

GUIDELINE

Solactive Deep Value World MV ex-DA Index

Version 2.0 dated September 30th, 2019



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This document contains the underlying principles and regulations regarding the structure and the operating of the Solactive Deep Value World MV ex-DA Index. 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 Solactive Deep Value World MV ex-DA Index. Any changes made to the guideline are initiated by the Committee specified in section 1.6. The Solactive Deep Value World MV ex-DA Index is calculated and published by Solactive AG. The name "Solactive" is copyrighted.

1 Index specifications

The Solactive Deep Value World MV ex-DA Index (the "Index") is an Index of Solactive and is calculated and distributed by this provider.

The objective of the Index is to provide exposure to the performance of a basket of 50 liquid International Companies selected through a Deep Value, Expected Dividend Yield and Low Volatility methodology.

The Index is calculated as Price Return (PR), Net Total Return (NTR) and Gross Total Return (GTR).

The Index is calculated and published in EURO (EUR).

1.1 Short name and ISIN

The Index is distributed under the following identifiers:

Name	ISIN	WKN	Characteristic	Reuters	Bloomberg
Solactive Deep Value World MV ex-DA GTR Index	DE000SLA5WT6	SLA5WT	Gross Total Return	.SOWDEEXG	
Solactive Deep Value World MV ex-DA NTR Index	DE000SLA5WU4	SLA5WU	Net Total Return	.SOWDEEXN	
Solactive Deep Value World MV ex-DA PR Index	DE000SLA5WV2	SLA5WV	Price Return	.SOWDEEXP	SOWDEEXP Index

1.2 Initial value

The Index is based on 100 at the close of trading on the start date, April 1st, 2006.

1.3 Distribution

The Solactive Deep Value World MV ex-DA 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 Solactive Deep Value World MV ex-DA Index via his information systems.

1.4 Prices and calculation frequency

The index level of the Solactive Deep Value World MV ex-DA Index is calculated on each Business Day based on the prices on the respective Exchanges on which the Index Components are listed. The most recent prices of all Index Components are used. Prices of Index Components not listed in the Index Currency are translated using spot foreign exchange rates quoted by Reuters. Should there be no current price available on Reuters, the most recent price or the Trading Price on Reuters for the preceding Trading Day is used in the calculation. The daily index closing level is calculated using Reuters/WMCO closing spot rates as at 4pm London time.

The Index is calculated from 8:00 am to 22:30 pm, CET. In the event that data cannot be provided to Reuters or to the pricing services of Boerse Stuttgart AG, the Index cannot be distributed. Any incorrect calculation is adjusted on a retrospective basis.

1.5 Weighting

On each Adjustment Day each Index Component of the Solactive Deep Value World MV ex-DA Index is weighted as described in section 2.1.

1.6 Decision-making bodies

A Committee composed of staff from Solactive AG 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 "**Committee**"). The future composition of the Index is set by the Committee on the Selection Days. The Committee shall also decide about the future composition of the Index and the implementation of any necessary adjustments if any Extraordinary Events should occur.

Members of the Committee can recommend changes to the guideline and submit them to the Committee for approval if there are regulatory reasons for changing the guideline.

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 launch of the Index on June 29th, 2018.

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 by Solactive.

2 Composition of the Index

2.1 Selection of the Index Components

The initial composition of the Index as well as any ongoing adjustment is based on the following rules:

Based on the criteria outlined in Chapter 4, the Index Calculator determines the Selection Pool of securities which are eligible for inclusion in the Index. On each Selection Day, the Index selection is determined following the steps below:

Step 1: Deep Value Filter

For each stock in the Selection Pool a Solvency Score is calculated based on the solvency criteria (Financial Leverage and Interest Coverage for Non-Financials or RoE and EBITDA Growth for Financials), a Sustainability Score based on Past Dividends and Past Earnings and a Valuation Score based on Cyclically Adjusted P/E Ratio (CAPE), CAPE/PtB and Earning Yield. In parallel, the Deep Value Score is calculated as the sum of the three scores above (Solvency, Sustainability and Valuation). In order to move to the next step of the selection process, a Company must comply with the following four constraints:

- Deep Value score greater than or equal to 4
- Solvency score greater than or equal to 1
- Sustainability score greater than or equal to 1
- Valuation score greater than or equal to 1

All stocks, which don't fulfil with these constraints are removed.

Step 2: Disputable Activities involvement screening

All stocks which passed the Deep Value Filter are examined for any major involvement in specific disputable activities based on the Vigeo Eiris Controversial Activities Screening. Those shares are then removed from the selection pool.

Step 3: Dividend Yield Filter

All companies remaining are ranked according to their dividend yield. The dividend yield is computed as the estimated dividend per share as provided by Factset, divided by the unadjusted closing price, both measured in the underlying's own currency. Out of all the securities in the Universe, 25% of the securities with the highest dividend yield are selected. Denote this number by n_{pre} .

In case there are less than 10% stocks from each Region (as defined in Section 4), the next best (in terms of dividend yield) stocks from the underrepresented Region are added until there are at least 10% stocks from each region. Denote the final number of selected stocks as n .

Step 4: Minimum Variance Optimization

Based on the resulting n securities of the selection steps above, an optimization algorithm determines weights for the securities which would lead to minimal portfolio volatility.

$$\min_w w' \Sigma w$$

Subject to the constraints:

$$\sum_{i=1}^n w_i = 1$$

$$\sum_{i=1}^n y_i = 50$$

$$w^{\min} * y_i \leq w_i \leq w^{\max} * y_i, \quad i = 1, \dots, n$$

$$\sum_{i \in S(j)} w_i \leq 0.25, \quad i = 1, \dots, n$$

$$0.1 \leq \sum_{i \in R(j)} w_i \leq 0.5, \quad i = 1, \dots, n$$

$$y_i \in \{0,1\}, \quad i = 1, \dots, n$$

Where:

- w = n-dimensional vector of weights with generic element w_i
- Σ = n-by-n-dimensional variance-covariance matrix (using 125 daily returns) based on Trading Prices adjusted for splits and spin-offs
- w^{\max} = the maximum weight of each stock (5%)
- w^{\min} = the minimum weight of each stock (1%)
- $S(j)$ = the set of securities belonging to sector j.
- $R(j)$ = the set of securities belonging to region j

The resulting weights of the optimization problem are the weights w_i^{target} for $i=1,\dots,n$.

2.2 Ordinary adjustment

The composition of the Index is ordinarily reviewed quarterly, 2 Trading Days prior to the scheduled Adjustment day. The composition of the Index is adjusted on the Adjustment Day.

The Index is rebalanced quarterly over a ten-day period to ensure that rebalance transactions stay below the Average Daily Value Traded. Beginning on the Business Day immediately following the Adjustment Day, and continuing over the next nine Trading Days, defined as the Rebalancing Period, the target weights of the constituents of the Index on the m^{th} day are set as follows:

$$w_i^{\text{target}}(t_0 + m) = w_i(t_0) + \frac{m * (w_i^{\text{target}} - w_i(t_0))}{M}, \quad 0 < m \leq 10$$

where

- t_0 = Adjustment Day
- $w_i(t_0)$ = Percentage Weight of security i at the Adjustment Day. For the avoidance of doubt, if a security i is not an Index Component on the Adjustment Day, $w_i(t_0)$ is zero.
- w_i^{target} = Target Weight of security i after the completion of the Rebalancing Period.
- $w_i^{\text{target}}(t)$ = Target Weight of security i on Business Day t.
- m = m^{th} day of the Rebalancing Period
- M = Total number of Trading Days in the Rebalancing Period, i.e. 10

The first adjustment will be made in June 2017 based on the Trading Prices of the Index Components on the Adjustment Day.

For the historic Index values before the launch of the Index, m was set to 1.

Solactive AG shall publish any changes made to the Index composition on the Selection Day and consequently with sufficient notice before the Adjustment Day.

2.3 Extraordinary adjustment

If a company included in Solactive Deep Value World MV ex-DA Index is removed from the Index between two Adjustment Days due to an Extraordinary Event, if necessary, the Committee shall designate a successor. This is announced by Solactive AG after the close of business on the day on which the new composition of the Index was determined by the Committee. The Solactive Deep Value World MV ex-DA Index is adjusted with two days notice if possible.

3 Calculation of the Index

3.1 Index formula

The Solactive Deep Value World MV ex-DA Index is an index whose value on any week day is equivalent to the sum over all Index Components of the products of (a) the Number of Shares of the Index Component and (b) the price of the Index Component at the respective regulated Exchange.

As a formula:

$$Index_t = \sum_{i=1}^n x_{i,t} * p_{i,t}$$

with:

$Index_t$ = Solactive Deep Value World MV ex-DA Index on Business Day t rounded to 2 decimal places

$p_{i,t}$ = Price of Index Component i on Business Day t converted into the Index Currency

$x_{i,t}$ = Number of Shares of the Index Component i on Business Day t, calculated as follows

If t falls into the Rebalancing Period, the Number of Shares $x_{i,t}$ is calculated as follows

$$x_{i,t} = \frac{w_i^{target}(t) * Index_{t-1}}{p_{i,t-1}},$$

Otherwise, besides any adjustments due to Corporate Actions,

$$x_{i,t} = x_{i,t-1}.$$

3.2 Accuracy

The value of the Index will be rounded to four decimal places.

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

3.3 Adjustments

Indices need to be adjusted for systematic changes in prices once these become effective. This requires the new Number of Shares of the affected Index Component to be calculated on an ex-ante basis.

The Solactive Deep Value World MV ex-DA Index is adjusted for special cash distributions, capital increases, rights issues, splits, par value conversions and capital reductions.

3.4 Dividends and other distributions

Dividend payments and other regular distributions are included in the Gross and Net Total Return Index, causing an adjustment to the Number of Shares of the corresponding Index Component. The Price Return Index reinvests only Special Cash Distributions. The new Number of Shares is calculated as follows:

$$x_{i,t} = x_{i,t-1} * \frac{p_{i,t} + D_{i,t}}{p_{i,t}}$$

with

$x_{i,t}$ = Number of Shares of the Index Component i on Business Day t

$D_{i,t}$ = Payment on Business Day t multiplied by the Dividend Correction Factor of the respective country

$p_{i,t}$ = Price of Index Component i on Business Day t

All dividend payments are adjusted in the index on the respective ex-dividend date.

3.5 Corporate actions

3.5.1 Principles

Following the announcement by a company included in the Index of the terms and conditions of a corporate action the Index Calculator determines whether such corporate action has a dilution, concentration or other effect on the price of the Index Component.

If this should be the case the Index Calculator shall make the necessary adjustments to the affected Index Component and/or the formula for calculating the Index and/or to other terms and conditions of this document that he deems appropriate in order to take into account the dilution, concentration or other effect and shall determine the date on which this adjustment shall come into effect.

Amongst other things the Index Calculator can take into account the adjustment made by an Affiliated Exchange as a result of the corporate action with regard to option and futures contracts on the respective share traded on this Affiliated Exchange.

3.5.2 Capital increases

In the case of capital increases (from the company's own resources or through cash contributions) the new Numbers of Shares are calculated as follows:

$$x_{i,t} = x_{i,t-1} * \frac{p_{i,t-1}}{p_{i,t-1} - rB_{i,t-1}}$$

with

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

with:

$x_{i,t}$ = Number of Shares of Index Component i on the day of the distribution

$x_{i,t-1}$ = Number of Shares of Index Component i on the day prior to the distribution

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

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

B = Price of rights issue

N = Dividend disadvantage

BV = Subscription ratio

$B = 0$ if capital is increased from the company's own resources.

3.5.3 Capital reductions

In the case of capital reductions, the new Number of Shares is determined as follows:

$$x_{i,t} = x_{i,t-1} \frac{1}{H_{i,t}}$$

$H_{i,t}$ = Reduction ratio of the company on day t

$x_{i,t}$ = Number of Shares of the affected Index Component on the day of the distribution

$x_{i,t-1}$ = Number of Shares of the affected Index Component on the day prior to the distribution

3.5.4 Share splits and par value conversions

In the case of share splits and par value conversions it is assumed that the prices change in ratio to the number of shares or to the par values. The new Number of Shares is calculated as follows:

$$x_{i,t} = x_{i,t-1} \frac{N_{i,t-1}}{N_{i,t}}$$

$N_{i,t}$ = New par value of security class i (or former number of shares)

$N_{i,t-1}$ = Former par value of security class i (or new number of shares)

$x_{i,t}$ = Number of Shares of the affected Index Component on the day of the distribution

$x_{i,t-1}$ = Number of Shares of the affected Index Component on the day prior to the distribution

3.6 Market Disruption Event and Correction Policy

Recalculation: Solactive AG makes the greatest possible efforts to accurately calculate and maintain its indices. However, the occurrence of errors in the index determination process cannot be ruled out. In such cases Solactive AG strictly adheres to its publicly available [Correction Policy](#).

Market Disruption: In periods of market stress Solactive AG calculates its indices following predefined and exhaustive arrangements set out in its publicly available [Disruption Policy](#).

4. Definitions

“**Adjustment Day**” is the first Trading Day of March, June, September and December.

A “**Business Day**” is every weekday other than a Saturday or a Sunday unless a Market Disruption event occurs.

“**Deep Value Score**” is calculated as the sum of the Solvency, Sustainability and Valuation Score.

"**Deep Value Filters**" are the following:

Solvency – Financial Leverage (for companies that are not assigned to the Financial Sector by the Index Administrator)

Data items provided by FactSet (or any reference source taking the place of FactSet and providing comparable data items, acceptable to and as determined by the Index Calculator) are used to compute this indicator, which is expressed as the ratio between the company’s long-term debt (net of cash) and its EBITDA.

The ratio has to be lower than 2 for the company to score 1 on this criterion.

$$Criterion_{(k,t)} = \frac{LT\ Debt_{(k,t)} - Cash_{(k,t)}}{EBITDA_{(k,t)}}$$

where

$LT\ Debt_{(k,t)}$ is the Company ‘k’ ‘s last reported long-term debt at the time of Index Selection Day t

$Cash_{(k,t)}$ is the Company ‘k’ ‘s last reported cash at the time of Index Selection Day t

$EBITDA_{(k,t)}$ is the Company ‘k’ ‘s last reported annual EBITDA at the time of Index Selection Day t

Solvency – Interest Cover (for companies that are not assigned to the Financial Sector by the Index Administrator)

Data items provided by FactSet (or any reference source taking the place of FactSet and providing comparable data items, acceptable to and as determined by the Index Calculator) are used to compute this indicator, which is expressed as the ratio between the company’s EBIT and its financial charges (net of financial income).

The ratio has to be greater than 5 for the company to score 1 on this criterion.

$$Criterion_{(k,t)} = \frac{EBIT_{(k,t)}}{Financial\ Charges_{(k,t)} - Financial\ Income_{(k,t)}}$$

where

$EBIT_{(k,t)}$ is the Company ‘k’ ‘s last reported annual EBIT at the time of Index Selection Day t

$Financial\ Charges_{(k,t)}$ are the Company ‘k’ ‘s last reported annual financial charges at the time of Index Selection Day t

$Financial\ Income_{(k,t)}$ is the Company ‘k’ ‘s last reported annual financial income at the time of Index Selection Day t

Solvency – Return on Equity (for companies that are assigned to the Financial Sector by the Index Administrator)

The estimate has to be greater than 8% to score 1 on this criterion.

Solvency – EBITDA Growth (for companies that are assigned to the Financial Sector by the Index Administrator)

For every company, the EBITDA Growth criterion is computed as the ratio between two last reported annual EBITDA. The ratio has to be greater than 1 for the company to score 1 on this criterion.

$$Criterion_{(k,t)} = \frac{EBITDA_{(k,t)}}{EBITDA_{(k,t-1Y)}}$$

where

$EBITDA_{(k,t)}$ is the Company 'k' 's last reported annual EBITDA at the time of Index Selection Day t

$EBITDA_{(k,t-1Y)}$ is the Company 'k' 's second last reported annual EBITDA at the time of Index Selection Day t

Sustainability – Past Dividends

Data items provided by FactSet (or any reference source taking the place of FactSet and providing comparable data items, acceptable to and as determined by the Index Calculator) are used to compute this indicator, which is expressed as the company's minimum annual dividend payment over the past 10 years.

The ratio has to be strictly positive for the company to score 1 on this criterion.

$$Criterion_{(k,t)} = \text{Min}_{j=1}^{j=10} (Div(k, t - j))$$

where

$Div(k, t - j)$ is the dividend paid by Company 'k' as of the j-th year prior to Index Selection Day t

Sustainability – Past Earnings

Data items provided by FactSet (or any reference source taking the place of FactSet and providing comparable data items, acceptable to and as determined by the Index Calculator) are used to compute this indicator, which is expressed as the company's minimum earnings per share over the past 10 years.

The ratio has to be strictly positive for the company to score 1 on this criterion.

$$Criterion_{(k,t)} = \text{Min}_{j=1}^{j=10} (EPS(k, t - j))$$

where

$EPS(k, t - j)$ is the EPS generated by Company 'k' as of the jth year prior to Index Selection Day t

Valuation – Cyclically Adjusted P/E Ratio (CAPE)

Data items provided by FactSet (or any reference source taking the place of FactSet and providing comparable data items, acceptable to and as determined by the Index Calculator) are used to compute this indicator, which is expressed as the company's share price divided by the average of its EPS over the past 5 years.

The ratio has to be lower than 15 for the company to score 1 on this criterion.

$$Criterion_{(k,t)} = \frac{Share\ Price_{(k,t)}}{Average_{j=1}^{j=5}(EPS(k, t - j))}$$

where

$Share\ Price_{(k,t)}$ is Company's last available closing price on Index Selection Day t

$Average_{j=1}^{j=5}(EPS(k, t - j))$ is the EPS generated by Company 'k' as of the jth year prior to Index Selection Day t

Valuation – CAPE x Price-to-Book

Data items provided by FactSet (or any reference source taking the place of FactSet and providing comparable data items, acceptable to and as determined by the Index Calculator) are used to compute this indicator, which is expressed as the product between the company's CAPE as defined in (g) above and its Price-to-Book ratio.

The ratio has to be lower than 30 for the company to score 1 on this criterion.

$$Criterion_{(k,t)} = CAPE_{(k,t)} * PBV_{(k,t)}$$

where

$CAPE_{(k,t)}$ is the Company's CAPE as defined and calculated on Index Selection Day t

$PBV_{(k,t)}$ is the Company's Price-to-Book ratio on Index Selection Day t

Valuation – Earning Yield

FactSet (or any reference source taking the place of FactSet and providing comparable data items, acceptable to and as determined by the Index Calculator) data items are used to compute this indicator, which is expressed as the ratio between the company's FY1 EPS mean estimate and its last available share price.

The ratio has to be higher than 5% for the company to score 1 on this criterion.

$$Criterion_{(k,t)} = \frac{EPS_{(k,t)}}{Share\ Price_{(k,t)}}$$

where

$EPS_{(k,t)}$ is the Company 'k' 's FY1 earnings per share mean estimate at the time of Index Selection Day t

$Share\ Price_{(k,t)}$ is Company's last available closing price on Index Selection Day t

“Dividend Correction Factor” is calculated as 1 minus the applicable withholding tax rate and/or other applicable tax rate currently prevalent in the respective country. The table can be accessed on the Solactive corporate website using the following URL: <http://www.solactive.com/news/documents/>

“Exchange” is, in respect of the Selection Pool and every Index Component, the respective primary exchange where the Index Component has its primary listing. The Committee may decide to declare a different stock exchange the “Exchange” for trading reasons, even if the company is only listed there via a Stock Substitute.

In particular, an **“Extraordinary Event”** is

1. **Merger:**

With regard to an Index Component a **“Merger”** is

- i. a change in the security class or a conversion of this share class that results in a transfer or an ultimate definite obligation to transfer all the shares in circulation to another legal person,
- ii. a merger (either by acquisition or through forming a new structure) or a binding obligation on the part of the issuer to exchange shares with another legal person (except in a merger or share exchange under which the issuer of this Index Component is the acquiring or remaining company and which does not involve a change in security class or a conversion of all the shares in circulation),
- iii. a takeover offer, exchange offer, other offer or another act of a legal person for the purposes of acquiring or otherwise obtaining from the issuer 100% of the shares issued that entails a transfer or the irrevocable obligation to transfer all shares (with the exception of shares which are held and controlled by the legal person), or
- iv. a merger (either by acquisition or through forming a new structure) or a binding obligation on the part of the issuer of the share or its subsidiaries to exchange shares with another legal person, whereby the issuer of the share is the acquiring or remaining company and it does not involve a change in the class or a conversion of the all shares issued, but the shares in circulation directly prior to such an event (except for shares held and controlled by the legal person) represent in total less than 50% of the shares in circulation directly subsequent to such an event.

2. **Takeover bid**

A **“Takeover bid”** is a bid to acquire, an exchange offer or any other offer or act of a legal person that results in the related legal person acquiring as part of an exchange or otherwise more than 10% and less than 100% of the voting shares in circulation from the issuer of the Index Component or the right to acquire these shares, as determined by the Index Calculator based on notices submitted to public or self-regulatory authorities or other information considered by the Index Calculator to be relevant.

3. **Delisting**

An Index Component is **“delisted”** if the Exchange announces pursuant to the Exchange regulations that the listing of, the trading in or the issuing of public quotes on the Index Component at the Exchange has ceased immediately or will cease at a later date, for whatever reason (provided delisting is not because of a Merger or a Takeover bid), and the Index Component is not immediately listed, traded or quoted again on an exchange, trading or listing system, acceptable to the Index Calculator,

4. **Nationalisation**

“Nationalisation” is a process whereby all shares or the majority of the assets of the issuer of the shares are nationalised or are expropriated or otherwise must be transferred to public bodies, authorities or institutions.

5. **Insolvency**

“Insolvency” occurs with regard to an Index Component if (A) all shares of the respective issuer must be transferred to a trustee, liquidator, insolvency administrator or a similar public officer as result of a voluntary or compulsory liquidation, insolvency or winding-up proceedings or comparable proceedings affecting the issuer of the Index Components or (B) the holders of the shares of this issuer are legally enjoined from transferring the shares.

The Trading Price for this Index Component on the day the event came into effect is the last available market price for this Index Component quoted on the Exchange on the day the event came into effect (or, if a market price is not available for the day the event came into effect, the last available market price quoted on the Exchange on a day specified as appropriate by the Index Calculator), as determined by the Index Calculator, and this price is used as the Trading Price of the particular Index Component until the end of the day on which the composition of the Index is next set.

In the event of the Insolvency of an issuer of an Index Component the Index Component shall remain in the Index until the next Adjustment Day. As long as a market price for the affected Index Component is available on a Business Day, this shall be applied as the Trading Price for this Index Component on the relevant Business Day, as determined in each case by the Index Calculator. If a market price is not available on a Business Day the Trading Price for this Index Component is set to zero. The Committee may also decide to eliminate the respective Index Component at an earlier point in time prior to the next Adjustment Day. The procedure in this case is identical to an elimination due to and Extraordinary Event.

The **“Index”** refers to the Solactive Deep Value World MV ex-DA Index.

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

“Index Component” is each security currently included in the Index or, during a Rebalancing Period, each security currently included in the index and to be included in the index during the Rebalancing Period.

The **“Index Currency”** is Euro (EUR).

A **“Market Disruption Event”** occurs if

1. one of the following events occurs or exists on a Business Day prior to the opening quotation time for an Index Component:
 - A) trading is suspended or restricted (due to price movements that exceed the limits allowed by the Exchange or an Affiliated Exchange, or for other reasons):
 - 1.1. across the whole Exchange; or
 - 1.2. in options or futures contracts on or with regard to an Index Component or an Index Component that is quoted on an Affiliated Exchange; or
 - 1.3. on an Exchange or in a trading or quotation system (as determined by the Index Calculator) in which an Index Component is listed or quoted; or
 - B) an event that (in the assessment of the Index Calculator) generally disrupts and affects the opportunities of market participants to execute on the Exchange transactions in respect of a share included in the Index or to determine market values for a share included in the Index or to execute on an Affiliated Exchange transaction with regard to options and futures contracts on these shares or to determine market values for such options or futures contracts; or
2. trading on the Exchange or an Affiliated Exchange is ceased prior to the usual closing time (as defined below), unless the early cessation of trading is announced by the Exchange or Affiliated Exchange on this Business Day at least one hour before
 - (aa) the actual closing time for normal trading on the Exchange or Affiliated Exchange on the Business Day in question or, if earlier.
 - (bb) the closing time (if given) of the Exchange or Affiliated Exchange for the execution of orders at the time the quote is given.

“Normal exchange closing time” is the time at which the Exchange or an Affiliated Exchange is normally closed on working days without taking into account after-hours trading or other trading activities carried out outside the normal trading hours; or
3. a general moratorium is imposed on banking transactions in the country in which the Exchange is resident if the above-mentioned events are material in the assessment of the Index Calculator, whereby the Index Calculator makes his decision based on those circumstances that he considers reasonable and appropriate.

“Number of Shares” is in respect of an Index Component and any given Business Day the number or fraction of shares included in the Index. It is calculated for any Index Component as the ratio of (A) the Percentage Weight of an Index Component multiplied by the Index value and (B) its Trading Price.

“Percentage Weight” of an Index Component is the ratio of its Trading Price multiplied by its Number of Shares divided by the Index value.

“Selection Day” is the Business Day which is two Business Days prior to the Adjustment Day.

“Selection Pool” is determined on a quarterly basis on the Selection Days. It includes all companies traded in one of the following three regions:

- North America – listed in United States or Canada

- Europe – listed in Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland or United Kingdom
- Asia – listed in Australia, Hong Kong, Israel, Japan, New Zealand or Singapore

Which fulfill the below requirements:

- Companies with a minimum Average Daily Value Traded of at least EUR 10mn over the previous 6 months and the previous month: $\min(ADV_{6m}, ADV_{1m}) > 10,000,000 \text{ €}$
- Companies which classify as Common or Preferred Equity Stock
- Only the primary share is considered for each company

“Vigeo Eiris Controversial Activities Screening” – identifies companies deriving revenues from the below controversial activities and quantifies their involvement. Only companies with Major involvement are removed.

- Alcohol

Subcategory	Major involvement
Production of alcoholic beverages	>0%
Distribution of alcoholic beverages	≥10%

- Armament

Subcategory	Major involvement
Civilian Firearms – Production or sale (Firearms or ammunition or Semi-automatic weapons)	>0%
Civilian Firearms – Production or sale (Key parts: materials, gun cases, locks and safes...)	≥10%
Military – Controversial weapons (development; production, maintenance, use, distribution, storage, transportation or trade in controversial weapons or their key components)	>0%
Military - Financing of cluster munitions or anti-personnel landmines (Major shareholders ≥3%)	>0%
Military – Production - Conventional weapons	>0%
Military –production - Key parts or services for conventional weapons	≥10%

- Gambling

Subcategory	Major involvement
Gambling operations (betting shops, horse and greyhound tracks, licensed bingo halls, casinos, gaming clubs...)	≥5%
Gambling products (manufacture or supply of gaming or amusement with- prizes machines, manufacture of parts of gaming machines, supply of IT products specifically designed for use in gambling products, payment solutions for online gambling).	≥10%

- Nuclear Power

Subcategory	Major involvement
Nuclear power generation (companies that own or operate nuclear power stations)	≥5%
Nuclear power sale (companies that sell electricity generated in nuclear power plants owned or operated by third parties, i.e. companies purchasing nuclear-generated electricity for resale to their own clients).	≥10%

Major nuclear parts and services (nuclear power reactor, nuclear fuels, control rooms, waste storage)	≥10%
Uranium mining (owning or operating uranium mines)	>0%

- Pornography

Subcategory	Major involvement
Pornography and adult entertainment services (ownership or management of sex shops, lap dancing clubs; producing pornographic videos or software; operating pornographic websites and companies offering adult entertainment on cable, digital and satellite television).	>0%
Facilitating access to pornography (Tour operators, airlines and hotels clearly stating that access to prostitution is part of a travel arrangement or make indirect references to practices of sex tourism).	≥10%

- Tobacco

Subcategory	Major involvement
Production of core tobacco products	>0%
Distribution of core tobacco products	≥10%

- Fossil Fuels (Thermal Coal, tar sands and oil shale)

Subcategory	Major involvement
Coal Mining (all coal types, including both thermal and metallurgical coal)	≥10%
Thermal coal mining and power generation	>0%
Thermal coal mining	>0%
Coal-fueled power generation	>0%
Tar sands and oil shale extraction	>0%
Tar sands or oil shale reserves (Percentage of proven oil reserves represented by tar sands and oil shale deposits)	>0%
Tar sands and oil shale extraction or services	≥10% if tar sands and oil shale extraction and tar sands or oil shale reserves = 0%

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A “Trading Day” is in relation to the Index or an Index Component a Trading Day on the Exchange (or a day that would have been such a day if a market disruption had not occurred), excluding days on which trading may be ceased prior to the normal Exchange closing time. The Index Calculator is ultimately responsible as to whether a certain day is a Trading Day with regard to the Index or an Index Component or in any other connection relating to this document.

With regard to an Index component (subject to the provisions given above under “Extraordinary Events”) the “Trading Price” in respect of a Trading Day is the closing price on this Trading Day determined in accordance with the Exchange regulations. If the Exchange has no closing price for an Index Component, the Index Calculator shall determine the Trading Price and the time of the quote for the share in question in a manner that appears reasonable to him.

5 Appendix

5.1 Contact data

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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.