



Index guidelines relating to the
Adaptivv Downside Control World Index
ISIN: DE000A3EEG05

("Index Guidelines")

Version 1.1 dated 5 July 2023

Important Information

The general principles of the Adaptivv Downside Control World Index (the "**Index**") as of 15 May 2023 are set out below.

These Index Guidelines contain the underlying principles and regulations regarding the structure and the operations of the Index. The Index is the sole property of the Index Sponsor. LIXX GmbH, Fürstenwall 172a, 40217 Düsseldorf, Germany acting as Index Administrator maintains and publishes the Index and strives to the best of its ability to ensure the correctness of its mechanism and calculation. The Index Administrator is not obliged – irrespective of possible obligations to issuers, licensees and other users – to advise third parties, including investors and/or financial intermediaries, of any errors in the Index. This document is to be used as a guideline regarding the composition, calculation and management of the Index.

It should be noted that the general principles of the Index may be updated or amended from time to time. In managing the Index, the Index Administrator will employ the methodology described herein and its application of such methodology shall be conclusive and binding. No assurance can be given that fiscal, market, regulatory, juridical, financial or other circumstances will not arise that would, in the view of the Index Administrator, necessitate or make desirable a modification of or change to such methodology. The Index Administrator shall be entitled to make any such modification or change any of the provisions of the Index as set out in these Index Guidelines as it deems fit. The Index Administrator may also make modifications to the terms of the Index in any manner that it may deem necessary or desirable, including (but not limited to) to correct any manifest or proven error to cure, correct or supplement any ambiguity or defective provision contained in these Index Guidelines. Any such modification or change shall take effect upon publication of the relevant Index Guidelines.

This document is communicated by the Index Administrator. All information provided herein is for information purposes only and no warranty is made as to its fitness for purpose, satisfactory quality or otherwise. Every effort has been made to ensure that all information given is accurate, but no responsibility or liability (including in negligence) can be accepted by the Index Administrator for errors or omissions or for any losses arising from the use of this information. The information presented herein has been prepared based on the publicly available information, internally developed data or other third-party sources believed to be reliable. All opinions and views constitute judgments as of the date of the writing and are subject to change at any time without notice. Neither the information contained in these Index Guidelines nor the calculation and publication of the Index by the Index Administrator constitutes an invitation to make an investment in a product based upon the Index. Information, recommendations, or opinions expressed herein shall not constitute an offer for purchase of such product nor shall it purport any assurance regarding a purchase of such a product.

The Index is designed as an "index" pursuant to the Benchmarks Regulation.

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1 DEFINITIONS

Allocation Advice	Has the meaning given to such term in Section 4.6 (<i>Rebalancing and Allocation Advice</i>).
Allocation Mechanism	Has the meaning given to such term in Annex 3 .
Allocation Implementation Period	Has the meaning given to such term in Section 4.6 (<i>Rebalancing and Allocation Advice</i>).
Annex	Means an annex to these Index Guidelines, each of which form an integral part of these Index Guidelines.
Benchmarks Regulation	Means Regulation (EU) 2016/2011 of the European Parliament and the Council of 8 June 2016 as amended.
Business Day	Means each day Monday to Friday which is not a public holiday in a Business Day Centre.
Business Day Centres	Means Düsseldorf and Zurich.
Change in Law	Any change in any national or international laws, regulations, directives, decisions by courts of last resort or administration practice applicable to any Index Component and affecting any Index Component to the economic detriment of the Index Administrator or any holder of any Index Component.
Data Provider	A contributor of data used to maintain or calculate the Index in accordance with Article 11 of the Benchmarks Regulation.
Eligible Component	Has the meaning given to such term in Section 4.6 (<i>Rebalancing and Allocation Advice</i>).
Index	Adaptivv Downside Control World Index (ISIN DE000A3EEG05).
Index Administrator	LIXX GmbH, a limited liability company (<i>Gesellschaft mit beschränkter Haftung</i>) under the laws of the Federal Republic of Germany, registered with the commercial register (<i>Handelsregister</i>) of the local court (<i>Amtsgericht</i>) of Düsseldorf under HRB 81816, with the principal place of business at Fürstenwall 172A, 40217 Düsseldorf, Federal Republic of Germany.

Index Allocator	Adaptivv Financial Technologies AG, a joint stock company under the laws of Switzerland, registered under number CHE-183.265.157, having its statutory seat in Zürich and principal place of business at Talstrasse 9, 8001, Zürich, Switzerland.
Index Component	Any constituent of the Index selected from the Index Universe.
Index Component Selection Criteria	Has the meaning given to such term in <u>Annex 2</u> .
Index Currency	USD
Index Level	Has the meaning given to such term in Section 4.1 (<i>Index Formula</i>).
Index Objective	Has the meaning given to such term in Section 2.1 (<i>Summary of Index Specifications</i>).
Index Sponsor	Adaptivv Financial Technologies AG, a joint stock company under the laws of Switzerland and registered under number CHE-183.265.157 having its statutory seat in Zürich and principal place of business at Talstrasse 9, 8001, Zürich, Switzerland.
Index Start Date	15 May 2023
Index Universe	Instruments, which may be selected as Index Components, as listed in <u>Annex 1</u> .
Index Valuation Date	Means each Business Day. If a scheduled Index Valuation Date is not a Business Day, the next day that is a Business Day shall be the relevant Index Valuation Date.
Initial Index Level	787.97
LIXX Correction Policy	Means the correction policy published by the Index Administrator on the Website.
Official Valuation	The official valuation is based on publicly available data, that has been made available by internationally established information services or exchanges. Such data includes daily closing (end of day) values of each Index Component, as they are available on the relevant Index Valuation Date. If no data is available on the relevant valuation date, the most recent value available (closing), will be considered.

Regulatory Event	Any public or private statement or action by, or response of, any competent authority or any official or representative of any competent authority acting in an official capacity affecting any Index Component to the economic detriment of the Index Administrator or any holder of any Index Component.
Section	Means a section of these Index Guidelines.
Significant Change	Has the meaning given to such term in Section 4.10 (<i>Consulting Procedures and Significant Change</i>).
Tax Event	Means any change in the tax treatment of a holder of Index Components which is based on either a change in legislation or a change in tax administration practice.
Total Net Return Index	An index type where dividends or coupon payments are reinvested in the relevant index components, reduced by any Withholding Tax.
Website	Means www.lixxinnovation.com .
Withholding Tax	The withholding tax rates published on the Website for the relevant country ISO Code.

2 INDEX DESCRIPTION

2.1 Summary of Index Specifications

Objective and Economic Reality
<p>The objective of the Index is to reflect the performance an investor can achieve by investing in a portfolio of weighted exchange traded funds ("ETF") which provides an improved risk/return profile compared to a passive investment in equity, cash, and bond instruments and to protect against major drawdowns during severe market crises.</p> <p>In order to reflect the economic reality given by factors such as availability of instruments, reinvestments of maturing instruments and portfolio size, composition of the Index and the weighting of the Index Components is subject to change (the "Index Objective").</p>
Administration of the Index and Regulatory Status
<p>The Index is calculated, maintained, rebalanced and published by the Index Administrator and sponsored by the Index Sponsor. The Index is maintained and rebalanced following recommendations provided by the Index Allocator.</p> <p>As at the date of these Index Guidelines the Index is considered a "non-significant benchmark" within the meaning of Article 3 para 1 (27) of the Benchmarks Regulation. The Index is administrated in accordance with the applicable provisions of the Benchmarks Regulation and its delegated acts. The Index Administrator may, at its own discretion, choose not to apply some or all non-mandatory, waivable obligations in accordance with Article 26 of the Benchmarks Regulation.</p>
Index Universe
<p>The Index Universe is set out in <u>Annex 1</u>.</p>
Selection of Index Components
<p>Index Components will be selected by applying certain filter criteria to the Index Universe. The Index Components must meet the Index Component Selection Criteria set out in <u>Annex 2</u> at the time of inclusion. The index allocation is set out in <u>Annex 4</u>.</p>

Changes to Index Components
The Index Component's weightings are subject to change. The Index Administrator will adjust the Index allocation by implementing any Allocation Advice it receives from the Index Allocator. The Allocation Advice must adhere to the allocation mechanism described in Annex 3 .
Index Methodology
The methodology of the Index is set out in Section 3 (<i>Index Methodology</i>).
Technical Specifications
The Index is calculated daily in USD. The Index is a Total Net Return Index.
Data Provider
The recommendations provided by the Index Allocator are considered input data.

2.2 Name and ISIN

The name of the Index is Adaptivv Downside Control World Index. The Index is distributed under ISIN DE000A3EEG05 and Bloomberg Ticker ADAPTW.

2.3 Index Start Date; Initial Index Level

The calculation of the Index commences on 15 May 2023 ("**Index Start Date**") at an Initial Index Level of 787.97 ("**Initial Index Level**"). Index Levels published for a period prior to the Index Start Date have been backtested.

2.4 Distribution

The Index Level is published by the Index Administrator under a sub-page on the Website as of each Index Valuation Date, no later than ten (10) Business Days following the respective Index Valuation Date.

2.5 Prices and Calculation Frequency

The Index is calculated daily on each Index Valuation Date.

The Index calculation is based on the Official Valuation of the respective Index Components on the relevant Index Valuation Date.

The Index Administrator will take appropriate steps to avoid a disruption to the process of the provision of the Index. However, if relevant data cannot be obtained, the Index Administrator will not publish the Index.

Deficient calculations will be managed in accordance with the LIXX Correction Policy.

2.6 Publication

Specifications and information relevant for calculating the Index will be made available on the Website and relevant sub-pages.

2.7 Index Administrator

The Index is calculated by the Index Administrator. Adjustments to the Index Level are determined by the Index Administrator.

In performing its duties, the Index Administrator follows the business principles published on the Website and the applicable provisions of the Benchmarks Regulation and its delegated acts.

2.8 Index Allocator

The Index Allocator and the Index Administrator have entered into an index allocation agreement, pursuant to which the Index Allocator may provide the Index Administrator with certain recommendations regarding the composition of the Index. Each such recommendation must qualify as valid Allocation Advice as defined in Section 4.6 (*Rebalancing and Allocation Advice*).

The Index Allocator provides such Allocation Advice to reflect the economic reality and the Index Objective. Any Allocation Advice shall be based on the results obtained from application of the allocation mechanism described in **Annex 2** and **Annex 3**.

2.9 Historical Data

Historical data will be recorded in accordance with Article 8 of the Benchmarks Regulation, if and as applicable. This means that in such cases all input data and the methodology is recorded for a minimum of five (5) years.

2.10 Licensing

Licenses to use the Index as a benchmark for financial instruments within the meaning of the Benchmarks Regulation are issued by the Index Administrator or the Index Sponsor.

3 INDEX METHODOLOGY

3.1 Index Composition and Adjustments to the Index

The Index Allocator may recommend to the Index Administrator instruments from the Index Universe for inclusion in the Index and weightings of the Index Components to accurately reflect the economic reality it is intended to measure. As such, the recommendations of the Index Allocator are considered input data and the Index Allocator is considered a contributor of input data in accordance with Article 11 of the Benchmarks Regulation, to the extent applicable.

When executing a recommendation, the Index Administrator ensures that (i) the selection of instruments from the Index Universe for inclusion in the Index and (ii) the weightings are in line with the Index Guidelines.

The Index Allocator will review the composition of the Index on an ongoing basis. Instruments may be selected by the Index Administrator from the Index Universe upon recommendation of the Index Allocator for inclusion in the Index if they satisfy the requirements set out in these Index Guidelines. Each Index Component's weighting may be adjusted by the Index Administrator upon recommendation of the Index Allocator. The number of Index Components can change over time.

The Index Level will be determined based on the Official Valuation.

3.2 Index Universe

The relevant categories of instruments which may be selected for inclusion in the Index as Index Components are set out in **Annex 1**.

3.3 Selection of Index Components

Index Components must meet the Index Component Selection Criteria set out in **Annex 2** at the time of inclusion. The index allocation is set out in **Annex 4**.

3.4 Allocation of Index Components

The Index Administrator will adjust the Index allocation according to any Allocation Advice it receives from the Index Allocator. The Allocation Advice must adhere to the allocation mechanism described in **Annex 2** and **Annex 3**. Therefore, the Index Components' weightings are allocated by the Index

Administrator at the Index Allocator's discretion.

3.5 Extraordinary Changes to Index Components

The Index Administrator may, at its reasonable discretion, remove an Index Component from the Index if on any Index Valuation Date *inter alia*:

- (i) Such Index Component ceases to meet the Index Component Selection Criteria;
- (ii) such Index Component ceases to exist or is being terminated;
- (iii) purchasing, holding or selling of such Index Component becomes unlawful or economically unreasonable for a holder of such Index Component in Switzerland or the European Economic Area;
- (iv) the Index Administrator deems such removal necessary to ensure that the Index continues to meet the Index Objective;
- (v) the Index Administrator has available to it relevant Allocation Advice instructing it accordingly;
- (vi) a Change in Law, Tax Event or Regulatory Event occurs.

After removal of an Index Component the remaining Index Components' allocation may be adjusted accordingly and a replacement component that meets the Index Component Selection Criteria may be added to the Index.

An instrument that satisfies the Index Component Selection Criteria may be added to the Index to ensure that the Index continues to meet the Index Objective. After inclusion of the new instrument, the other Index Components' allocation may be adjusted accordingly.

4 CALCULATION OF THE INDEX

4.1 Index Formula

On each Index Valuation Date, the Index Administrator calculates the level of the Index (the "**Index Level**"). This calculation is based on the Official Valuation.

The Index Administrator will use the following formula to calculate the Index Level:

$$Index_t = \sum_{i=1}^N (W_{t,i} \times P_{t,i}) - A_t$$

Whereas:

$Index_t$ Means the Index Level on Index Valuation Date t.

$W_{t,i}$ Means the number of units of an Index Component in the Index on Index Valuation Date t.

$P_{t,i}$ Means the Official Valuation of each Index Component on Index Valuation Date t > 0, converted to USD where necessary.

A_t Means the adjustment factor, which is determined at the reasonable discretion of the Index Administrator on Index Valuation Date t with reference to adjustments carried out pursuant to Sections 4.4 (*Other Changes*) and 4.5 (*Adjustments Following Distributions and Corporate Actions*).

N Means the total number of Index Components.

i Means an indicator for an individual Index Component.

t Means an indicator for the relevant Index Valuation Date where t = 0 represents the Index Start Date and for each subsequent Index Valuation Date t is incremented by 1.0.

4.2 Transaction Fee

A transaction fee of 0.05% is applied to an amount in the Index Currency which, converted, corresponds to the changed weighting of an Index Component in the Index resulting from any adjustment of the Index. The transaction fee reduces the Index Level as it results in a lower number of units.

4.3 Accuracy

The value of the Index will be rounded to two (2) decimal places (with halves being rounded up). Calculations on units are rounded to eight (8) decimals (with halves being rounded up).

4.4 Other Changes

The Index Administrator may at its reasonable discretion amend these Index Guidelines to (i) ensure achievement of the Index Objective or (ii) to address any errors, omission or ambiguities. Such amendments may include changes to the Index Component Selection Criteria or the rules with respect to the composition, calculation and weighting of the Index.

4.5 Adjustments Following Distributions and Corporate Actions

4.5.1 Distributions

Dividends, interest and other distributions will be allocated to the Index. A Withholding Tax applies and will be deducted, before the corresponding unit size of an Index Component is adjusted.

$$W_{i,t} = W_{i,t-1} \times \frac{p_{i,t-1}}{p_{i,t-1} - D_{i,t}}$$

Where:

$W_{i,t}$ Means the number of units of the Index Component i on Index Valuation Date t.

$p_{i,t-1}$ Means the closing price of Index Component i on Index Valuation Date t-1 in the Index Currency.

$D_{i,t}$ Means the dividend amount on Index Valuation Date t multiplied by $(1 - WT_i)$ where WT_i is the Withholding Tax rate of the respective country of the Index Component i.

4.5.2 Splits

Splits require the recalculation of the "W" parameter if the split ratio is applicable to the price change, as follows:

$$W_{i,t+1} = W_{i,t} * S$$

Whereas:

$W_{i,t+1}$ Means the number of units / notional affected in the Index at time t+1

$W_{i,t}$ Means the number of units / notional affected in the Index at time t

S Means units / notional after the split for every unit / notional before split

Share distributions require the recalculation of the "W" parameter if the distribution ratio is applicable to the price change, as follows:

$$W_{i,t+1} = W_{i,t} * (1 + S)$$

Whereas:

$W_{i,t+1}$ Means the number of units / notional affected in the Index at time t+1.

$W_{i,t}$ Means the number of units / notional affected in the Index at time t.

S Means units / notional for every unit / notional before distribution.

4.5.3 Rights

Regarding capital increases the number of units of an Index Component must be adjusted and the following calculation is applied:

$$W_{i,t} = W_{i,t-1} \times \frac{p_{i,t-1}}{p_{i,t-1} - rB_{i,t}}$$

Where $rB_{i,t} = \frac{p_{i,t-1} - B - N}{BV + 1}$

And:

$W_{i,t}$ Number of units of Index Component i on the day of the ex-date.

$W_{i,t-1}$ Number of units of the Index Component i on the day prior to the ex-date.

$p_{i,t-1}$ Closing price on the day prior to ex-date.

$rB_{i,t-1}$ Calculated value of rights issue.

B Price of rights issued.

N Dividend disadvantage.

BV Subscription ratio.

The last dividend paid, or the proposed dividend announced is applied as the so-called dividend disadvantage. This occurs in case the new listed shares are non-eligible for dividend distribution.

4.5.4 Other Corporate Actions

In case of any other corporate action on an Index Component, the Index Administrator will assess whether such corporate action has a dilutive or any other effect on the price of the Index Component. In such case, the Index Administrator will make required adjustments and determine the date on which

these adjustments become effective. Amongst other things the Index Administrator can consider adjustments executed by an exchange as a result of the corporate action concerning options and futures.

4.6 Rebalancing and Allocation Advice

In general, the determinations set out in **Annex 2** with respect to a potential rebalancing of the Index are made on a weekly basis, each Monday (if such day is not a Business Day the next following Business Day), and, together with the Allocation Mechanism set out in **Annex 3**, may lead to an Allocation Advice.

The Index Allocator shall provide an Allocation Advice to the Index Administrator.

The Index Administrator may disregard any Allocation Advice provided to it if such recommendation is not in line with the Index Objective.

"Allocation Advice" means any advice given by the Index Allocator to the Index Administrator (i) relating to an increase or reduction in any Index Component's weighting; (ii) on the removal of any Index Component from the Index; (iii) on the addition of any instrument that satisfies the Index Component Selection Criteria (such instrument an **"Eligible Component"**), in each case provided that such advice is in line with the Index Objective as determined by the Index Administrator.

The Index Administrator will implement validly given Allocation Advice on the next Business Day following its receipt by reducing or increasing the number of units / notional of each Index Component or, as the case may be, by adding the Eligible Component and increasing the relevant number of units / notional of such instrument, in each case using their Official Valuation applicable to such Index Valuation Date and in each case within the applicable Allocation Implementation Period, in each case as mentioned in the Allocation Advice.

4.7 Data Provider

Each Allocation Advice is considered input data and the Index Allocator therefore acts as Data Provider in accordance with the Benchmarks Regulation.

4.8 Index Continuity and Market Disruption

In case of missing, insufficient, inaccurate or unreliable input data or non-compliance with the standards as set out below, for any of the required data to calculate the Index, the Index Administrator may not calculate and publish the Index. The decision will be taken at the Index Administrator's sole discretion.

In case the minimum requirements and standards set out below are not fulfilled for a considerable time, the Index Administrator, to protect users of the Index, will publish such circumstance either by amending the Index Guidelines, or by notice on the Website. Where appropriate, the Index Administrator will consult experts to make the decision.

The minimum requirements for the quantity of input data are:

- A price for each Index Component must be available;
- a weight of each Index Component must be available or calculatable.

The minimum standards for the quality of input data are:

- Data must be reliable and consistent;
- data must be robust;
- data must be verifiable.

4.9 Internal Review and Approval of Methodology

After the preparation of the index related documentation, a review round with regards to whether the requirements of the Benchmarks Regulation are reflected and whether there is an operational feasibility for implementation takes place. Thereafter, a revision and further coordination with relevant parties takes place, including a dedicated checklist maintained by the Index Administrator to ensure compliance with the Benchmarks Regulation. Such a checklist includes, among other things, documentation requirements of the Benchmarks Regulation. After the relevant steps have been successfully completed, the management of the Index Administrator has discretion to approve launching an index. The methodology is reviewed annually.

4.10 Consulting Procedures and Significant Change

In the event of a proposed Significant Change in the Index methodology, it is the responsibility of a relevant party to contact the Index Administrator and notify the relevant request. Such notification must in any case be made in writing or by email. The Index Administrator will subsequently review the case regarding the reasons given.

For the purposes of this Section 4.10 "**Significant Change**" means, in each case determined in the Index Administrator's reasonable discretion taking into account the Index Sponsor's interests and Index users at all times:

- (i) Any change which causes a change in the Index Level of more than 3% compared to the Index Level prevailing in the absence of such change on the last Index Valuation Date prior to such change; and
- (ii) any methodological adjustment that leads to significant changes of the Index Levels in the longer term.

In case of a Significant Change, the Index Administrator will provide updated Index Guidelines on its website. In addition, any licensees will be informed by the Index Administrator about any Significant Change.

5 CHANGE HISTORY

15.05.2023 – 1.0. – Initial version

05.07.2023 – 1.1 – Adjustment of the Transaction Fee from 0.1% to 0.05% and update of Annex 4.

6 CONTACT DATA

Information regarding the Index

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ANNEX 1: INDEX UNIVERSE

Instruments

Equity ETF

Cash ETF

Bond ETF

ANNEX 2: INDEX COMPONENT SELECTION CRITERIA

Each instrument selected from the Index Universe must fulfil the following criteria to be eligible for inclusion in the Index ("**Index Component Selection Criteria**").

The information included in this **Annex 2** has been provided by the Index Allocator, who is solely responsible for its content.

On each rebalancing determination date, the following filter criteria are applied to the Index Universe.

An instrument is eligible, if:

- a) it is a Swiss collective investment schemes open for the distribution to non-qualified investors or for foreign collective investment schemes approved for distribution to non-qualified investors by FINMA according Art. 120 CISA, or a successor thereof; and
- b) it is subject to the Swiss Direct Federal Tax DBST according to: <https://www.ictax.admin.ch/extern/de.html#/ratelist/2023>, or a successor thereof; and
- c) it is listed or admitted to trading on SIX (or any successor thereof) or on a foreign securities exchange with equivalent regulation (e.g. which hold full membership of the Federation of European Securities Exchanges (FESE) or the World Federation of Exchanges (WFE)) providing it complies with the provisions of the Federal Act of 23 June 2006 on Collective Investment Schemes (CISA) and its implementing provisions; and
- d) it is accumulating; and
- e) it is quoted in EUR, USD, CHF, GBP, or JPY.

The Index Component Selection Criteria are required to be fulfilled at the time of inclusion of the relevant instrument as Index Component in the Index. However, fulfilment of the Index Component Selection Criteria will not be monitored on an ongoing basis following such inclusion.

ANNEX 3: ALLOCATION MECHANISM

The information included in this **Annex 3** has been provided by the Index Allocator, who is solely responsible for its content.

Allocation Mechanism

The Index dynamically allocates – using a rule-based methodology (the “Model”) between eleven exchange-traded funds with industrial exposures to **Consumer Discretionary, Communication Services, Consumer Stables, Energy, Financials, Health Care, Industrials, Information Technology, Materials, Real Estate** and **Utilities** (each an Equity Instrument), and a **money market** exchange-traded fund (Cash Instrument) using variance-weighted trend indicators adjusted for regime shifts as further explained herein.

The Index aims to provide an improved risk/return profile compared to a passive investment in the Equity Instruments and protect against major drawdowns during severe market crises. Conceptually, the Model allocates weights on the assumption that an Equity Instrument can undergo sudden changes (regime shifts) in its price dynamic. A regime shift occurs if new price information of an Equity Instrument cannot be explained with the dynamics of its older price information i.e. a change in the expected trend and/or a change in expected variance.

The Model considers the last 48 weekly returns of an Equity Instrument. In order to avoid an arbitrary partitioning of the dataset, the Model takes into consideration any possible partitioning of the 48 weekly returns of an Equity Instrument. For each cluster in a partition, the Model calculates the expected trend and expected variance as well as the likelihood of the partition itself (i.e. the probability that the partition describes the dataset accurately)¹.

Once all the expected trends, expected variances and likelihoods have been computed, the Model calculates – for each of the 48 weekly returns used – the final trends (T), the final variances (V) and, using the likelihoods of partitions, the so-called change point probabilities (P) i.e. 144 values in total (3 statistics T, V, P × 48 weekly returns per Equity Instrument).

¹ The Model uses **expected** trends and **expected** variances instead of sample trends (means) and variances. Analytical solutions based on Bayesian inference for the expected trend, expected variance and the likelihood are illustrated in the doctoral thesis of Tobias Setz: “Stable Portfolio Design Using Bayesian Change Point Models and Geometric Shape Factors”, ETH Zurich (2017), <https://doi.org/10.3929/ethz-b-000244960>.

The 144 statistics are computed for each of the eleven Equity Investments. $T_{m,j}$, $V_{m,j}$ and $P_{m,j}$ to indicate the final trends, variances and change point probabilities of week m and Equity Instrument j are used. In order to derive the allocation to each Equity Instrument, the Model computes indicators I_1 to I_{11} (one for each Equity Instrument j) as follows:

1. Calculate the ratios $R_{m,j} = T_{m,j} / V_{m,j}$ (48 ratios per Equity Instrument), note the ratios are similar to the Sharpe ratios (but lacking the risk-free rate).
2. I_j for each Equity Instrument j is equal to the exponential moving average of $R_{1,j}$ to $R_{48,j}$ (the corresponding $P_{1,j}$ to $P_{48,j}$ are used as the base of the weighting factor or loads in the calculation of the exponential moving average).

The eleven indicators I_1 to I_{11} are theoretically unbound and can range from minus infinity to plus infinity. To map the eleven indicators to weights (W_1 to W_{11}) between 0% and 100% the Model performs the following steps:

1. Map each indicator I_j to a value between 0 and 1 using a sigmoid function, the resulting outcome is eleven signals denoted S_1 to S_{11} .
2. Since each equity instrument represents an industry, industry weights IW_j are defined. Industry weights are updated every week and are approximately equal to the global industry market capitalization.
3. Use the indicator values (I_j) to over- and underweight the industry weights (IW_j) and normalize them such that they sum up to 1. The result will be ranked weights (RW_j), one weight for every equity instrument j .
4. The final weight (W_j) for each equity instrument j is calculated by multiplying the ranked weights (RW_j) with the signals (S_j).
5. Once the Model computed the weight W_j for each Equity Instrument j , the weight for the Cash Instrument (W_{12}) is the difference between 100% and the sum of W_1 to W_{11} .

W_1 to W_{11} (Equity instruments) and W_{12} (Cash Instruments) are calculated on a weekly basis. In addition, any net dividend received from an Equity Instrument will be automatically reinvested in the Equity Instrument.

ANNEX 4: INDEX ALLOCATION

The weight allocation as of 05.07.2023 for the Index Components is set out below.

ISIN	Weight
IE00BM67HP23	8.40%
IE00BM67HR47	6.00%
IE00BM67HN09	4.10%
IE00BM67HM91	2.01%
IE00BM67HL84	7.19%
IE00BM67HK77	5.59%
IE00BM67HV82	12.11%
IE00BM67HT60	24.30%
IE00BM67HS53	2.52%
IE00BH4GR342	0.60%
IE00BM67HQ30	1.05%
LU0321465469	26.14%