real estate investment trusts with their primary listing on a regulated U.S. exchange that also meet certain additional criteria. More information regarding the REFERENCE INDEX is available at <https://www.solactive.com/indices/?se=1&index=DE000SLA0Q47>. Information on such website is not part of, or incorporated by reference in, this document.

The Index Calculation Agent selects only those constituents with a published closing price over the previous 504 TRADING DAYS (such selected constituents, the "**REFERENCE CONSTITUENTS**").





In respect of each TRADING DAY, the Index Calculation Agent then calculates the exponentially weighted return of each REFERENCE CONSTITUENT based on such REFERENCE CONSTITUENT's daily returns over the previous 503 TRADING DAYS (including TRADING DAY t) according to the formula below. Specifically, the Index Calculation Agent multiplies the daily percentage return of each REFERENCE CONSTITUENT by the exponential weighting variable (as set forth below), resulting in the exponentially weighted return vector for the applicable REFERENCE CONSTITUENT and TRADING DAY. The exponential weighting variable allows each daily return to have a different weight in the realized variance calculation and allows the more recent returns to be weighted more heavily than less recent returns.

The degree of time decay to which less recent returns have a lower effect than more recent returns is dictated by the exponential weighting variable used in the calculation of the exponentially weighted returns.

Accordingly, the exponential weighting variable used in the calculation of the exponentially weighted returns is equal to approximately 99.9006% (rounded for ease of reference). The weight of the return on the TRADING DAY that is one TRADING DAY prior to TRADING DAY t is 99.9006% of the weight of return on TRADING DAY t.

The weight of return on the TRADING DAY that is 502 TRADING DAYS prior to TRADING DAY t is approximately 60.7134% of the weight of return on the TRADING DAY t.

$$\tilde{R}_i(s, t) = R_i(s) * e^{-\lambda \times (1 + TDay(s, t))}$$

Where, in respect of a TRADING DAY t:

- $\tilde{R}_i$  = the exponentially weighted return vector for each REFERENCE CONSTITUENT i;
- $\tilde{R}_i(s, t)$  = the exponentially weighted return of REFERENCE CONSTITUENT i on TRADING DAY s with the exponential weighting based on TRADING DAY t;
- s = each TRADING DAY starting 502 TRADING DAYS before TRADING DAY t to, and including, TRADING DAY t;
- $e^{-\lambda \times (1 + TDay(s, t))}$  = the exponential weighting variable;
- $\lambda = 0.5/503$ ;
- $TDay(s, t)$  = the number of TRADING DAYS between TRADING DAY s (inclusive) and TRADING DAY t (exclusive). For the avoidance of doubt,  $TDay(t, t) = 0$ ;
- $R_i$  = the return vector for each REFERENCE CONSTITUENT i; and
- $R_i(s)$  = the return of REFERENCE CONSTITUENT i on TRADING DAY s, calculated according to the following formula:

$$R_i(s) = \frac{Equity\ Level_i(s)}{Equity\ Level_i(s - 1)} \times \left( 1 + \frac{DIV_i(s)}{Equity\ Level_i(s)} \right) - 1$$

where:



- $Equity\ Level_i(s)$  = the closing level of REFERENCE CONSTITUENT  $i$  on TRADING DAY  $s$ ;
- $Equity\ Level_i(s - 1)$  = the closing level of REFERENCE CONSTITUENT  $i$  on the TRADING DAY prior to TRADING DAY  $s$ ; and
- $DIV_i(s)$  = the sum of all gross, ordinary or special dividends of REFERENCE CONSTITUENT  $i$  detached between the TRADING DAY  $s$  (included) and the prior TRADING DAY (excluded).

### The variance of Principal Components:

The exponentially weighted return vectors for all of the REFERENCE CONSTITUENTS form the exponentially weighted return matrix ' $\tilde{R}$ '. The Index Calculation Agent then uses PRINCIPAL COMPONENT analysis, a method summarizing the variation of return series, to convert the returns into linearly uncorrelated variables ("**PRINCIPAL COMPONENTS**").

The variance of each PRINCIPAL COMPONENT and exponentially weighted return vector of each REFERENCE CONSTITUENT (as calculated below) is then calculated as a fraction. The numerator of the fraction is calculated in three steps. First, for each TRADING DAY in the 503 TRADING DAYS review period, the value of each PRINCIPAL COMPONENT or exponentially weighted return vector of each REFERENCE CONSTITUENT, as the case may be, on such TRADING DAY (the "**DAILY VALUE**") and the average value of each PRINCIPAL COMPONENT or exponentially weighted return vector of each REFERENCE CONSTITUENT, as the case may be, over the previous 503 TRADING DAYS (the "**AVERAGE VALUE**") are determined. Then, the Calculation Agent subtracts the AVERAGE VALUE from the corresponding DAILY VALUE and raises the result to the second power. Finally, the results for all of the TRADING DAYS are summed and then divided by 502.

The variance of each PRINCIPAL COMPONENT is calculated according to the following formula:

$$\sigma_{Comp,i}^2(t) = \frac{\sum_{k=t-502}^t (Comp_i(k, t) - \overline{Comp}_i(t))^2}{502}$$

Where:

- $\sigma_{Comp,i}^2(t)$  = the variance of PRINCIPAL COMPONENT  $i$  on TRADING DAY  $t$ ;
- $i$  = each PRINCIPAL COMPONENT;
- $Comp_i(k, t)$ : the value of PRINCIPAL COMPONENT  $i$  on TRADING DAY  $k$  calculated on TRADING DAY  $t$ ;
- $k$  = each TRADING DAY starting 502 TRADING DAYS prior to TRADING DAY  $t$  to, and including, TRADING DAY  $t$ ; and
- $\overline{Comp}_i(t)$  = the average of the values of PRINCIPAL COMPONENT  $i$  calculated on TRADING DAY  $t$  over the 503 TRADING DAYS immediately preceding on TRADING DAY  $t$  (included), calculated according to the following formula:

$$\overline{Comp}_i(t) = \frac{\sum_{k=t-502}^t Comp_i(k, t)}{503}$$



## The variance of the exponentially weighted returns:

The variance of each exponentially weighted return vector of each REFERENCE CONSTITUENT is calculated according to the following formula:

$$\sigma_{Equity,j}^2(t) = \frac{\sum_{k=t-502}^t (\tilde{R}_j(k,t) - \bar{R}_j(t))^2}{502}$$

Where:

- $\sigma_{Equity,j}^2(t)$  = the variance of the exponentially weighted return vector of REFERENCE CONSTITUENT j on TRADING DAY t;
- $j$  = each REFERENCE CONSTITUENT;
- $\tilde{R}_j(k,t)$  = the variance of the exponentially weighted return vector of REFERENCE CONSTITUENT j on TRADING DAY k with the exponential weighting based on TRADING DAY t; and
- $\bar{R}_j(t)$  = the average of the variance of the exponentially weighted returns of REFERENCE CONSTITUENT j calculated on TRADING DAY t over the previous 503 TRADING DAYS immediately preceding TRADING DAY t (included), calculated according to the following formula:

$$\bar{R}_j(t) = \frac{\sum_{k=t-502}^t \tilde{R}_j(k,t)}{503}$$

- $k$  = each TRADING DAY starting 502 TRADING DAYS before TRADING DAY t to, and including, TRADING DAY t.

## The Fragility Ratio:

After the Index Calculation Agent has calculated the variance of each PRINCIPAL COMPONENT and exponentially weighted return vector of each REFERENCE CONSTITUENT, the PRINCIPAL COMPONENTS are ranked from greatest variance to least variance. The Index Calculation Agent then takes the square root of the number of REFERENCE CONSTITUENTS (rounded up to the nearest whole number) and retains only that number of PRINCIPAL COMPONENTS. The PRINCIPAL COMPONENTS with the highest variance will be retained first (the retained PRINCIPAL COMPONENTS, the "**ELIGIBLE PRINCIPAL COMPONENTS**"). For example, if there were 64 REFERENCE CONSTITUENTS, only the 8 PRINCIPAL COMPONENTS with the greatest variance would be retained. Those 8 PRINCIPAL COMPONENTS would be deemed the **ELIGIBLE PRINCIPAL COMPONENTS**.

The Index Calculation Agent will then calculate the fragility ratio based on the variance of the **ELIGIBLE PRINCIPAL COMPONENTS** and the exponentially weighted return vectors of the REFERENCE CONSTITUENTS.

First, the Index Calculation Agent will (i) sum the variances of the **ELIGIBLE PRINCIPAL COMPONENTS** (such sum, the "**AGGREGATE ELIGIBLE PRINCIPAL COMPONENT VARIANCE**") and (ii) sum the variances of the exponentially



weighted return vectors of the REFERENCE CONSTITUENTS (such sum, the “**AGGREGATE REFERENCE CONSTITUENT VARIANCE**”). The fragility ratio is equal to the quotient of the AGGREGATE ELIGIBLE PRINCIPAL COMPONENT VARIANCE divided by the AGGREGATE REFERENCE CONSTITUENT VARIANCE and represents the portion of the variance that is explained by the ELIGIBLE PRINCIPAL COMPONENTS.

The Fragility Ratio is calculated according to the following formula:

$$FR(t) = \frac{\sum_{i=1}^n \sigma_{Comp,i}^2(t)}{\sum_{j=1}^N \sigma_{Equity,j}^2(t)}$$

Where:

- **$FR(t)$**  = the fragility ratio on TRADING DAY t;
- **$n = \sqrt{N}$** , rounded up to the nearest whole number;
- **$N$**  = the number of REFERENCE CONSTITUENTS;
- **$i$**  = each ELIGIBLE PRINCIPAL COMPONENT;
- **$j$**  = each REFERENCE CONSTITUENT;
- **$\sigma_{Comp,i}^2(t)$**  = the variance of ELIGIBLE PRINCIPAL COMPONENT  $i$  on TRADING DAY t; and
- **$\sigma_{Equity,j}^2(t)$**  = the variance of the exponentially weighted return vector of REFERENCE CONSTITUENT  $j$  on TRADING DAY t.
- 

### The Z-score:

The Index Calculation Agent will then calculate the fragility ratio in the same manner for each of the prior 252 TRADING DAYS and will calculate two average fragility ratios, a 15 TRADING DAY average fragility ratio and a one year (252 TRADING DAY) average fragility ratio. The Index Calculation Agent will then calculate the standard deviation of the fragility ratios over the previous 252 TRADING DAYS. This standard deviation is calculated in several steps. First, the Index Calculation Agent will calculate the fragility ratio on each of the previous 252 TRADING DAYS. After the Index Calculation Agent has collected these fragility ratios, it will then calculate the average of these fragility ratios. For each of the applicable TRADING DAYS, the Index Calculation Agent will then subtract the average fragility ratio from each day's fragility ratio and square the result. Finally, the results for each applicable TRADING DAY are summed and such sum is divided by 251 (equal to the 252 TRADING DAY review period minus 1). The standard deviation is equal to the square root of this quotient. The standard deviation of the one-year fragility ratio is then used to calculate the z-score estimate. The previously calculated 252 TRADING DAY fragility ratio is subtracted from the previously calculated 15 TRADING DAY Fragility Ratio. The difference is then divided by the 252 TRADING DAY standard deviation, normalizing the fragility ratio, and resulting in the z-score estimate.



The z-score estimate is calculated according to the following formula:

$$\Delta(t) = \frac{(FR_{15\text{ Day}}(t) - FR_{1\text{ year}}(t))}{\sigma(t)}$$

Where:

- $\Delta(t)$  = the z-score estimate on TRADING DAY t;
- $FR_{15\text{ Day}}(t)$  = the 15 TRADING DAY average of the fragility ratio on TRADING DAY t, calculated according to the following formula:

$$FR_{15\text{ Day}}(t) = \frac{\sum_{k=t-14}^t FR(k)}{15}$$

- $FR(k)$  = the fragility ratio on TRADING DAY k;
- k = each TRADING DAY starting 14 TRADING DAYS before TRADING DAY t to, and including, TRADING DAY t;
- $FR_{1\text{ year}}(t)$  = the 252 TRADING DAY average of the fragility ratio on TRADING DAY t, calculated according to the following formula:

$$FR_{1\text{ year}}(t) = \frac{\sum_{k=t-251}^t FR(k)}{252}$$

- $FR(k)$  = the fragility ratio on TRADING DAY k;
  - o k = each TRADING DAY starting 251 TRADING DAYS before TRADING DAY t to, and including, TRADING DAY t;
- $\sigma(t)$  = the standard deviation of the fragility ratio over the immediately preceding 252 TRADING DAYS on TRADING DAY t, calculated according to the following formula:

$$\sigma(t) = \sqrt{\frac{\sum_{k=t-251}^t (FR(k) - \overline{FR}(t))^2}{251}}$$

- $FR(k)$  = the fragility ratio on TRADING DAY k;
- k = each TRADING DAY starting 251 TRADING DAYS before TRADING DAY t to, and including, TRADING DAY t;
- $\overline{FR}(t)$  = the average fragility ratio over 252 TRADING DAYS on TRADING DAY t, calculated according to the following formula:

$$\overline{FR}(t) = \frac{\sum_{k=t-251}^t FR(k)}{252}$$

### The Fragile, Stable and Resilient Regimes:

The z-score estimate is then used to determine the applicable regime: Fragile, Stable or Resilient (each, a "REGIME"), and to allocate the BASE PORTFOLIO's exposure among the INDEX COMPONENTS. The applicable z-score estimates, REGIMES and allocations/weights of the INDEX COMPONENTS are set forth in the tables below. If on any TRADING DAY the z-score estimate indicates a new REGIME, the BASE PORTFOLIO's exposure will be



reallocated over a five TRADING DAY period starting on, and including, the second TRADING DAY following the TRADING DAY on which the z-score estimate indicates that a new REGIME is required (the "REALLOCATION PERIOD"). Accordingly, on each TRADING DAY during the REALLOCATION PERIOD, the reallocated weights of each relevant INDEX COMPONENT will equal the average of the target weight over the 5 previous TRADING DAYS (including the current TRADING DAY). If the z-score estimate determines a new REGIME on any TRADING DAY after the TRADING DAY on which the z-score estimate indicates that a new REGIME is required, the BASE PORTFOLIO's exposure will be reallocated over a new REALLOCATION PERIOD.

Z-Score Estimate	REGIME
Greater than 1	Fragile
Between 1 and -1	Stable
Less than -1	Resilient

### Weighting of the Index Components:

On each TRADING DAY, the INDEX COMPONENTS are weighted according to the applicable REGIME. The BASE PORTFOLIO's exposure to the INDEX COMPONENTS is rebalanced each TRADING DAY in order to keep the BASE PORTFOLIO's exposure to each INDEX COMPONENT equal to the weights assigned by the applicable REGIME.

	Solactive 10-Year U.S. Treasury Future 2 Index TR	Solactive US Free Cash Flow Yield Index NTR	Solactive US Momentum Index NTR
Fragile Regime	100%	0%	0%
Stable Regime	50%	50%	0%
Resilient Regime	50%	0%	50%

## 2.3. ALLOCATION BETWEEN THE BASE PORTFOLIO AND THE MONEY MARKET POSITION



On each TRADING DAY, the exposure of the INDEX between the BASE PORTFOLIO and the MONEY MARKET POSITION is allocated based on the realized volatility of the BASE PORTFOLIO on the prior TRADING DAY. Accordingly, on each TRADING DAY, the Index Calculation Agent calculates the weights between the BASE PORTFOLIO and the MONEY MARKET POSITION based on the following rules. First, the Index Calculation Agent will divide the TARGET VOLATILITY (or 6%) by the greater of the 20 TRADING DAY realized volatility and the 60 TRADING DAY realized volatility of the BASE PORTFOLIO on the previous TRADING DAY (or the "**PORTFOLIO RISK**", as further described below). The resulting percentage will be compared against 100%, and the lower value is the weighting allocation for the BASE PORTFOLIO. The weighting allocation for the MONEY MARKET POSITION is equal to 1 minus the BASE PORTFOLIO weighting allocation (i.e., the weights of the MONEY MARKET POSITION and the BASE PORTFOLIO will always sum to 100%).

### Exposure to the Base Portfolio:

The INDEX's exposure to the BASE PORTFOLIO is calculated according to the following formula:

$$Weight_{Risky}(t) = \text{Min} \left( 100\%, \frac{Target\ Volatility}{Portfolio\ Risk} \right)$$

Where:

- **Weight<sub>Risky</sub>(t)** = the INDEX's exposure to the BASE PORTFOLIO on TRADING DAY t;
- **Target Volatility** = 6%; and
- **Portfolio Risk** = the greater of the 20 TRADING DAY realized volatility and the 60 TRADING DAY realized volatility of the BASE PORTFOLIO on the previous TRADING DAY (or  $t - 1$ ).  
The PORTFOLIO RISK calculations details in the section "Realized Volatility".

### Exposure to the Money Market Position:

The INDEX's exposure to the MONEY MARKET POSITION is calculated according to the following formula:

$$Weight_{Safe}(t) = 1 - Weight_{Risky}(t)$$

Where:

- **Weight<sub>Safe</sub>(t)** = the INDEX's exposure to the MONEY MARKET POSITION on TRADING DAY  $t$ .
- **Weight<sub>Risky</sub>(t)** = the INDEX's exposure to the BASE PORTFOLIO on TRADING DAY  $t$ .



## The Base Portfolio's Daily Returns:

To calculate the Portfolio Risk on each TRADING DAY, the first step is to calculate the daily return of the BASE PORTFOLIO based on the daily return of each INDEX COMPONENT over the prior 60 TRADING DAYS. Accordingly, for each of the prior 60 TRADING DAYS, the daily return of each INDEX COMPONENT is multiplied by its reallocated weight in the BASE PORTFOLIO as measured two TRADING DAYS prior to the then current TRADING DAY, resulting in the weighted daily returns of each INDEX COMPONENT. For any given TRADING DAY within the prior 60 TRADING DAY period, the daily return of the BASE PORTFOLIO is equal to the sum of the weighted daily returns of each INDEX COMPONENT on such TRADING DAY (the "**BASE PORTFOLIO'S DAILY RETURN**").

The BASE PORTFOLIO'S DAILY RETURN is calculated according to the following formula:

$$DR(t, t') = \sum_{i=1}^3 \left[ \left( \frac{Level_i(t)}{Level_i(t-1)} - 1 \right) \times \widetilde{Weight}_i(t') \right]$$

Where:

- DR (t, t') = the BASE PORTFOLIO'S DAILY RETURN on TRADING DAY t;
- t' = the TRADING DAY that is two TRADING DAYS prior to TRADING DAY t;
- **Level<sub>i</sub>(t)** = the closing level of INDEX COMPONENT i on TRADING DAY t;
- **Level<sub>i</sub>(t - 1)** = the closing level of INDEX COMPONENT i on TRADING DAY t - 1;
- **Weight<sub>i</sub>(t')** = the weight of INDEX COMPONENT i on TRADING DAY t' calculated according to the following formula:

$$\widetilde{Weight}_i(t') = \frac{1}{5} \sum_{j=0}^4 Weight_i(t' - j)$$

- **Weight<sub>i</sub>(t' - j)** = the weight assigned on TRADING DAY (t' - j) according to its applicable REGIME.

## The Realized Volatility:

Once the BASE PORTFOLIO'S DAILY RETURNS are determined, the arithmetic average of the daily BASE PORTFOLIO'S logarithmic returns over the past 20 TRADING DAYS and over the past 60 TRADING DAYS (excluding the then current TRADING DAY) (each, a "**REVIEW PERIOD**") are calculated.

With respect to each TRADING DAY within the applicable REVIEW PERIOD, the Index Calculation Agent will then subtract the average of the logarithmic returns of the BASE PORTFOLIO'S DAILY RETURN over the applicable REVIEW PERIOD from the logarithmic return of the BASE PORTFOLIO'S DAILY RETURN on such TRADING DAY, and square the result. Accordingly, this calculation is repeated for each TRADING DAY in the applicable REVIEW





PERIOD, aggregated and multiplied by 252 (the number of TRADING DAYS in one year). The result is then divided by the number of TRADING DAYS in the applicable review period minus one (i.e., 19 or 59).

The square root of the quotient equals the BASE PORTFOLIO's realized volatility for the applicable REVIEW PERIOD, and the PORTFOLIO RISK is equal to the greater of the realized volatility of the BASE PORTFOLIO over the REVIEW PERIODS.

The Realized Volatility of the BASE PORTFOLIO over each of the REVIEW PERIODS is calculated according to the following formula:

$$\text{RealizedVolatility}_B = \sqrt{\frac{252}{B-1}} \times \sqrt{\sum_{k=t-B}^{t-1} (\ln(1 + DR(k, t')) - \overline{\text{LnDR}}(t-1, t'))^2}$$

Where:

- **RealizedVolatility<sub>B</sub>** = the realized volatility of the BASE PORTFOLIO calculated over the previous 20 TRADING DAYS and 60 TRADING DAYS prior to TRADING DAY t (excluded), where "B" is equal to 20 and 60, respectively.
- $\overline{\text{LnDR}}(t-1, t')$  means the average daily BASE PORTFOLIO logarithmic returns over the last B TRADING DAYS (excluding t) weighted as of TRADING DAY t', calculated according to the following formula:

$$\overline{\text{LnDR}}(t-1, t') = \frac{1}{B} \sum_{k=t-B}^{t-1} \ln(1 + DR(k, t'))$$

- $DR(k, t')$  means on each TRADING DAY k, the daily BASE PORTFOLIO'S DAILY RETURN calculated according to the following formula:

$$DR(k, t') = \sum_{i=1}^3 \left[ \left( \frac{\text{Level}_i(k)}{\text{Level}_i(k-1)} - 1 \right) \times \widetilde{\text{Weight}}_i(t') \right]$$

- $t'$  = the TRADING DAY that is two TRADING DAYS prior to TRADING DAY t;
- $\text{Level}_i(k)$  = the closing level of INDEX COMPONENT i on TRADING DAY k;
- $\text{Level}_i(k-1)$  = the closing level of INDEX COMPONENT i on TRADING DAY  $k-1$ ;



- $\widetilde{Weight}_i(t')$  = the weight of INDEX COMPONENT  $i$  on TRADING DAY  $t'$  calculated according to the following formula:

$$\widetilde{Weight}_i(t') = \frac{1}{5} \sum_{j=0}^4 Weight_i(t' - j)$$

- $Weight_i(t' - j)$  = the weight assigned on TRADING DAY  $(t' - j)$  according to its applicable REGIME.

## 2.4. ORDINARY REBALANCE

The Ordinary Rebalancing is algorithmically performed (section 2.2 – Allocation of INDEX COMPONENTS in the BASE PORTFOLIO)

## 2.5. EXTRAORDINARY REBALANCE

The INDEX is not rebalanced extraordinarily.



## 3. CALCULATION OF THE INDEX

### 3.1. INDEX FORMULA

On each TRADING DAY, The Index Calculation Agent shall calculate first the value of the USD net excess return of the NET TOTAL RETURN PORTFOLIO, referred to as LASERUSD(t) in this section below "The Calculation of the LASERUSD value". Then the Index Calculation Agent will apply the FX hedging mechanism (se described in section 3.b) to calculate the value of the LASERJPY Index.

$$\text{Index}(t) = (1 + \text{FXhedge}(t)) \times \text{Index}(t - 1)$$

To calculate the INDEX's level, on each TRADING DAY, the Index Calculation Agent must calculate and apply the FX hedging mechanism to the performance of the LASERUSD, net of bid-offer on the FX RATE. The INDEX is an excess net total return strategy, the FX hedging is simply calculated by the following formulas:

$$\text{FXhedge}(t) = \text{LASERUSD Return}(t) \times \frac{\text{FX}(t)}{\text{FX}(t - 1)} - \text{FXTC}(t)$$

where :

- $\text{LASERUSD Return}(t) = \frac{\text{LASERUSD}(t)}{\text{LASERUSD}(t-1)} - 1$
- $\text{FXTC}(t) = \text{FXBO} \times \text{ABS}[\text{LASERUSD Return}(t)] \times \frac{\text{FX}(t)}{\text{FX}(t-1)}$
- $\text{FXBO} = 0.03\%$
- FX(t) is the level of the FX RATE on the TRADING DAY t
- LASERUSD(t) is the level of LASERUSD on the TRADING DAY t (as determined in section below "The Calculation of the LASERUSD value").
- FXTC(t) being the FX transaction due to a bid-offer applicable on the FX RATE (such bid offer being equal to FXBO above).



## The Calculation of the LASERUSD value

The LASERUSD is a net excess return index. From the Index Inception Date (excluded), the LASERUSD is calculated on each TRADING DAY according to the following formula:

$$\text{LASERUSD}(t) = (1 + \text{ER}(t)) \times \text{LASERUSD}(t - 1)$$

The initial level of LASERUSD is 100 (i.e on Inception Date)

To calculate the ER level, on each TRADING DAY, the Index Calculation Agent calculates the total return performance of the NET TOTAL RETURN PORTFOLIO and then reduces such performance by an amount based on the NOTIONAL INTEREST RATE and INDEX COSTS of 0.50% per annum (the "**INDEX COSTS**").

To calculate the total return performance of the NET TOTAL RETURN PORTFOLIO, the Index Calculation Agent will calculate the weighted return of both the BASE PORTFOLIO and the MONEY MARKET POSITION. The weighted return of the BASE PORTFOLIO will equal its daily return multiplied by its weighting allocation, each calculated as described above.

The MONEY MARKET POSITION's weighted return will be calculated as the product of its weighting allocation (as calculated above) times the applicable NOTIONAL INTEREST RATE times the quotient of (i) the number of elapsed TRADING DAYS divided by (ii) 360. This is designed to mimic the interest accrued on a similar cash account.

The return of the NET TOTAL RETURN PORTFOLIO is equal to the sum of the weighted return of the BASE PORTFOLIO and the weighted return of the MONEY MARKET POSITION.

## Performance of the Net Total Return Portfolio:

The total return performance of the NET TOTAL RETURN PORTFOLIO is calculated according to the following formula:

$$\text{TR}(t) = \text{Weight}_{\text{Risky}}(t - 1) \times \text{DR}(t) + \text{Weight}_{\text{Safe}}(t - 1) \times \text{L}(t - 1) \times \frac{\text{Day}(t - 1, t)}{360}$$

Where:

- **TR(t)** = the NET TOTAL RETURN PORTFOLIO's total return performance on TRADING DAY t;
- **Weight<sub>Risky</sub>(t - 1)** = the INDEX's exposure to the BASE PORTFOLIO on the TRADING DAY prior to TRADING DAY t;



- **$Weight_{safe}(t - 1)$**  = the INDEX's exposure to the MONEY MARKET POSITION on the TRADING DAY prior to TRADING DAY t;
- **$L(t - 1)$**  = the NOTIONAL INTEREST RATE on the TRADING DAY prior to TRADING DAY t;
- **$Day(t - 1, t)$**  = the number of calendar days between TRADING DAY t and the immediately prior TRADING DAY t - 1;
- **$DR(t)$**  = the performance daily return of the BASE PORTFOLIO on TRADING DAY t, calculated according to the following formula:

$$DR(t) = \sum_{i=1}^3 \left[ \left( \frac{Level_i(t)}{Level_i(t-1)} - 1 \right) \times \widetilde{Weight}_i(t-3) \right]$$

- **$Level_i(t)$**  = the closing level of INDEX COMPONENT i on TRADING DAY t.
- **$\widetilde{Weight}_i(t)$**  = the weight of INDEX COMPONENT i on TRADING DAY t calculated according to the following formula:

$$\widetilde{Weight}_i(t) = \frac{1}{5} \sum_{j=0}^4 Weight_i(t-j)$$

- **$Weight_i(t)$**  = the weight assigned to INDEX COMPONENT i on a TRADING DAY t according to its applicable REGIME.

### Performance of the Excess Return Portfolio:

Once the total return performance of the NET TOTAL RETURN PORTFOLIO has been calculated, the Index Calculation Agent will calculate the excess return performance of the NET TOTAL RETURN PORTFOLIO by calculating representative amounts of fees and lost interest. Specifically, the Index Calculation Agent will calculate the representative interest by multiplying the applicable NOTIONAL INTEREST RATE by the quotient of (i) the number of elapsed days divided by (ii) 360 and will calculate the representative costs by multiplying the INDEX COSTS of 0.50% by the quotient of (i) the number of elapsed days divided by (ii) 365. The excess return performance of the NET TOTAL RETURN PORTFOLIO is equal to its total return performance minus the representative interest and the representative fees.

The excess return performance of the NET TOTAL RETURN PORTFOLIO is calculated according to the following formula:

$$ER(t) = TR(t) - L(t-1) \times \frac{Day(t-1, t)}{360} - \frac{Day(t-1, t)}{365} \times Index\ Costs$$

ER(t) = the NET TOTAL RETURN PORTFOLIO's excess return performance on TRADING DAY t;



$TR(t)$  = the NET TOTAL RETURN PORTFOLIO's total return performance on TRADING DAY  $t$ ;

$L(t - 1)$  = the NOTIONAL INTEREST RATE on the TRADING DAY prior to TRADING DAY  $t$ ;

$Day(t - 1, t)$  = the number of calendar days between TRADING DAY  $t$  and the immediately prior TRADING DAY  $t - 1$ ; and

Index Costs = 0.50%.

Finally, the Index Calculation Agent will calculate the level of the INDEX by multiplying the sum of the excess return performance of the NET TOTAL RETURN PORTFOLIO and one by the level of the INDEX on the prior TRADING DAY.

## 3.2. ACCURACY

The level of the INDEX will be rounded to 2 decimal places.

## 3.3. RECALCULATION

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

If a published level of an INDEX COMPONENT which is used or should be used for any calculation or determination of the INDEX level by the Index Calculation Agent is subsequently corrected by its sponsor or by its official publication source and such correction is published within 2 TRADING DAYS from the initial publication, the Index Calculation Agent shall take such correction into account when calculating the INDEX level.

Such correction will be announced within 2 TRADING DAYS or as soon as is reasonably practicable and will be published by the INDEX SPONSOR on <https://www.loomissayles.com/website/institutional/Loomis-Sayles-Asset-Selector-EquityRotation-Index>



## 4. PRICE DISRUPTIONS, INDEX ADJUSTMENTS, SUCCESSOR

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

### 4.1. PRICE SOURCE DISRUPTIONS

On any TRADING DAY on which the level of an INDEX COMPONENT or the NOTIONAL INTEREST RATE or the FX RATE is scheduled to be published but such level is not actually published, the Index Calculation Agent will calculate the level of the INDEX using the last level that is available for such INDEX COMPONENT or the NOTIONAL INTEREST RATE or the FX RATE, as applicable. If such level is not published for five successive TRADING DAYS, the Index Calculation Agent will determine if an Index Adjustment Event (as defined below) has occurred.

If an Index Adjustment Event has occurred, section 4.3 below shall apply. If an Index Adjustment Event has not occurred, the Index Calculation Agent will either:

- (i) Continue calculating the level of the INDEX using the last level of such INDEX COMPONENT or the NOTIONAL INTEREST RATE or FX RATE, as applicable, that is available; or
- (ii) if the Index Calculation Agent determines using the last available level is not commercially reasonable, calculate the level of the INDEX using its good faith estimate of the level of such INDEX COMPONENT or the NOTIONAL INTEREST RATE or FX RATE, as applicable, on such day had no disruption in publication occurred.

### 4.2. FX RATE EXTRAORDINARY EVENTS

- (i) A Conversion Currency Extraordinary Event occurs if the currency of an INDEX COMPONENT or the NOTIONAL INTEREST RATE which was prior legal tender in the country or the zone concerned is subsequently removed, converted, reissued, exchanged or otherwise replaced in favor of a successor currency becoming legal tender in the country or zone concerned. In case of the occurrence of a Conversion Currency Extraordinary Event, the Index Calculation Agent shall proceed with the conversion of the original currency into



the successor currency, using the conversion or exchange rate established, recognized and used for these purposes by the country or the zone concerned, on the latest date on which the removal, conversion, reissue, exchange or replacement concerned occurred.

- (ii) In the event the FX RATE is not published by Bloomberg but by a third party which is accepted by the Index Calculation Agent, or is replaced by another FX RATE whose characteristics (including the time of fixing) are substantially similar, according to the Index Calculation Agent, then this new FX RATE will replace the existing FX RATE.

### 4.3. DISCONTINUATION OF THE NOTIONAL INTEREST RATE

The NOTIONAL INTEREST RATE will be 3-month USD LIBOR, as displayed on Reuters screen "LIBOR01", or such other page as may replace the Reuters screen "LIBOR01" on the Reuters service or such other service or services as may be nominated for the purpose of displaying London interbank offered rates for U.S. dollar deposits by ICE Benchmark Administration Limited ("IBA") or its successor or such other entity assuming the responsibility of IBA or its successor in calculating the London interbank offered rate in the event IBA or its successor no longer does so.

If the Index Calculation Agent determines at any time that 3-month USD LIBOR has been discontinued, it will, as soon as reasonably practicable, appoint an agent (the "Rate Determination Agent"), which will determine whether a substitute or successor NOTIONAL INTEREST RATE substantially comparable to 3-month USD LIBOR is available. If the Rate Determination Agent determines that there is an industry-accepted successor NOTIONAL INTEREST RATE, the Rate Determination Agent will designate such successor NOTIONAL INTEREST RATE as the Replacement Benchmark (as defined below) to determine the NOTIONAL INTEREST RATE. For these purposes, a rate that is formally recommended by a relevant central bank, reserve bank, monetary authority or any similar institution (including any committee or working group thereof) for U.S. dollars or any supervisory authority which is responsible for supervising the administrator of USD LIBOR will be considered an industry-accepted successor rate. If the Rate Determination Agent has determined a substitute or successor NOTIONAL INTEREST RATE in accordance with the foregoing (such benchmark, the "Replacement Benchmark") for purposes of determining the NOTIONAL INTEREST RATE on or after the date of such determination but not earlier than the actual discontinuation of USD LIBOR, (i) the Rate Determination Agent will also determine changes (if any) to the business day convention, the definition of business day, the day count fraction and any method for obtaining the Replacement Benchmark, including the relevant screen page or reference bank methodology, and any adjustment factor needed to make such Replacement Benchmark comparable to USD LIBOR, in each case in a manner that is consistent with industry-accepted practices for such Replacement Benchmark; (ii) references to the NOTIONAL INTEREST RATE in this methodology will be deemed to be references to the NOTIONAL INTEREST RATE determined on the basis of the Replacement Benchmark, including any alternative method for determining such rate as described





in (i) above; and (iii) the Rate Determination Agent will notify the Index Calculation Agent of the foregoing as soon as reasonably practicable. The determination of the Replacement Benchmark and the other matters referred to above by the Rate Determination Agent will (in the absence of manifest error) be final and binding on the Index Calculation Agent.

#### 4.4. INDEX ADJUSTMENT EVENTS

An "Index Adjustment Event" means any of the following:

- a. Any license or permission to use any INDEX COMPONENT or the NOTIONAL INTEREST RATE or the FX RATE is withdrawn, terminated or otherwise unavailable;
- b. permanent discontinuance or unavailability of the level of an INDEX COMPONENT or an announcement that an INDEX COMPONENT or the NOTIONAL INTEREST RATE or the FX RATE is to be permanently discontinued (and, with respect to an INDEX COMPONENT, no successor exists); and
- c. the sponsor of an INDEX COMPONENT cancels such INDEX COMPONENT, announces a material change in the methodology of such INDEX COMPONENT or materially modifies the INDEX COMPONENT. If the Index Calculation Agent determines that an Index Adjustment Event has occurred, the Index Sponsor will determine which of the following adjustments will best preserve the strategy and objectives of the INDEX. The Index Sponsor will notify the Index Calculation Agent of its determination and the Index Calculation Agent will make the applicable adjustment.

Potential Adjustments include:

- a. Substitution of a successor for the applicable INDEX COMPONENT or NOTIONAL INTEREST RATE or the FX RATE which shall be deemed to be the affected INDEX COMPONENT or NOTIONAL INTEREST RATE or FX RATE for purposes of calculating the level of the INDEX;
- b. Removal of the applicable INDEX COMPONENT and calculation of the level of the INDEX without such INDEX COMPONENT;
- c. Removal of the NOTIONAL INTEREST RATE and calculation of the level of the INDEX using the last available level of the NOTIONAL INTEREST RATE;
- d. Substitution of a substantially similar index or rate of currency exchange rate, as applicable, for the affected INDEX COMPONENT or NOTIONAL INTEREST RATE or FX RATE; and
- e. Termination of the INDEX.

#### 4.5. SUCCESSOR



If an INDEX COMPONENT is (i) not calculated and announced by its respective index calculation agent but is calculated and announced by a successor calculation agent acceptable to the Index Sponsor, or (ii) replaced by a successor index using, in the determination of the Index Sponsor, the same or a substantially similar formula for and method of calculation as used in the calculation of such INDEX COMPONENT, then in each case that index (the "Successor Index") will be deemed to be the INDEX COMPONENT.

Announcements with respect to adjustments made under this Section 4 will be made within 2 TRADING DAYS or as soon as is reasonably practicable and will be published by the Index Sponsor on <https://www.loomissayles.com/websiteuat/institutional/Loomis-Sayles-Asset-Selector-EquityRotation-Index>.

## 5. RISK FACTORS

### **The INDEX and the INDEX COMPONENTS were recently launched and have limited operating history.**

The INDEX was launched on March 16, 2020 and therefore has limited historical performance. The INDEX COMPONENTS have also recently launched and have similarly limited historical performance. As a result, limited actual historical performance information is available for you to consider in making an independent investigation of the INDEX, which may make it difficult for you to evaluate the historical performance of the INDEX and make an informed investment decision than would be the case if the indices had a longer trading history.

Any performance information provided for the INDEX prior to March 16, 2020 in this document has been retrospectively simulated on a hypothetical basis, meaning that no actual investment which allowed a tracking of the performance of the INDEX existed at any time during the period of the retrospective simulation. The methodology of the INDEX used for the calculation and retrospective simulation of the INDEX has been developed with the advantage of hindsight. In reality, it is not possible to invest with the advantage of hindsight and therefore any hypothetical retrospective performance is purely theoretical and may not be indicative of future performance. You should not place undue reliance on any simulated data, and it must be considered illustrative only.

### **The INDEX is a net excess return index.**



The INDEX tracks the returns of its components, including price returns and the reinvestment of dividends, net of certain withholding taxes and 3-month USD LIBOR. As a result, the return on the INDEX will be less than the return on an excess return version of the index which would reflect the reinvestment of all dividends without consideration of any withholding taxes. Additionally, the INDEX incorporates the INDEX COSTS of 0.50% per annum and transaction costs and replications costs.

**The strategy tracked by the INDEX and the INDEX COMPONENTS and the views implicit in the INDEX and the INDEX COMPONENTS are not guaranteed to succeed.**

The strategy tracked by the INDEX and the INDEX COMPONENTS is not guaranteed to be successful. It is impossible to predict whether and the extent to which a given INDEX COMPONENT or its underlying constituents will yield positive or negative results. The INDEX allocates exposure among the INDEX COMPONENTS based on historical economic relationships which may not hold true in the future. You should seek your own advice as necessary to assess the INDEX and its strategy.

The INDEX is a dynamic portfolio consisting of the INDEX COMPONENTS and a U.S. dollar cash account, converted to JPY and hedged against currency variations. The INDEX seeks to maintain an annualized realized volatility approximately equal to the TARGET VOLATILITY of 6.0% by rebalancing its exposures to the BASE PORTFOLIO and the MONEY MARKET POSITION on each day based on two measures of realized portfolio volatility: a shorter-term volatility measure and a longer-term volatility measure. Each volatility measure reflects an exponentially weighted moving average, meaning that greater weight is assigned to more recent performance and less weight is assigned to less recent performance. By seeking to maintain an annualized realized volatility approximately equal to the TARGET VOLATILITY, the INDEX may underperform an alternative strategy that seeks to maintain a higher or lower annualized realized volatility or an alternative strategy that does not seek to maintain a level volatility.

In addition, the INDEX will reallocate the BASE PORTFOLIO's exposure among the INDEX COMPONENTS based on the realized variance, calculated based on the exponentially weighted moving average, of a sample of large cap U.S. equities (the constituent stocks of the REFERENCE INDEX with a minimum return history). This variance is used to calculate the current fragility REGIME. When the REGIME classification is resilient, the INDEX allocates exposure to both the Solactive 10-Year U.S. Treasury Future 2 Index (expected to be comparatively less volatile than the other INDEX COMPONENTS) and the Solactive US Momentum Index NTR (expected to be comparatively volatile). When the REGIME classification is stable, the LASER indicates exposure to both the Solactive 10-Year U.S. Treasury Future 2 Index and the Solactive US Free Cash Flow Yield Index NTR (expected to be more volatile than the Solactive 10-Year U.S. Treasury Future 2 Index but less volatile than the Solactive US Momentum Index NTR). Finally, when the REGIME classification is fragile, the LASER indicates exposure to the Solactive 10-Year U.S. Treasury Future 2 Index. Because the Regime is



calculated by reference to underlying stocks included in the REFERENCE INDEX, which is not an INDEX COMPONENT, such variance may not be indicative of the current variance or volatility of any of the INDEX COMPONENTS. Additionally, these allocation rules were chosen based on economic assumptions. It is impossible to predict the extent to which these assumptions will hold true in the future and whether they will produce positive INDEX performance.

**The INDEX may not approximate the TARGET VOLATILITY.**

No assurance can be given that the INDEX will maintain an annualized realized volatility that approximates the TARGET VOLATILITY, and the actual realized volatility of the INDEX may be greater or less than the TARGET VOLATILITY. The INDEX seeks to maintain an annualized realized volatility approximately equal to the TARGET VOLATILITY of 6.0% by rebalancing its exposures to the BASE PORTFOLIO and the MONEY MARKET POSITION on each day based on two measures of realized volatility (and between the INDEX COMPONENTS included in the BASE PORTFOLIO, each of which has a different expected volatility, based on measures of realized variance). However, there is no guarantee that trends exhibited by any such measures will continue in the future. The volatility of a portfolio on any day may change quickly and unexpectedly. Accordingly, the actual realized annualized volatility of the INDEX on a daily basis may be greater than or less than the TARGET VOLATILITY, which may adversely affect the level of the INDEX.

**The method by which the INDEX rebalances its exposure among the INDEX COMPONENTS and the REALLOCATION PERIOD may negatively affect the INDEX's ability to approximate the TARGET VOLATILITY.**

On each TRADING DAY, the Index Calculation Agent will determine whether to rebalance the INDEX's exposure among the INDEX COMPONENTS in accordance with the REGIME classifications as described above. However, any determination to reallocate the exposure among the INDEX COMPONENTS will not occur immediately. Any reallocation will occur over a five TRADING DAY REALLOCATION PERIOD beginning on the second TRADING DAY following the Index Calculation Agent's determination that a new REGIME classification is required. This delay between the observed REGIME change and reallocation between the INDEX COMPONENTS may negatively affect the INDEX's ability to achieve the TARGET VOLATILITY and the INDEX's return.

**The INDEX rebalances its exposure among the INDEX COMPONENTS. As a result, exposure to the BASE PORTFOLIO and each INDEX COMPONENT may be limited and the performance of the INDEX may be adversely affected.**

The INDEX rebalances daily between the BASE PORTFOLIO and the MONEY MARKET POSITION and among the INDEX COMPONENTS within the BASE PORTFOLIO. As a result of the daily weight allocation between the MONEY MARKET



POSITION, the INDEX may reduce its exposure to the BASE PORTFOLIO (and therefore its exposure to the INDEX COMPONENTS) in favor of increasing its exposure to the MONEY MARKET POSITION. This rebalance may occur even where returns on the MONEY MARKET POSITION may be significantly lower than the returns on the BASE PORTFOLIO and the applicable INDEX COMPONENTS, which will adversely affect the levels of the INDEX. Furthermore, even when the INDEX allocates significant exposure to the BASE PORTFOLIO, the INDEX may allocate exposure only to one or two of the INDEX COMPONENTS depending on the current regime. The allocation between the INDEX COMPONENTS is made based upon historical financial measures, and the INDEX may allocate exposure to an INDEX COMPONENT that has significantly lower returns than another INDEX COMPONENT, and possibly even negative returns while the returns of the other INDEX COMPONENTS are positive, based on such measures. Despite the inclusion of the INDEX COMPONENTS in the INDEX, the performance of one or more INDEX COMPONENTS may have little or no effect on the performance of the INDEX on any particular day, and exposure may be allocated to the MONEY MARKET POSITION or to a particular INDEX COMPONENT even when the BASE PORTFOLIO or another INDEX COMPONENT is performing more favorably. These allocation rules could lower the performance of the INDEX versus a strategy that was not subject to periodic rebalancing between the INDEX COMPONENTS.

**The lower performance of one INDEX COMPONENT may offset increases in other INDEX COMPONENTS.**

At a time when the value of one INDEX COMPONENT increases, the value of another INDEX COMPONENT may not increase as much or may even decline. This may offset the potentially positive effect of the performance of the former INDEX COMPONENT on the performance of the INDEX. Accordingly, it is possible that the value of the INDEX may decline even if the value of one or more of its INDEX COMPONENTS rises, because of the offsetting effect of a decline in another INDEX COMPONENT. As a result, the INDEX may not perform as well as an alternative index that tracks only one INDEX COMPONENT.

**Changes affecting the INDEX COMPONENTS could have an adverse effect on the level of the INDEX.**

The policies of the sponsors of the INDEX COMPONENTS with respect to the calculation of and adjustments to the applicable index may adversely affect the level of the INDEX. Each index sponsor may discontinue or suspend calculation or dissemination of such index or modify the methodology of such index at any time. Each INDEX SPONSOR may also substitute any stock with a successor stock on account of extraordinary events, corporate events, market disruption events, a merger, a takeover bid, a delisting, insolvency or the nationalization of a company. Any such actions may have an adverse effect on the level of the applicable INDEX COMPONENT, and therefore on the level of the INDEX, and/or could result in adjustments to the INDEX.



### **The INDEX is exposed to equity risk, including from mid-capitalization companies.**

The INDEX is linked to the performance of the INDEX COMPONENTS, which include the INDEX COMPONENTS, and indirectly linked to the performance of the INDEX COMPONENTS of the INDEX COMPONENTS which include U.S. large-capitalization and mid-capitalization stocks (the "UNDERLYING EQUITY CONSTITUENTS"). The level of the applicable INDEX COMPONENTS, and therefore the INDEX, can rise or fall sharply due to factors specific to the UNDERLYING EQUITY CONSTITUENTS, such as stock price volatility, earnings and financial conditions, corporate, industry and regulatory developments, management changes and decisions and other events, as well as general market factors, such as general market volatility and levels, interest rates and economic and political conditions.

Furthermore, as the UNDERLYING EQUITY CONSTITUENTS include mid-capitalization stocks, the return on the INDEX is also subject to additional risks as these companies often have greater stock price volatility, lower trading volume and less liquidity than large-capitalization companies. Stock prices of mid-capitalization companies are also more vulnerable than those of large-capitalization companies to adverse business and economic developments, and the stocks of mid-capitalization companies may be thinly traded, making it difficult for the relevant INDEX COMPONENTS to track them. In addition, mid-capitalization companies are typically less stable financially than large-capitalization companies and may depend on a small number of key personnel, making them more vulnerable to loss of personnel. Mid-capitalization companies are often subject to less analyst coverage and may be in early, and less predictable, periods of their corporate existences. Such companies tend to have smaller revenues, less diverse product lines, smaller shares of their product or service markets, fewer financial resources and less competitive strengths than large-capitalization companies and are more susceptible to adverse developments related to their products.

### **Risks related to the Solactive US Momentum Index NTR**

- **The Solactive US Momentum Index NTR may not successfully capture price momentum and there are risks associated with Solactive US Momentum Index NTR's momentum-based investing strategy.**

The Solactive US Momentum Index NTR is constructed using what is generally known as a momentum-based investment strategy. Momentum-based investing generally seeks to capitalize on positive trends in the prices of assets. As such, the composition of the Solactive US Momentum Index NTR is based on the historical performance of its UNDERLYING EQUITY CONSTITUENTS. However, there is no guarantee that trends existing in the preceding periods will continue in the future and,



as a result, if market conditions do not represent a continuation of prior observed trends, the level of the Solactive US Momentum Index NTR, which is rebalanced based on prior trends, may perform poorly or decline. No assurance can be given that the investment strategy used to construct the Solactive US Momentum Index NTR will outperform any alternative index.

In addition, the Solactive US Momentum Index NTR is constructed based on a modified market capitalization weighting methodology pursuant to which its UNDERLYING EQUITY CONSTITUENTS are selected and weights are based on factors including price momentum, volatility and market capitalization, subject to an overall weighting cap. It is possible that this weighting methodology will adversely affect the return of the Solactive US Momentum Index NTR. It is also possible that the volatility feature may limit the strategy's ability to track price momentum and may dampen the performance of the Solactive US Momentum Index NTR in bullish markets.

- **The Solactive US Momentum Index NTR may perform poorly during periods of increased short-term volatility.**

Trend-following methodologies, including momentum-based investing strategies, seek to benefit from identifying the current market direction in trending markets and may perform particularly poorly in "choppy" markets where they may be subject to "whipsaws." Choppy markets are characterized by short-term volatility and the absence of consistent long-term performance trends. In choppy markets, a whipsaw occurs when the market reverses and does the opposite of what is indicated by the trend indicator. The Solactive US Momentum Index NTR will perform poorly in these market conditions.

- **The Solactive US Momentum Index NTR is a net total return index.**

The Solactive US Momentum Index NTR tracks the returns of its UNDERLYING EQUITY CONSTITUENTS, including price returns and the reinvestment of dividends, net of certain withholding taxes. As a result, the return on the Solactive US Momentum Index NTR will be less than the return on a total return version of the index which would reflect the reinvestment of all dividends without consideration of any withholding taxes.

### **Risks related to the Solactive US Free Cash Flow Yield Index NTR**

- **There are risks associated with the Solactive US Free Cash Flow Yield Index NTR's strategy and its strategy may not be successful.**



The Solactive US Free Cash Flow Yield Index NTR seeks to select UNDERLYING EQUITY CONSTITUENTS with high free cash flow yield based on historic free cash flow and closing prices. However, there is no assurance that stocks with a high free cash flow yield will continue to have a high free cash flow yield or that the Solactive US Free Cash Flow Yield Index NTR will outperform any other index or strategy that tracks stocks selected using other criteria.

In addition, the Solactive US Free Cash Flow Yield Index NTR is constructed pursuant to a weighting methodology in which its UNDERLYING EQUITY CONSTITUENTS are weighted according to their inverse volatility. It is possible that this weighting methodology will adversely affect the return of the Solactive US Free Cash Flow Yield Index NTR. It is also possible that the volatility control features may limit the strategy's ability to track price momentum and may dampen the performance of the Solactive US Free Cash Flow Yield Index NTR in bullish markets.

- **The Solactive US Free Cash Flow Yield Index NTR is a net total return index.**

The Solactive US Free Cash Flow Yield Index NTR tracks the returns of its UNDERLYING EQUITY CONSTITUENTS, including price returns and the reinvestment of dividends, net of certain withholding taxes. As a result, the return on the Solactive US Free Cash Flow Yield Index NTR will be less than the return on a total return version of the index which would reflect the reinvestment of all dividends without consideration of any withholding taxes.

### **Risks related to the Solactive 10-Year U.S. Treasury Future 2 Index**

- **Changes in U.S. Treasury rates may affect the level of the INDEX.**

Because the value of the INDEX is linked, in part, to the Solactive 10-Year U.S. Treasury Future 2 Index which tracks the value of U.S. Treasury futures contracts, changes in U.S. Treasury rates may affect the level of the INDEX.

- **The Solactive 10-Year U.S. Treasury Future 2 Index may be affected by changes in the perceived creditworthiness of the United States.**





The price of U.S. Treasury futures contracts are significantly influenced by the creditworthiness of the United States. Any perceived decline in the creditworthiness of United States, as a result of a credit rating downgrade or otherwise, may cause the yield on the relevant underlying bonds to increase and the prices of such underlying bonds to fall, perhaps significantly, and may cause increased volatility in local or global credit markets. Any such decline would adversely impact the prices of the futures contracts tracked by the Solactive 10-Year U.S. Treasury Future 2 Index and, accordingly, the level of the INDEX.

- **The Solactive 10-Year U.S. Treasury Future 2 Index is subject to significant risks associated with futures contracts.**

The Solactive 10-Year U.S. Treasury Future 2 Index tracks the returns of futures contracts. The price of a futures contract depends not only on the price of the asset referenced by the futures contract, but also on a range of other factors, including but not limited to changing supply and demand relationships, interest rates, governmental and regulatory policies and the policies of the exchanges on which the futures contracts trade. In addition, the futures markets are subject to temporary distortions or other disruptions due to various factors, including the lack of liquidity in the markets, the participation of speculators and government regulation and intervention. These factors and others can cause the prices of futures contracts to be volatile and could adversely affect the level of the Solactive 10-Year U.S. Treasury Future 2 Index and, accordingly, the level of the INDEX.

- **Negative roll returns associated with futures contracts may adversely affect the performance of the Solactive 10-Year U.S. Treasury Future 2 Index.**

The Solactive 10-Year U.S. Treasury Future 2 Index notionally invests in U.S. Treasury futures contracts. As the contract that underlies the Solactive 10-Year U.S. Treasury Future 2 Index nears its expiration, it is replaced by a contract that has a later expiration. This process is referred to as "rolling." Excluding other considerations, if prices are higher in more distant delivery months than in nearer delivery months, the purchase of the later expiring contract would take place at a price that is higher than the price of the sooner expiring contract, thereby creating a negative "roll return," which could adversely affect the level of the Solactive 10-Year U.S. Treasury Future 2 Index and, accordingly, the level of the INDEX. In addition, interest rates have been historically low for an extended period and, if interest rates revert to their historic means, the adverse effect of negative roll returns will increase.



- **Suspension or disruptions of market trading in futures contracts may adversely affect the level of the INDEX.**

Futures markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, the participation of speculators, and government regulation and intervention. In addition, futures exchanges generally have regulations that limit the amount of futures contract price fluctuations that may occur in a single day. These limits are generally referred to as "daily price fluctuation limits" and the maximum or minimum price of a contract on any given day as a result of these limits is referred to as a "limit price." Once the limit price has been reached in a particular contract, no trades may be made at a price beyond the limit, or trading may be limited for a set period of time. Limit prices have the effect of precluding trading in a particular contract or forcing the liquidation of contracts at potentially disadvantageous times or prices. These circumstances could affect the level of the Solactive 10-Year U.S. Treasury Future 2 Index and, accordingly, the level of the INDEX.

### **Risks related to the embedded fees and LIBOR**

- **The NOTIONAL INTEREST RATE and the Costs will have a negative effect on the performance of the INDEX.**

In this section Costs means INDEX COSTS, Transaction Costs, Replication Costs and FX transaction costs.

The INDEX is a net excess return index. The return of the INDEX is determined by reference to the NET TOTAL RETURN PORTFOLIO (which embed Transaction Costs, Replication Costs and FX Transaction Costs) net of the sum of the NOTIONAL INTEREST RATE and the INDEX COSTS of 0.50% per annum. The NOTIONAL INTEREST RATE and the Costs will offset, in whole or in part, any positive performance and increase any negative performance of the NET TOTAL RETURN PORTFOLIO. As a result, any return on the INDEX may be reduced or eliminated.

- **The historical levels of the NOTIONAL INTEREST RATE are not an indication of the future levels of the NOTIONAL INTEREST RATE.**

In the past, the NOTIONAL INTEREST RATE has experienced significant fluctuations. You should note that historical levels, fluctuations and trends of the NOTIONAL INTEREST RATE are not necessarily



indicative of future levels. Any historical upward or downward trend in the NOTIONAL INTEREST RATE is not an indication that the NOTIONAL INTEREST RATE is more or less likely to increase or decrease at any time, and you should not take the historical levels of the NOTIONAL INTEREST RATE as an indication of its future performance.

- **LIBOR reform may adversely affect the level of the INDEX.**

The sustainability of LIBOR has been questioned by the U.K. Financial Conduct Authority ("FCA") as a result of the absence of relevant active underlying markets and possible disincentives (including possibly as a result of regulatory reforms) for market participants to continue contributing to such benchmarks. On July 27, 2017, the Chief Executive of the FCA, which regulates LIBOR, announced that the FCA intends to stop persuading or compelling banks to submit rates for the calculation of LIBOR after 2021. That announcement suggests that LIBOR may cease to be published after that time. Actions by regulators have resulted in the establishment of alternative reference rates to LIBOR in most major currencies. A discontinuance of LIBOR or a change in its method of calculation could have a material adverse effect on the level of the INDEX.

You should be aware that if LIBOR is changed or discontinued, then the level of the INDEX will be calculated for a period based on the fall-back provisions provided in the INDEX's methodology. There is no guarantee that any replacement rate used in the event that LIBOR is discontinued will perform in the same manner as would LIBOR. No assurance may be provided that LIBOR will continue to exist.

- **SOLACTIVE acting as the Index Calculation Agent and the Index Publication Agent**

SOLACTIVE, as the Index Calculation Agent and as the Index Administrator, has the authority to determine whether certain events affecting the INDEX as described herein have occurred including, but not limited to, Index Adjustment Events or events affecting the NOTIONAL INTEREST RATE.

Potential investors in any financial instrument of which the INDEX is an underlying ("LASER-linked Instruments") needs to be aware that any determination or calculation made by SOLACTIVE as Index Calculation Agent may affect the level of the INDEX and, as appropriate, the performance of the LASER-linked Instruments. The Index Calculation Agent has no obligation to consider the interest of investors in any LASER-linked Instruments when making any determination or calculation. Such discretion in the decisions taken by SOLACTIVE as Index Calculation Agent (in the absence of



manifest or proven error) are binding on all investors and holders of such LASER-linked Instruments.



## 6. DISCLAIMERS

### 6.1. IMPORTANT NOTICE

This document does not constitute an offer or a solicitation with respect to the purchase, sale or subscription of any interest or security or as an undertaking by the INDEX SPONSOR or the Index Calculation Agent to complete a transaction in any product based on the underlying(s) or strategy(ies) referred to herein.

### 6.2. PERFORMANCE OF THE INDEX

All information herein regarding the INDEX is derived from publicly available information. Such information reflects the policies of, and is subject to change by, the INDEX SPONSOR. The INDEX SPONSOR owns the copyright and all other rights to the INDEX. The INDEX SPONSOR has no obligation to continue to publish, and may discontinue publication of, the INDEX. Historical performance of the INDEX is not an indication of future performance. Future performance of the INDEX may differ significantly from historical performance, either positively or negatively.

The INDEX is a composite index developed by Loomis Sayles (together with its subsidiaries and affiliates, "Loomis Sayles") based in part on the Solactive US Momentum Index NTR, the Solactive US Free Cash Flow Yield Index NTR and the Solactive 10-Year U.S. Treasury Future 2 Index (collectively, the "Solactive Indices" and together with the INDEX, the "Indices").

Licenses to use the INDEX as the underlying for products ("Products") issued by stock exchanges, banks, financial services providers and investment houses or for benchmark usage may be granted by Loomis Sayles.

Any Products are not sponsored, operated, endorsed, recommended, sold or promoted by Loomis Sayles or SOLACTIVE (together with its subsidiaries and affiliates "SOLACTIVE"). Neither Loomis Sayles nor SOLACTIVE makes any representation or gives any warranty, express or implied, regarding the advisability or possible benefits of purchasing the Products or any other financial product. Investors should undertake their own due diligence and seek appropriate professional advice before purchasing any financial product, including the Products.



The Indices and other information disseminated by SOLACTIVE are for informational purposes only, are provided on an "as is" basis, and are not intended for trading purposes. Neither Loomis Sayles nor SOLACTIVE makes any warranty, express or implied, as to, without limitation, (i) the correctness, accuracy, reliability or other characteristics of the Indices, (ii) the results to be obtained by any person or entity from the use of the Indices for any purpose, or (iii) relating to the use of the Indices and other information covered by the Products, including, but not limited to, express or implied warranties of merchantability, fitness for a particular purpose or use, title or non-infringement. SOLACTIVE does not warrant that the Indices will be uninterrupted and is under no obligation to continue compiling, calculating, maintaining or sponsoring any of the Indices.

The Indices are determined, composed and calculated without regard to the Products. Neither Loomis Sayles nor SOLACTIVE will take the owners of the Products into consideration in determining, composing or calculating the Indices. Neither Loomis Sayles nor SOLACTIVE is responsible for or has participated in the determination of the timing of, prices at, or quantities of the Products to be issued or the terms thereof. Neither Loomis Sayles nor SOLACTIVE has any obligation or liability in connection with the administration, marketing or trading of the Products. Neither Loomis Sayles nor SOLACTIVE shall bear any responsibility or liability, whether for negligence or otherwise, with respect to (i) any inaccuracies, omissions, mistakes or errors in the methodology(ies) or formula(s) for, or computation of, the Indices (and shall not be obligated to advise any person of and/or to correct any such inaccuracies, omissions, mistakes or errors), (ii) the use of and/or reference to the Indices in connection with any financial product or otherwise, or (iii) any economic or other loss which may be directly or indirectly sustained by any client or other person dealing with any such financial product or otherwise. Any client or other person dealing with such financial products does so, therefore, in full knowledge of this disclaimer and can place no reliance whatsoever on Loomis Sayles or SOLACTIVE nor bring claims, actions or legal proceedings in any manner whatsoever against any of them.

Loomis Sayles is a registered trademark of Loomis Sayles.

### 6.3. THE UNDERLYING COMPONENTS

All information herein regarding the INDEX COMPONENTS and the NOTIONAL INTEREST RATE is derived from publicly available information. Such information reflects the policies of, and is subject to change by, with respect to the INDEX COMPONENTS, SOLACTIVE and, with respect to the NOTIONAL INTEREST RATE, IBA. SOLACTIVE owns the copyright and all other rights to the INDEX COMPONENTS.



SOLACTIVE and IBA have no obligation to continue to publish, and may discontinue publication of, any or all of the INDEX COMPONENTS and the NOTIONAL INTEREST RATE. Historical performance of the INDEX COMPONENTS and the NOTIONAL INTEREST RATE is not an indication of future performance. Future performance of the INDEX COMPONENTS and the NOTIONAL INTEREST RATE may differ significantly from historical performance, either positively or negatively.



## 7. MISCELLANEOUS

### 7.1. DISCRETION

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

### 7.2. METHODOLOGY REVIEW

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

Such change in the methodology will be announced on the SOLACTIVE website under the Section "[Announcement](https://www.solactive.com/news/announcements/)", which is available at <https://www.solactive.com/news/announcements/>. The date of the last amendment of this INDEX is contained in this GUIDELINE.

### 7.3. CHANGES IN CALCULATION METHOD

The application by the INDEX ADMINISTRATOR of the method described in this document is final and binding. The INDEX ADMINISTRATOR shall apply the method described above for the composition and calculation of the INDEX. However, it cannot be excluded that the market environment, supervisory, legal and financial or tax reasons may require changes to be made to this method. The INDEX ADMINISTRATOR may also make changes to the terms and conditions of the INDEX and the method applied to calculate the INDEX that it deems to be necessary and desirable in order to prevent obvious or demonstrable error or to remedy, correct or supplement incorrect terms and conditions. The INDEX ADMINISTRATOR is not obliged to provide information on any such modifications or changes. Despite the modifications and changes, the INDEX ADMINISTRATOR will take the appropriate steps to ensure a calculation method is applied that is consistent with the method described above.





## 7.4. TERMINATION

SOLACTIVE makes the greatest possible efforts to ensure the resilience and continued integrity of its indices over time. Where necessary, SOLACTIVE follows a clearly defined and transparent procedure to adapt Index methodologies to changing underlying markets (see Section 4.2 “Methodology Review”) in order to maintain continued reliability and comparability of the indices. Nevertheless, if no other options are available the orderly cessation of the INDEX may be indicated. This is usually the case when the underlying market or economic reality, which an index is set to measure or to reflect, changes substantially and in a way not foreseeable at the time of inception of the index, the index rules, and particularly the selection criteria, can no longer be applied coherently or the index is no longer used as the underlying value for financial instruments, investment funds and financial contracts.

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

## 7.5. OVERSIGHT

An oversight committee composed of staff from SOLACTIVE and its subsidiaries (the “**OVERSIGHT COMMITTEE**”) is responsible for decisions regarding any amendments to the rules of the INDEX. Any such amendment, which may result in an amendment of the GUIDELINE, must be submitted to the OVERSIGHT COMMITTEE for prior approval and will be made in compliance with the Methodology Policy, which is available on the SOLACTIVE website: <https://www.solactive.com/documents/methodology-policy/>.

## 8. DEFINITIONS

“**AGGREGATE ELIGIBLE PRINCIPAL COMPONENT VARIANCE**”: the sum of variances of the ELIGIBLE PRINCIPAL COMPONENTS as defined in Section 2.2 “Allocation of Index Components in the Base Portfolio”

“**AGGREGATE REFERENCE CONSTITUENT VARIANCE**”: The sum the variances of the exponentially weighted return vectors of the REFERENCE CONSTITUENTS as defined in Section 2.2 “Allocation of Index Components in the Base Portfolio”

“**AVERAGE VALUE**” The Average value of each PRINCIPAL COMPONENT or exponentially weighted return vector of a REFERENCE CONSTITUENT over the previous 503 TRADING DAYS.

“**BASE PORTFOLIO’S DAILY RETURN**”



“**BENCHMARK REGULATION**” shall have the meaning as defined in Section “Introduction”.

“**BMR**” shall have the meaning as defined in Section “Introduction”.

“**CALCULATION DAY**” shall have the meaning of the TRADING DAY. The “**CLOSING PRICE**” in respect of an INDEX COMPONENT and a TRADING DAY is a security's final regular-hours TRADING PRICE published by the EXCHANGE and determined in accordance with the EXCHANGE regulations. If the EXCHANGE has no or has not published a CLOSING PRICE in accordance with the EXCHANGE rules for an INDEX COMPONENT, the last TRADING PRICE will be used.

“**DAILY VALUE**” the value of a PRINCIPAL COMPONENT or exponentially weighted return vector of a REFERENCE CONSTITUENT, on a given TRADING DAY.

“**ELIGIBLE PRINCIPAL COMPONENTS**” shall have the meaning as defined in Section 2.2 “Allocation of Index Components in the Base Portfolio”

“**EXCHANGE**” is New York Stock Exchange (NYSE).

“**FX RATE**”: The FX exchange rate fixing to convert 1 USD into Yen around 6 pm NY time (post-closing),

“**GUIDELINE**” shall have the meaning as defined in Section “Introduction”.

“**INDEX**” shall have the meaning as defined in Section “Introduction”.

“**INDEX ADMINISTRATOR**” shall have the meaning as defined in Section “Introduction”.

An “**INDEX COMPONENT**” Each of the Solactive US Momentum Index NTR, Solactive US Free Cash Flow Yield Index NTR, and Solactive 10-Year U.S. Treasury Future 2 Index is referred to as and collectively, form the BASE PORTFOLIO.

The “**INDEX COSTS**” means 0.5%

“**INDEX CURRENCY**” is the currency specified in the column “Currency” in the table in Section 1.2.

“**INDEX UNIVERSE**” the INDEX COMPONENTS in the Section “INDEX COMPONENTS”.

The “**JPY NET TOTAL RETURN PORTFOLIO**” means the NET TOTAL RETURN PORTFOLIO following the conversion and hedging into Yen currency.

“**LIVE DATE**” shall have the meaning as defined in Section 1.3.

The “**NET TOTAL RETURN PORTFOLIO**” means the BASE PORTFOLIO and the MONEY MARKET POSITION.

“**MONEY MARKET POSITION**”: means U.S. dollar cash account bearing interest at a rate equal to 3-month USD LIBOR

“**NOTIONAL INTEREST RATE**”: means the 3-month USD LIBOR.

“**OVERSIGHT COMMITTEE**” shall have the meaning as defined in Section 4.5.

“**PORTFOLIO RISK**”, The greater of the 20 TRADING DAY realized volatility and the 60 TRADING DAY realized volatility of the BASE PORTFOLIO on the previous TRADING DAY.



**“PRINCIPAL COMPONENTS”** means the variables resulting from the principal components analysis summarizing the variation of return series.

**“REALLOCATION PERIOD”** The five TRADING DAY period starting on, and including, the second TRADING DAY following the TRADING DAY on which the z-score estimate indicates that a new REGIME is required.

**“REGIME”**: Fragile, Stable or Resilient.

The **“REFERENCE INDEX”** means Solactive US Large Cap Index (GTR). More information regarding the REFERENCE INDEX is available at <https://www.solactive.com/indices/?se=1&index=DE000SLA0Q47>

**“REVIEW PERIOD”** means the volatility window of 20 Trading Days or 60 Trading Days.

**“SOLACTIVE”** shall have the meaning as defined in Section “Introduction”.

The **“INDEX SPONSOR”**: Loomis Sayles:

**“REFERENCE CONSTITUENTS”** means the constituent stocks of the REFERENCE INDEX

**“START DATE”** shall have the meaning as defined in Section 1.3 **“TRADING DAY”** means each day on which both the New York Stock Exchange and NASDAQ Stock Market are open for trading.

The **“TRADING PRICE”** in respect of an INDEX COMPONENT and a TRADING DAY is the most recent published price at which the INDEX COMPONENT was traded on the respective EXCHANGE.

**“TARGET VOLATILITY”** is 6%;

The **“UNDERLYING EQUITY CONSTITUENTS”** means the constituent stocks of THE REFERENCE INDEX

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