DESCRIPTION

OPTI SELECT BALANCE STRATEGY (ISIN DE000A1KP203)

3 March 2023

Document Information

Document History

Date	By	Change Description
2015-06-26	Karsten Knüvener	replacement of “Short Bund Strategy” by ETF
2015-09-21	Falk Neugebohrn	Update of strategy reweighting procedure to avoid delays during the implementation
2015-10-29	Falk Neugebohrn	Replacement of XET7 (delisted) by OD7Z, Constraint Adjustment
2016-02-19	Falk Neugebohrn	Modification of Return & Covariance Estimators, Turnover Constraint, ISIN & Name of Instrument 9, implementation of various smaller findings of Mid Office
2017-05-29	Klaus Kretzschmar	Addendum – Value at Risk
2017-06-23	Falk Neugebohrn	Specification of previous weights for the Selection Process
2021-01-21	Falk Neugebohrn	Modified Value at Risk Calculation in Addendum
2023-03-03	Falk Neugebohrn	Replaced 5X62 (merged) by AHYJ

- ### Sign-off

Date	Department	Name	Status
2015-06-26	MMB5ES, MMB8PW	Index Committee	Approved
2015-10-29	MMB5ES, MMB8PW	Index Committee	Approved
2015-10-30	MMB5ES, MMB8PW	Index Committee	Approved
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2021-01-26	MMS5PW, MMS6ND, MMS5RC	Index Committee	Approved
2023-03-03	MMS5PW, MMS6ND, MMS5RC	Index Committee	Approved

Open Points

No.	Area	Open Point	Status

1. General Description

The Opti Select Balance Strategy (the "**Strategy**") shall reflect the performance in Euro of an optimized multi asset strategy with a fixed target volatility. The Strategy consists of an investment in varying weightings into underlying instruments (the "Underlying Instruments" or "Instruments") which have shown an optimized risk/return profile on each Selection Day (as defined in sec. 3). The regular Instrument selection and implementation (the "Reweighting") takes place every month beginning on the 1st Trading Day of the month.

The Strategy will be calculated on each Calculation Day (as defined in sec. 4) by the **Strategy Calculation Agent** (as defined in sec. 13), and is based on latest available closing price levels of the Underlying Instruments. The strategy currency (the "Strategy Currency") is defined to be EURO. The Strategy can be retrieved via the financial information service supplied by BLOOMBERG (QUIXOPTI <Index>).

The target volatility (the "**Target Volatility**") of the Strategy is 6%.

The Strategy initial value as of 24 March 2011 (the "**Strategy Start Date**") is 1,000.

2. Instrument Universe

As of 26 February 2016, the instrument universe (the "**Instrument Universe**") consists of the following N = 24 Instruments (hereby, "ETF" means Exchange Traded Fund and "ETC" means "Exchange Traded Commodity"), with their Weights (as defined in sec. 4) $\omega_i \ , i = 1...N,$ being subject to the following constraints (the "Constraints"):

#	Instrument Name	Instrument Type (ISIN)	Bloomberg	Reuters	Constraint 1	Constraint 2
1	ESTX 50 € NRt	Index	SX5T Index	.STOXX50ER	w_1 <= 20%	
2	DAX INDEX	Index	DAX Index	.GDAXI	w_2 <=20%	
3	DB X-TRACKERS SMI UCITS ETF	ETF (LU0274221281)	XSMI GY Equity	XSMI.DE	w_3 <=18%	
4	FTSE 100 TR GBP	Index	TUKXG Index	.TFTSE	w_4 <=20%	
5	S&P 500 Net TR	Index	SPTR500N Index	.SPXNTR	w_5 <=20%	
6	NASDAQ 100 TOTAL RETURN	Index	XNDX Index	.XNDX	w_6 <=20%	
7	NIKKEI Net Total Return	Index	NKYNTR Index		w_7 <=20%	
8	S&P BRIC 40 Net TR Euro	Index	SPTRBRIE Index	.SPTRBRIE	w_8 <=20%	
9	BNPETF EPRA EUROPE	ETF (LU1291091228)	EEP FP Equity	EEP.PA	w_9 <=18%	
10	ISHARES GVT GMNY 1.5-2.5 DE	ETF (DE0006289473)	RXP1EX GY Equity	RXP1EX.DE	$w_{10} = w_{11}$	$w_{10} + w_{11}$ <=20%
11	ISHARES EURO GOV BND 1-3	ETF (DE000A0J21A7)	IBCA GY Equity	IBCA.DE		
12	ISHR GVT GERMANY 2.5-5.5 DE	ETF (DE0006289481)	RXP2EX GY Equity	RXP2EX.DE	$w_{12} = w_{13}$	$w_{12} + w_{13}$ <=20%
13	ISHARES EURO GOV BND 3-5	ETF (DE000A0LGQD2)	IBCN GY Equity	IBCN.DE		
14	ISHAR GVT GMNY 5.5-10.5YR DE	ETF (DE0006289499)	RXP5EX GY Equity	RXP5EX.DE	$w_{14} = w_{15}$	$w_{14} + w_{15}$ <=20%
15	ISHARES EURO GOV BND 7-10	ETF (DE000A0LGQH3)	IBCM GY Equity	IBCM.DE		
16	ISHARES EURO CORP BND LC	ETF (DE0002511243)	IBCS GY Equity	IBCSz.DE	w_{16} <=10%	
17	ISHARES USD TREASURY BND 1-3	ETF (DE000A0J2078)	IUSU GY Equity	IUSU.DE	$w_{17} = w_{18}$	$w_{17} + w_{18}$ <=20%
18	ISHARES USD TREASURY BND7-10	ETF (DE000A0LGQB6)	IUSM GY Equity	IUSM.DE		
19	ISHARES JPM EMERG MRKT BOND	ETF (DE000A0RFFT0)	IUS7 GY Equity	IUS7.DE	w_{19} <=10%	
20	AMUNDI GERMY BND DL -1X INVR	ETF (LU2572256829)	AHYJ GY Equity	AHYJ.DE	w_{20}<=18%	
21	ETFS PHYSICAL GOLD	ETC (DE000A0N62G0)	VZLD GY Equity	VZLD.DE	w_{21} <=9%	

22	ETFS INDUST MTLS DJ-UBSCISM	ETC (DE000A0KRKG7)	OD7Z GY Equity	OD7Z.DE	w_{22} <=9%	w_{22} + w_{23} <=9%
23	ETFS ENERGY DJ-UBSCISM	ETC (DE000A0KRKD4)	OD7W GY Equity	OD7W.DE	w_{23} <=9%	
24	EONIA Capitalization Index	Strategy	UCGREONC Index	.HVEONIA	w_{24} <=100%	

As additional constraints, $w_{20} = 0$ if $w_{14} > 0$ and $w_{14} = 0$ if $w_{20} > 0$.

All Strategy Constituents which are not being traded in the Strategy Currency at the respective Relevant Domestic Exchange will be converted into the Strategy Currency at the prevailing foreign exchange rate of the relevant currency as shown in the table "Table of Relevant Domestic Exchanges" under sec. 10 (the "**Prevailing Foreign Exchange Rate**") ("**Compo Instrument**").

The Prevailing Foreign Exchange Rate is expressed as Index Currency for 1 Domestic Currency and equals the relevant Reuters/WM London Mid Fixing on each Calculation Day immediately after the trading of all Index Constituents has stopped (i.e. the moment after closing of the relevant Domestic Stock Exchanges).

With respect to the calculation of the Strategy, each reference to an Instrument shall be considered as a reference to the Compo Instrument, if applicable and not mentioned otherwise.

In case any Underlying Instrument pays dividend distributions, the net proceedings of the distributions will be reinvested on the Ex-Date of the distribution into the EONIA Capitalization Index.

3. Definitions

All dates defined below, in particular the Optimization Day, the Selection Day, the Deallocation Day and the Implementation Day, can be brought forward or postponed by the Strategy Committee by at most 5 Calculation or Trading Days. This bringing forward or postponement will be done only for important reasons as determined by the Strategy Committee in its reasonable discretion. In particular, the Strategy Committee may bring forward or postpone a Selection Day, Deallocation Day and/or Implementation Day in advance if, due to scheduled Bank Holidays, more than 3 workdays (=each calendar day except for weekends) potentially fall between a Selection Day and its associated Implementation Day. For this bringing forward or postponement it is sufficient if, on a potential Deallocation Day and/or Implementation Day, at least one Relevant Domestic Exchange (sec. 10) of the Instrument Universe is scheduled not to be open for business during regular trading hours.

"Current Strategy Components"	All Underlying Instruments which have nonzero Shares Per Index as currently implemented ("Instruments which are currently invested").
"New Strategy Components"	All Underlying Instruments which have nonzero Shares Per Index as newly determined on a Selection Day, but not yet implemented ("Instruments which will be invested in the course of the upcoming reweight").
"Optimization Day"	Every calendar day on which at least one Relevant Domestic Exchange (sec. 10) of the Instrument Universe is open for business.
"**Calculation Day**"	Every calendar day on which at least one Relevant Domestic Exchange (sec. 10) of the Current Strategy Components is open for business.
"**Selection Day**"	The Calculation Day before the last scheduled Calculation Day of each month.
"**Deallocation Day**"	The first calendar day of each month on which all Relevant Domestic Exchanges of all Current Strategy Components are open for business during regular trading hours.
"**Implementation Day**"	The first calendar day following the Deallocation Day on which all Relevant Domestic Exchanges of all New Strategy Components are open for business during regular trading hours.

"**Trading Day**"	Every calendar day on which all Relevant Domestic Exchanges (sec. 10) of all Current Strategy Components are open for business during regular trading hours.
"Underlying Instrument"	An Instrument of the Instrument Universe as defined in sec. 2.
SPI_i	The Shares Per Strategy of the Underlying Instrument i as determined in the preceding Reweighting.

4. Selection Process

On every Selection Day the return vector R and the variance-covariance matrix Σ of the Instrument Universe are newly determined, more precisely:

$\mathbf{R}(t)=(R_1,\ldots,R_i,\ldots,R_N)$	where R_i denotes the arithmetic mean of the annualized (i.e. multiplied with factors 12, 6, 4, 3, 12/5 and 2, respectively) returns of the Compo Underlying Instrument i of the last 1, 2, 3, 4, 5 and 6 months, respectively before (and including) the Calculation Day t. If the Calculation Day t is a Selection Day, all monthly timeframes will be determined in such a way that the first and the last day of each monthly timeframe is or has been a Selection Day.
$\Sigma(t)=(\sigma_{i,j})$	where $\sigma_{i,j}$ denotes the annualized covariance estimated from the 3 day logreturns of Compo Underlying Instrument i and Compo Underlying Instrument j for the Optimization Days of the last 6 months before (and including) the Calculation Day t. If the Calculation Day t is a Selection Day, the 6 month timeframe will be determined in such a way that the first and the last day of the timeframe is or has been a Selection Day. Otherwise, the timeframe shall consist of as many Calculation Days as the timeframe determined on the immediately preceding Selection Day.

Let $\boldsymbol{\omega}=(\omega_1,\ldots,\omega_N)\in[0,\infty[^N$ be an allocation vector for the Instrument Universe, i.e. ω_i describes the percentage of the total investable amount (a "Weight") invested in Underlying Instrument i. The allocation vector of the selection process $\boldsymbol{\omega}^{optimized}$ is given as a solution of the following optimization problem:

$$\max\left(\mathbf{R}(t)^T\boldsymbol{\omega}-\lambda\tilde{\boldsymbol{\omega}}^T\tilde{\boldsymbol{\omega}}\right)\quad \text{such that}\quad \sqrt{\boldsymbol{\omega}^T\Sigma(t)\boldsymbol{\omega}}\le \mathrm{TV}\,,\quad \boldsymbol{\omega}^T\mathbf{1}=1,\quad \boldsymbol{\omega}\ \text{fulfils the Constraints}$$

where the Calculation Day t equals the Selection Day and

$$\mathrm{TV}=6\%\quad (\text{"Target Volatility"})$$
$$\lambda=0.5\quad (\text{"Regularisation Parameter"})$$
$$\tilde{w}:=\boldsymbol{\omega}-\boldsymbol{\omega}_{pre}^{optimized}$$

Here, $\boldsymbol{\omega}_{pre}^{optimized}$ denotes the Allocation Vector of the Selection Process of the immediately preceding (regular) Selection Day prior to a potential rescaling linked to the Value at Risk calculation (see Section 17). An Extraordinary Index Reweighting (see Section 7) does not affect $\boldsymbol{\omega}_{pre}^{optimized}$.

For the avoidance of doubt, the above procedure amounts to

- a determination of the allocation vector in such a way that the (hypothetical) portfolio return (calculated as an arithmetic mean as described above) of the last 6 months minus a regularization term (aiming at reducing the portfolio turnover) is maximized, while at the same time the (hypothetical) portfolio volatility of the last 6 months is kept equal or smaller than the Target Volatility

- in addition, as additional constraints all components of the allocation vector ω must be larger than or equal zero, the sum of the components must equal 100%, and the allocation vector must fulfill the Constraints (which have been defined in Section 2).

5. Deallocation and Implementation

The Shares Per Index of the Underlying Instruments i=1…N as determined in the preceding Reweighting are denoted by SPI_i . On each Selection Day, with closing of all Relevant Domestic Exchanges, "net" Shares Per Index and theoretical Shares Per Index are defined as

$$SPI_i^{net} := SPI_i \, , \qquad SPI_i^{theo} := \frac{Index_s \times \omega_i^{optimized}}{P_i^s}$$

where P_i^s denotes the closing price of Underlying Instrument i, $Index_s$ the closing price of the Strategy as of the Selection Day, t_s the current Selection Day and t_s^{pre} the preceding Selection Day.

After the Selection Day a two-step implementation phase starts. The aim of the implementation phase is to adjust the weights of the Underlying Instruments in the Strategy in such a way that after completion of the implementation phase, they approximate the allocation vector $\boldsymbol{\omega}^{optimized}$.

Phase I: With closing of all Relevant Domestic Exchanges on the Deallocation Day immediately following the Selection Day, the current Shares Per Index of each Underlying, SPI_i , are reduced to the following number:

$$SPI_i^d := \min\left(SPI_i^{net}, SPI_i^{theo}\right)$$

The associated Weights of the Underlying Instruments i=1…N as of this moment are given by

$$\omega_i^d := SPI_i^d \times \frac{P_i^d}{Index_d}, \quad i = 1...N$$

where P_i^d denotes the closing price of the Underlying Instrument i and $Index_d$ denotes the Strategy closing price as of the Deallocation Day.

The net proceeds of the share reduction,

$$Cash = \sum_i \left(SPI_i^{net} - SPI_i^d\right) \times P_i^d$$

are invested into the EONIA Capitalization Index. The total Shares Per Index of the EONIA Capitalization Index at the closing of all Relevant Domestic Exchanges on the Deallocation Day is therefore

$$SPI_N^{d,total} := SPI_N^d + \frac{Cash}{P_N^d}$$

Phase II: With closing of the Relevant Domestic Exchanges on the Implementation Day immediately following the Deallocation Day, the Shares Per Index of the Underlying Instruments i =1…N are finally determined to be equal to:

$$SPI_i^{final} := SPI_i^d + \left(\frac{P_N^I}{P_N^d}\right) \times \frac{Cash}{P_i^I} \times \frac{\max\left(0, \omega_i^{optimized} - \omega_i^d\right)}{\sum_{j=1}^{N} \max\left(0, \omega_j^{optimized} - \omega_j^d\right)}, \quad i = 1...N$$

where P_i^I is the closing value of Underlying Instrument i on the Implementation Day. After completion of this implementation phase, SPI_i^{final} is renamed to SPI_i .

6. Calculation of the value of the Strategy

On every Calculation Day after the closing of all Relevant Domestic Exchanges of the Underlying Instruments, the Strategy value will be calculated by the Strategy Calculation Agent as the sum of the products of (i) the number of Underlying Instruments ("**Shares Per Index**") times (ii) the last available prices of the respective (compo) Underlying Instrument, more precisely:

$$Index_t = \sum_i SPI_i \times P_i(t)$$

where $P_i(t)$ denotes the closing price of the Underlying Instrument i on Calculation Day t.

7. Extraordinary Strategy Reweighting

If on a Calculation Day t the realized volatility of the Strategy exceeds the Target Volatility by 25%,

$$VOL^R(t) > 125\% \times TV,$$

(making this day an "Extraordinary Selection Day" t_{ESD}), the Index Committee (see Section 12) will advise the Index Calculation Agent to undertake an extraordinary Strategy reweighting (the "Extraordinary Strategy Reweighting"). Hereby, the realized volatility of the Strategy at any Calculation Day t is defined as

$$VOL^R(t) = \sqrt{\left(\boldsymbol{\omega}^{optimized}\right)^T \Sigma(t) \boldsymbol{\omega}^{optimized}}$$

where $\boldsymbol{\omega}^{optimized}$ denotes the Allocation Vector determined on the immediately preceding (Extraordinary) Selection Day, and $\Sigma(t)$ denotes the Estimated Covariance Matrix on the Calculation Day t as defined in Section 4.

The Extraordinary Strategy Reweighting shall be carried out starting on the second Calculation Day after the Extraordinary Selection Day (this day becoming the "First Extraordinary Implementation Day" $t_{EID,k}$, $k = 1$). For *i = 1…N-1,* let

$$\varepsilon_{i,k} := \begin{cases} 1 & \text{if } A \\ 0 & \text{else} \end{cases}$$

$$\varepsilon_{i,0} := 0$$

where *A = "on the Extraordinary Implementation Day* $t_{EID,k}$*, the Relevant Exchange of the Underlyings i and N are open for business during regular trading hours and* $\varepsilon_{i,j} = 0 \text{ for all } 0 \le j < k$ *".*

Immediately after closing of the Relevant Exchanges on the First Extraordinary Implementation Day $t_{EID,k}$, $k = 1$, the SPI_i of the Underlying Instruments i =1...N will be recalculated as follows:

$$SPI_{i,k}^{EID} := SPI_{i,k-1}^{EID} - \varepsilon_{i,k} \times \left(1 - \frac{TV}{VOL^R(t_{ESD})}\right) \times SPI_{i,k-1}^{EID}, \qquad \mathrm{i = 1, ..., N - 1}$$

$$SPI_{N,k}^{EID} := SPI_{N,k-1}^{EID} + \frac{\left(1 - \frac{TV}{VOL^R(t_{ESD})}\right) \times \sum_{i=1}^{N-1} \varepsilon_{i,k} \times \left(SPI_{i,k-1}^{EID} \times P_i^{EID,k}\right)}{P_N^{EID,k}}$$

$$SPI_{i,0}^{EID} := SPI_i^{pre}, \qquad i = 1, ..., N$$

where SPI_i^{pre} are the Shares Per Index as of the immediately preceding (Final Extraordinary) Implementation Day, and $P_i^{EID,k}$ is the closing value of the Instrument i on the Extraordinary Implementation Day *k*.

On the third, fourth, fifth, etc. Calculation Day after the Extraordinary Selection Day (these days becoming the "Second", "Third", "Fourth", etc. "Extraordinary Implementation Days" $t_{EID,k}$, $k = 2,3,4,...$), the above described procedure is repeated, until on *k = Final* (this day becoming the “Final Extraordinary Implementation Day” $t_{EID,Final}$), for all i = 1, …, N-1 the following relation is fulfilled:

$$SPI_{i,Final}^{EID} = \frac{TV}{VOL^{R}\left(t_{ESD}\right)} SPI_{i}^{pre}$$

No Extraordinary Strategy Reweighting shall occur if there are less than 2 Trading Days between a Deallocation Day or Implementation Day and an Extraordinary Implementation Day. In case the Implementation of an Extraordinary Strategy Reweighting is delayed due to Market Disruptions, it shall be discontinued at the latest on the Trading Day before a Deallocation Day.

After completion of the Extraordinary Strategy Reweighting, $SPI_{i,Final}^{EID}$ will be renamed to SPI_i , and the Allocation Vector $\omega^{optimized}$ is redefined as follows:

$$\omega_i^{optimized} := SPI_i^{EID,Final} \times \frac{P_i^{EID,Final}}{Index_{EID,Final}}, \quad i = 1 \ldots N$$

8. Calculation of the value of the Strategy in the Event of an Strategy Market Disruption

A Strategy market disruption (the "**Strategy Market Disruption**") will be deemed to have occurred if for any relevant Underlying Instrument the quotation is suspended, limited or restricted (as a result of price movements during the trading hours which exceed the limits set by the Relevant Domestic Exchange or for any other reasons) on the Relevant Domestic Exchange or any relevant market where this specific Underlying Instrument or a future contract on this specific Underlying Instrument is listed.

A change in the trading days or opening hours of the Relevant Domestic Exchange will not constitute an Strategy Market Disruption.

If for one or more Underlying Instruments a Strategy Market Disruption occurs on a Deallocation or (Extraordinary) Implementation Day, the Deallocation or Implementation Day will be postponed to the next Trading Day on which the Market Disruption ceases to exist and all Relevant Domestic Exchanges are open for business. If a Deallocation Day is postponed, its associated Implementation Day will be postponed accordingly.

If on the 5th consecutive relevant Trading Day after the regular Deallocation or Implementation Day the Underlying Instrument is still affected by the Strategy Market Disruption, that 5th day will be used as Deallocation or Implementation Day. The Strategy Calculation Agent shall determine in its reasonable discretion (§ 315 BGB) all parameters necessary for the implementation on a best effort basis, taking into account the current market environment.

If a Strategy Market Disruption arises with respect to one or more Underlying Instruments of the Current Strategy Components, the Strategy Calculation Agent, reserves the right to either determine a reasonable price for the respective Underlying Instrument at its reasonable discretion on a continuous basis in good faith and manner in line with current market conditions or to use the last calculated and rebalanced price which has been fixed by its Relevant Domestic Exchange for the Underlying Instrument concerned. As long as the Strategy Marked Disruption persists and the respective Underlying Instrument is not deleted or replaced (see below), the respective chosen price at time t is used to calculate the value of the Strategy at time t. If on the 5th consecutive Calculation Day the Underlying Instrument is still affected by the Strategy Market Disruption, the Strategy Calculation Agent reserves the right in its reasonable discretion (§ 315 BGB) to either replace the Underlying Instrument affected by the Strategy Market Disruption by an instrument of a comparable asset class and/or investment strategy or delete the Underlying Instrument from the Strategy, in order to ensure a proper future calculation of the value of the Strategy.

9. Extraordinary Adjustments

The Strategy Calculation Agent shall apply the aforementioned method of calculation and the results will be final and binding except for obvious errors. If regulatory, legal, juridical, fiscal or market circumstances (including, but not limited to any trading restrictions in the components of the Strategy or any derivatives linked to the Strategy), a Fund Event as defined in paragraph 3 of this sec.9, a Strategy Event as defined in paragraph 4 of this sec.9 or any other serious circumstances may arise that require a modification of, or change to such methodology, the Strategy Committee with consent of the Strategy Sponsor shall be entitled to make such required modification or change at its reasonable discretion. The Strategy Committee with consent of the Strategy Sponsor shall with all due care ensure that the resulting method of calculation of such a modification or change will be consistent with respect to the method defined above, and will be taking into account the economic position of investors in financial products that are linked to the Strategy.

Additionally, in case of a Fund Event, a Strategy Event or any other similar circumstances and based on the advice of the Strategy Committee the Strategy Calculation Agent is entitled to replace in its reasonable discretion (§ 315 BGB) the affected Underlying Instruments of the Strategy Universe by instruments of a comparable asset class and/or investment strategy. In particular, if a Fund Event has occurred, any Exchange Traded Fund affected by the Fund Event may be replaced by an Exchange Traded Fund of a comparable asset class and/or investment strategy, or by its Benchmark Strategy, where the choice lies in the reasonable discretion of the Strategy Committee.

"**Fund Event**" means with respect to the Underlying Instruments which are Exchange Traded Funds (or Exchange Traded Commodities, if applicable) (both referred to as the "Fund" or "**Funds**"):

a) in the Strategy Committee's reasonable discretion pursuant to § 315 BGB, material modification of the investment strategy (e.g. by way of an amendment to the fund prospectus or a material change to the share of the different assets held within a Fund), which materially changes the hedging situation of the Issuer;

b) a change in the currency of a Fund;

c) the impossibility for a respective trading counterpart of the Strategy performance to trade fund shares at their NAV;

d) any amended fee, commission or other charge is imposed by the investment company with respect to any subscriptions or redemption orders;

e) failure to calculate or communicate the NAV on more than 3 Calculation Days;

f) a change in the legal nature of a Fund or in the treatment of a Fund under international laws of Germany or Luxembourg;

g) a material change in the investment company respectively issuer of a Fund if this change affects the performance of the Fund;

h) failure of a Fund or the investment company respectively issuer to comply with applicable legal or regulatory provisions;

i) there is any change in the legal, financial of supervisory treatment or suspension, failure or revocation of the registration of a Fund or the respective investment company, as far as the hedging situation of a respective trading counterpart of the Strategy performance is concerned;

j) there is any change in the official interpretation or administration of any laws or regulation relating to taxation regarding a Fund, the investment company, the Issuer or the Calculation Agent or a change of the tax treatment of a Fund;

k) the Hedging Entities's relative holding of shares in a Fund exceeds 15 per cent;

l) the introduction of composition, bankruptcy or insolvency proceedings, a de-merger, reclassification or consolidation, e.g. the change of the investment class of a Fund or the merger of a Fund with another fund;

m) any distributions or reinvested amounts which do not comply with the general distribution policy of a Fund;

n) the approval of the investment company respectively issuer to administer a Fund or the right to distribute fund units to the country of the Calculation Agent for any reason whatsoever ceases to exist;

o) the imposition of any regulatory procedures of the respectively relevant supervisory authority against the respective investment company respectively issuer or the cancellation, suspension or revocation of the registration of a Fund;

p) any similar event, which may have a material and not only temporary adverse effect on the NAV of a Fund.

"**Strategy Event**" means with respect to the Underlying Instruments which are indices (the "**Underlying Indices**"):

(a) the cancellation of the calculation or publication of an Underlying Index or its replacement by its sponsor or

(b) any other event, which may have a material and not only temporary adverse effect on the Underlying Strategy.

10. Table of Relevant Domestic Exchanges

Underlying Instrument	Instrument Type (ISIN)	Relevant Domestic Exchange	Currency of units
ESTX 50 € NRt	Index	EUREX	EUR
DAX INDEX	Index	EUREX	EUR
DB X-TRACKERS SMI UCITS ETF	ETF (LU0274221281)	Xetra, SIX	EUR
FTSE 100 TR GBP	Index	London Stock Exchange	GBP
S&P 500 Net TR	Index	NYSE	USD
NASDAQ 100 TOTAL RETURN	Index	NASDAQ	USD
NIKKEI Net Total Return	Index	Tokyo Stock Exchange	JPY
S&P BRIC 40 Net TR Euro	Index	Hongkong Stock Exchange, NYSE, London Stock Exchange	EUR
BNPETF EPRA EUROPE	ETF (LU1291091228)	Xetra, Central European Stock Ex-changes	EUR
ISHARES GVT GMNY 1.5-2.5 DE	ETF (DE0006289473)	Xetra	EUR
ISHARES EURO GOV BND 1-3	ETF (DE000A0J21A7)	Xetra	EUR
ISHR GVT GERMANY 2.5-5.5 DE	ETF (DE0006289481)	Xetra	EUR
ISHARES EURO GOV BND 3-5	ETF (DE000A0LGQD2)	Xetra	EUR
ISHAR GVT GMNY 5.5-10.5YR DE	ETF (DE0006289499)	Xetra	EUR
ISHARES EURO GOV BND 7-10	ETF (DE000A0LGQH3)	Xetra	EUR
ISHARES EURO CORP BND LC	ETF (DE0002511243)	Xetra	EUR
ISHARES USD TREASURY BND 1-3	ETF (DE000A0J2078)	Xetra	EUR
ISHARES USD TREASURY BND7-10	ETF (DE000A0LGQB6)	Xetra	EUR
ISHARES JPM EMERG MRKT BOND	ETF (DE000A0RFFT0)	Xetra	EUR
AMUNDI GERMY BND DL -1X INVR	ETF (LU2572256829)	Xetra, EUREX	EUR
ETFS PHYSICAL GOLD	ETC (DE000A0N62G0)	Xetra	EUR
ETFS INDUST MTLS DJ-UBSCISM	ETC (DE000A0KRKG7)	Xetra, London Metals Exchange	EUR
ETFS ENERGY DJ-UBSCISM	ETC (DE000A0KRKD4)	Xetra, Nymex	EUR
EONIA Capitalization Index	Strategy	EUREX	EUR

11. Replacement of Strategy Calculation Agent

The Strategy Sponsor is at any time authorized to select in its reasonable discretion (§ 315 BGB) a new Strategy Calculation Agent (the "New Strategy Calculation Agent"), whereas each reference in this description to the Strategy Calculation Agent will be deemed as a reference to the New Strategy Calculation Agent.

12. Review of Strategy Methodology and Strategy Changes

The Strategy Committee meets at least once a year in order to review the Strategy methodology. If deemed necessary, the Strategy Committee reserves the right to adjust the Strategy description in its reasonable discretion (§ 315 BGB).

The Strategy Committee also reserves the right to convene an extraordinary meeting in case of exceptional circumstances (e.g. regulatory changes).

13. Strategy Sponsor, Strategy Calculation Agent and Strategy Committee

The Strategy is provided by UniCredit Bank AG, or any legal successor thereof (the "Strategy Sponsor"), including all rights and duties with regard to the Strategy if not otherwise delegated. The Strategy Sponsor has assigned all rights and duties with regard to the Strategy calculation agent (the "Strategy Calculation Agent"). UniCredit Bank AG has been selected as Strategy Calculation Agent.

Additionally, an Strategy committee (the "Strategy Committee") provides guidance on all aspects of administering the Strategy. The Strategy Committee consists of a group of specialists for Structured Equity & Commodity products from UniCredit Bank AG and will meet on an ordinary and extraordinary basis.

The Strategy Calculation Agent will apply the aforementioned method of calculation and the results will be final except for obvious errors. If regulatory, legal, juridical, fiscal or market circumstances (including, but not limited to any trading restrictions in the components of the Investment Universe and/or any derivatives linked to the Strategy) may arise that require a modification of, or change to such methodology, the Strategy Calculation Agent, guided by the Strategy Committee, shall be entitled to make such required modification or change on the basis of the aforementioned rules in its reasonable discretion. The Strategy Calculation Agent will with all due care ensure that the resulting method of calculation of such a modification or change will be consistent with respect to the method defined above, and will be taking into account the economic position of investors in financial products that are linked to the Strategy.

When calculating the Strategy, the Strategy Calculation Agent has to rely on the statements, confirmations, computations, assurances and other information provided by third parties which cannot be verified. Any inaccuracies contained in this information may have an impact – without any fault of the Strategy Calculation Agent – on the calculation of the Strategy. There is no obligation of the Strategy Calculation Agent to independently verify any information received in relation to the Strategy.

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14. Important Aspects of the Strategy

Trading or other transactions by the Strategy Sponsor or affiliated companies in related financial instruments may adversely affect the value of the Strategy performance.

The Strategy Sponsor may hedge obligations in respect of the Strategy by purchasing or selling financial instruments linked to the components of the Strategy (and may adjust or unwind such hedges by trading foregoing on or before the Adjustment Date). Such hedging activities may adversely affect the value of the Strategy and of any product linked to the performance of the Strategy.

15. Important Aspects with respect to Strategy -linked Investments

Investors should refer to the relevant documentation for disclosures and risk factors relating to particular products.

Any of these transactions stated in the preceding section could adversely affect the value of any product linked to the performance of the Strategy.

The Strategy Sponsor or affiliated companies may also engage in trading in financial instruments whose returns are linked to the Strategy for proprietary accounts, for other accounts under their management.

Any of these activities could adversely affect the value of the Strategy and accordingly of any product linked to the performance of the Strategy. The Strategy Sponsor may hedge any of these positions.

16. Addendum – Insufficient Price Data for ETF / ETC Instruments

If for an instrument which is an ETF (Exchange Traded Fund) or an ETC (Exchange Traded Commodity) there is not enough historic price data available to carry out the selection process described in Section 4, to calculate the realized volatility of the Strategy as described in Section 7, or to calculate the Value at Risk as described in Section 17, price data of the underlying index or benchmark strategy (converted into the Strategy Currency as described in Section 2, if applicable) may be used for that purpose, provided that the ETF or ETC aims at a linear tracking of the underlying index or benchmark strategy.

17. Addendum – Value at Risk

If, on a Selection Day, the Value at Risk (the "VaR") of the newly determined allocation vector $\boldsymbol{\omega}^{optimized}$ exceeds 8%, the allocation vector will be rescaled as follows:

$$\omega_i^{optimized,new} = min\left(\frac{8\%}{VaR}, 1\right) \times \omega_i^{optimized} \quad for\ i = 1, \dots, 23$$

$$\omega_{24}^{optimized,new} = 1 - \sum_{i=1}^{23} \omega_i^{optimized,new}$$

Hereby, the VaR shall be calculated as follows. Let $\mu_{\mathrm{Port,t}}$ denote the daily return on Calculation Day t of a portfolio representing the newly determined allocation vector $\boldsymbol{\omega}^{optimized}$:

$$\mu_{Port,t} \coloneqq \sum_{i=1}^{24} \left(\frac{P_{i,t}}{P_{i,t-1}} - 1\right) \times \omega_i^{optimized}$$

where $P_{i,t}$ denotes the latest available closing price of the Underlying Instrument i on Calculation Day t. Let $\mu_{Port}^{ORDERED}$ be the ordered series of 250 portfolio returns from the last 251 Calculation Days before and including the Selection Day,

$$\mu_{Port,1}^{ORDERED} \le \mu_{Port,2}^{ORDERED} \le \dots \le \mu_{Port,250}^{ORDERED} \quad .$$

The VaR is defined as the absolute value of the weighted average of the 2-nd lowest return and the the 3-rd lowest return from the ordered series, multiplied by $\sqrt{20}$:

$$VaR \coloneqq \left|\sqrt{20} \times \left(0.49 \times \mu_{Port,2}^{ORDERED} + 0.51 \times \mu_{Port,3}^{ORDERED}\right)\right|$$

After the rescaling, the rescaled allocation vector $\omega^{\mathrm{optimized,new}}$ will be renamed to $\boldsymbol{\omega}^{optimized}$ and all further calculations, in particular the Deallocation and Implementation (Section 6), and the realized volatility (Section 7), shall be carried out using the rescaled allocation vector, with the following exception: the Allocation Vector of the Selection Process of the immediately preceding (regular) Selection Day $\boldsymbol{\omega}_{pre}^{optimized}$ (see Section 5) shall always refer to the respective allocation vector *before* a potential rescaling.

18. Disclaimer

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