

GUIDELINE

Arabesque Systematic Risk Control Index USD

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Contents

Introduction

1 Index specifications

- 1.1 Short name and ISIN
- 1.2 Initial value
- 1.3 Distribution
- 1.4 Prices and calculation frequency
- 1.5 Weighting
- 1.6 Decision-making bodies
- 1.7 Publication
- 1.8 Historical data
- 1.9 Licensing

2 Composition of the Index

- 2.1 Ordinary adjustment
- 2.2 Adjustment in case of an extraordinary event

3 Calculation of the Index

- 3.1 Index formula
- 3.2 Accuracy
- 3.3 Calculation of the Index in the event of a Market Disruption Event

4 Definitions

5 Appendix

- 5.1 Contact data
- 5.2 Calculation of the Index – change in calculation method

This document contains the underlying principles and regulations regarding the structure and the operating of the Arabesque Systematic Risk Control Index USD. Solactive AG shall make every effort to implement regulations. Solactive AG does not offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the Index nor the Index Value at any certain point in time nor in any other respect. The Index is merely calculated and published by Solactive AG and it strives to the best of its ability to ensure the correctness of the calculation. There is no obligation for Solactive AG – 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 AG is no recommendation for capital investment and does not contain any assurance or opinion of Solactive AG regarding a possible investment in a financial instrument based on this Index.

Introduction

This document is to be used as a guideline with regard to the composition, calculation and management of the Arabesque Systematic Risk Control Index USD. Any changes made to the guideline are initiated by the Index Committee specified in section 1.6. The Arabesque Systematic Index is calculated and published by Solactive AG. The name “Solactive” is copyrighted.

1 Index specifications

The Arabesque Systematic Risk Control Index USD (“Arabesque Systematic RC Index”, the “Index”) is an index of Arabesque Asset Management Ltd. and is calculated and distributed by Solactive AG (the “Index Administrator” and “Index Calculator”).

The Index gives exposure to the underlying index, the Arabesque Systematic Index USD. The exposure is reviewed on a daily basis to target a realized volatility of 10 percent of the risk control index. The maximum exposure is capped at 100% which means a leverage of the underlying index is not possible. If the exposure is determined to be below 100%, the difference is invested into a cash account which is accrued with the EONIA rate on a daily basis.

The Index is published in USD.

1.1 Short name and ISIN

The Index is distributed under ISIN DE000SLA2PJ8; the WKN is SLA2PJ. The Index is published in Reuters under the code <AISYRCUS> and in Bloomberg under the code <AISYRCUS Index>.

1.2 Initial value

The Index is based on 100 on the Index Base Date. The Index is calculated live since May, 11 2017.

1.3 Distribution

The Index is published via the price marketing services of Boerse Stuttgart AG and is distributed to all affiliated vendors. Each vendor decides on an individual basis as to whether he will distribute/display the Index via his information systems.

1.4 Prices and calculation frequency

The price of the Index is calculated on each Business Day based on the most recent Price of the underlying index and the most recent value of the EONIA interest rate.

The Index is calculated every Business Day from 3:00am to 4:30pm, EST. The Index is distributed through an appropriate distributor.

Any incorrect calculation is adjusted on a retrospective basis. The Index Administrator shall notify the Index Sponsor of such adjustments prior to them taking place.

1.5 Weighting

On each Business Day the weight of the Underlying Index and the cash account is determined as described in Section 3.

1.6 Decision-making bodies

A Committee composed of staff from Solactive and Arabesque Asset Management Ltd. is responsible for decisions regarding the composition of the Index as well as any amendments to the rules (in this document referred to as the "**Index Committee**"). The Index Committee shall also decide about the future composition of the Index if any Extraordinary Events should occur and the implementation of any necessary adjustments.

Members of the Index Committee can recommend changes to the guideline and submit them to the Index Committee for approval.

1.7 Publication

All specifications and information relevant for calculating the Index are made available on the <http://www.solactive.de> web page and sub-pages.

1.8 Historical data

Historical data will be maintained from the Index Base Date.

1.9 Licensing

Licences to use the Index as the underlying value for derivative instruments are issued to stock exchanges, banks, financial services providers and investment houses (each a "**Licensee**") by Arabesque Asset Management Ltd..

2 Composition of the Index

The index consists of the Underlying index and an investment in a cash account accrued on a daily basis using the Federal Funds interest rate.

2.1 Ordinary adjustment

On each Business Day the weight of the Underlying Index and the cash account is determined as described in Section 3.1.

2.2 Adjustment in case of an extraordinary event

If an Index Component is discontinued, the Committee decides about the continuation of the index or any adjustments to the composition.

3 Calculation of the Index

3.1 Index formula

The Closing Value of the Index on each Business Day is calculated according to the below formula:

$$Index_t = Index_{t-1} \times \left(1 - (FEDL_{t-1} + fee) \times \frac{DCF(t-1, t)}{360} - TC \times abs \left[(EW_t - EW_{t-1}) \times \sum_i w_{i,R} \right] \right) \\ \times \left(1 + EW_{t-1} \times \left(\frac{UI_t}{UI_{t-1}} - 1 + \frac{MF}{365} \times DCF(t-1, t) \right) + (1 - EW_{t-1}) \times \left(FEDL_{t-1} \times \frac{DCF(t-1, t)}{360} \right) \right)$$

with:

$Index_t$ = Value of the Index on Business Day t

$FEDL_{t-1}$ = Federal Funds rate on Business Day $t-1$

fee = fee deduction of the risk control index in percent per annum, i.e. 0.82%

TC = Transaction costs in percent per annum, i.e. 0.04%

$w_{i,R}$ = Target Weight of Underlying Index component i of the Underlying Index at the Rebalancing Date of the Underlying Index immediately preceding Business Day t

i = Underlying Index component which is not the cash component

UI_t = Value of the Underlying Index on Business Day t

MF = Management fee of the Underlying Index in percent per annum, i.e. 0.82%

$DCF(t-1, t)$ = Number of calendar days between Business Day $t-1$ (excluded) and Business Day t (included)

EW_t = Equity Weight as of Business Day t , calculated according to the below formula:

$$\text{If } abs \left[1 - \frac{EW_{t-1}}{TW_{t-1}} \right] > 5\%, \text{ then}$$

$$EW_t = \min[100\%, TW_{t-1}]$$

Else

$$EW_t = EW_{t-1}$$

with

TW_{t-1} = Target Weight on Business Day $t-1$, calculated according to the below formula:

$$TW_t = \frac{10\%}{\max[rvol_{t,20}, rvol_{t,60}]}$$

with

$rvol_{t,N}$ = realized volatility over the last N Business Days, calculated according to the below formula:

$$rvol_{t,N} = \sqrt{\frac{252}{N-1} \times \sum_{s=(t-N)+1}^{t-1} \left[\ln \left(\frac{Basket_s}{Basket_{s-1}} \right) \right]^2}$$

With

Basket_t = Level of an equity basket on Business Day *t* with a composition equal to

- If *t-1* is a *Rebalancing Day* of the Underlying Index and no change in composition is scheduled to become effective in the Underlying Index over the following two *Business Days*, the composition of the Underlying Index effective from Business Day *t-1* onwards; or
- Otherwise, the basket shall be comprised of shares with a weight determined according to the methodology of the Underlying Index, using the most recent composition determined by the *Index Sponsor*, but using *Closing Prices* for each Underlying *Index Component* of the preceding *Business Day* instead of using the *Closing Price* for each Underlying *Index Component* as of the Underlying Index *Rebalancing Day* from which such composition shall become effective; and
- All terms in italic in the foregoing paragraphs have the meaning given to them in the document setting the rules for the Underlying Index.

3.2 Accuracy

The value of the Index will be rounded to two decimal places for publication.

The Number of Shares of the Index Components will be rounded to six decimal places.

3.3 Calculation of the Index in the event of a Market Disruption Event

If the Index Administrator determines that a Market Disruption Event occurs or subsists on any day, the Index Administrator shall immediately notify the Index Sponsor and make such determinations and/or adjustments that, in its determination, are required to take account of such Market Disruption Event. In particular (and without limitation), the Index Administrator in making such determination may:

- (1) Not adjust the Equity Weight on such day
- (2) Determine that no Index Level shall be determined for such day.

Upon the continuing existence of a Market Disruption Event for more than 8 consecutive Business Days, the Administrator may permanently cancel the Index.

4. Definitions

A “**Business Day**” is any weekday except Saturday and Sunday on which each of the New York Stock Exchange, the London Stock Exchange, Xetra and the Tokyo Stock Exchange is scheduled to be open for its regular trading session.

The “**Underlying Index**” is the Arabesque Systematic Index USD (ISIN DE000SLA1YZ8).

The “**Close of Business**” is 4:30 pm EST.

“**Federal Funds**” is the Federal Funds rate as disseminated under the RIC USONFFE= in Reuters (or any successor thereto, as may be selected by the Index Administrator).

An “**Extraordinary Event**” is a discontinuation of the Federal Funds interest rate.

A “**Market Disruption Event**” is described in the guideline of the Underlying Index.

The “**Index Administrator**” is Solactive AG.

The “**Index Base Date**” is the April, 1st 2005.

The “**Index Calculator**” is Solactive AG or any other appropriately appointed successor in this function.

The “**Index Currency**” is USD.

The “**Index Sponsor**” is Arabesque Asset Management Ltd.

5 Appendix

5.1 Contact data

Information regarding the Index concept

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5.2 Calculation of the Index – change in calculation method

The application by the Index Calculator of the method described in this document is final and binding. The Index Calculator 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, financial or tax reasons may require changes to be made to this method. The Index Calculator may also make changes to the terms and conditions of the Index and the method applied to calculate the Index, which he 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 Calculator is not obliged to provide information on any such modifications or changes. Despite the modifications and changes the Index Calculator will take the appropriate steps to ensure a calculation method is applied that is consistent with the method described above.