

# **INDEX RULE BOOK**

## **Leverage, Short, and Bear Indices**

Version 20-02

Effective from 15 May 2020

[indices.euronext.com](https://indices.euronext.com)

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## 1. INDEX SUMMARY

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<b>Factsheet</b>	<b>Leverage, Short and Bear indices</b>
<b>Index names</b>	Various based on AEX®, BEL 20®, CAC 40®, PSI 20® and ISEQ®
<b>Index type</b>	Indices are based on price index versions or Net return index or Gross return index versions.
<b>Administrator</b>	Euronext Paris is the Administrator and is responsible for the day-to-day management of the index. The underlying indices have independent Steering Committees acting as Independent Supervisor.
<b>Calculation</b>	Based on daily leverage. May include spread on interest rate or Financing Adjustment rate in the calculation
<b>Rule for exceptional trading circumstances</b>	Either suspend or reset if underlying index moved beyond certain threshold. See reference table.

Mnemo	Full name	Underlying index	Factor	Rule for exceptional trading circumstances	ISIN	Base level and date
<b>AEX® based</b>						
AEXLV	AEX® Leverage	AEX®	2	Suspend if Underlying Index < 75% of close of previous day	QS0011095898	1,000 at 31Dec2002
AEXNL	AEX® Leverage NR	AEX® NR	2	Suspend if Underlying Index < 75% of close of previous day	QS0011216205	1,000 at 31Dec2002
AEXTL	AEX® Leverage GR	AEX® GR	2	Suspend if Underlying Index < 75% of close of previous day	QS0011179239	1,000 at 31Dec2002
AEX3L	AEX® X3 Leverage NR	AEX® NR	3	Reset if Underlying Index < 85% of close of previous day.	QS0011230115	10,000 at 31Dec2008
AEX4L	AEX® X4 Leverage NR	AEX® NR	4	Reset if Underlying Index < 85% of close of previous day.	QS0011230156	10,000 at 31Dec2008
AEX5L	AEX® X5 Leverage NR	AEX® NR	5	Reset if Underlying Index < 85% of close of previous day	QS0011230164	10,000 at 31Dec2008
AEX6L	AEX® X6 Leverage NR	AEX® NR	6	Reset if Underlying Index < 85% of close of previous day	QS0011230172	100,000 at 31Dec2008
AEX7L	AEX® X7 Leverage NR	AEX® NR	7	Reset if Underlying Index < 88% of close of previous day	QS0011230180	100,000 at 31Dec2008
AE10L	AEX® X10 Leverage NR	AEX® NR	10	Reset if Underlying Index < 91% of close of previous trading day	NL0011515366	10,000 at 31Oct2015
ALE10	AEX X10 Leverage NR	AEX® NR	10	Reset if Underlying Index < 91% of close of previous trading day	FR0013504768	10,000 at 27 March 2020
A12LE	AEX® X12 Leverage NR	AEX® NR	12	Reset if Underlying Index < 93% of close of previous trading day	NL0011936141	10,000 at 30Jun2016
A15LE	AEX® X15 Leverage NR	AEX® NR	15	Reset if Underlying Index < 94% of close of previous trading day	NL0011936133	10,000 at 30Jun2016

Mnemo	Full name	Underlying index	Factor	Rule for exceptional trading circumstances	ISIN	Base level and date
ALE15	AEX® X15 Leverage NR	AEX® NR	15	Reset if Underlying Index < 94% of close of previous trading day	FR0013504743	10,000 at 27 March 2020
AEXSH	AEX® Short GR	AEX® GR	-1	Suspend if Underlying Index >125% of close of previous day	QS0011095914	1,000 at 31Dec2002
AEX2S	AEX® Double Short GR	AEX® GR	-2	Suspend if Underlying Index >125% of close of previous day	QS0011146899	1,000 at 31Dec2002
AEXXB	AEX® Xbear GR	AEX® GR	-2	Suspend if Underlying Index >125% of close of previous day	QS0011100854	1,000 at 31Dec2002
AEX3S	AEX® X3 SHORT GR	AEX® GR	-3	Reset if Underlying Index > 115% of close of previous day	QS0011230198	10,000 at 31Dec2008
AEX4S	AEX® X4 SHORT GR	AEX® GR	-4	Reset if Underlying Index > 115% of close of previous day	QS0011230206	10,000 at 31Dec2008
AEX5S	AEX® X5 SHORT GR	AEX® GR	-5	Reset if Underlying Index > 115% of close of previous day	QS0011230214	10,000 at 31Dec2008
AEX6S	AEX® X6 SHORT GR	AEX® GR	-6	Reset if Underlying Index > 115% of close of previous day	QS0011230222	100,000 at 31Dec2008
AEX7S	AEX® X7 SHORT GR	AEX® GR	-7	Reset if Underlying Index > 112% of close of previous day	FR0013362985	100,000 at 31Dec2008
AE10S	AEX® X10 Short GR	AEX® GR	-10	Reset if Underlying Index > 109% of close of previous day	NL0011515390	10,000 at 31Oct2015
AE12S	AEX® X12 Short GR	AEX® GR	-12	Reset if Underlying Index > 107% of close of previous day	NL0011515408	10,000 at 31Oct2015
AE15S	AEX® X15 Short GR	AEX® GR	-15	Reset if Underlying Index > 106% of close of previous day	NL0011515416	10,000 at 31Oct2015

Mnemo	Full name	Underlying index	Factor	Rule for exceptional trading circumstances	ISIN	Base level and date
<b>BEL 20® based</b>						
BELLV	BEL 20® Leverage	BEL 20®	2	Suspend if Underlying Index < 75% of close of previous day	QS0011095864	1,000 at 31Dec2002
BELTL	BEL 20® Leverage GR	BEL 20® GR	2	Suspend if Underlying Index < 75% of close of previous day	QS0011179247	1,000 at 31Dec2002
BEL3L	BEL 20® Triple Leverage	BEL 20®	3	Suspend if Underlying Index < 75% of close of previous day	QS0011146915	10,000 at 31Dec2002
BE3LN	BEL 20® X3 Leverage NR	BEL 20® NR	5	Suspend if Underlying Index < 85% of close of previous day	BE0389916736	10,000 at 31Dec2013
BEL5L	BEL 20® X5 Leverage NR	BEL 20® NR	5	Suspend if Underlying Index < 85% of close of previous day	BE0389914715	10,000 at 31Dec2013
BELSH	BEL 20® Short GR	BEL 20® GR	-1	Suspend if Underlying Index >125% of close of previous day	QS0011095880	1,000 at 31Dec2002
BEL2S	BEL 20® DoubleShort GR	BEL 20® GR	-2	Suspend if Underlying Index >125% of close of previous day	QS0011146923	1,000 at 31Dec2002
BELXB	BEL 20® Xbear GR	BEL 20® GR	-2	Suspend if Underlying Index >125% of close of previous day	QS0011100847	1,000 at 31Dec2002
BEL3S	BEL 20® Triple Short GR	BEL 20® GR	-3	Suspend if Underlying Index >125% of close of previous day	QS0011146931	10,000 at 31Dec2002
BEL5S	BEL 20® X5 Short GR	BEL 20® GR	-5	Suspend if Underlying Index >115% of close of previous day	BE0389915720	10,000 at 31Dec2013
<b>CAC 40® based</b>						

Mnemo	Full name	Underlying index	Factor	Rule for exceptional trading circumstances	ISIN	Base level and date
CACLV	CAC 40 <sup>®</sup> Leverage	CAC 40 <sup>®</sup>	2	Suspend if Underlying Index < 75% of close of previous day	QS0011095815	1,000 at 31Dec2002
CACTL	CAC 40 <sup>®</sup> Leverage NR	CAC 40 <sup>®</sup> NR	2	Suspend if Underlying Index < 75% of close of previous day	QS0011179221	1,000 at 31Dec2002
CACGL	CAC 40 <sup>®</sup> Leverage GR	CAC 40 <sup>®</sup> GR	2	Suspend if Underlying Index < 75% of close of previous day	QS0011216213	1,000 at 31Dec2002
CAC3L	CAC 40 <sup>®</sup> X3 Leverage NR	CAC 40 <sup>®</sup> NR	3	Reset if Underlying Index < 85% of close of previous day.	FR0013362662	10,000 at 31Dec2008
CAC4L	CAC 40 <sup>®</sup> X4 Leverage NR	CAC 40 <sup>®</sup> NR	4	Reset if Underlying Index < 85% of close of previous day.	FR0013362811	10,000 at 31Dec2008
CAC5L	CAC 40 <sup>®</sup> X5 Leverage NR	CAC 40 <sup>®</sup> NR	5	Reset if Underlying Index < 85% of close of previous day	FR0013361359	10,000 at 31Dec2008
CAC6L	CAC 40 <sup>®</sup> X6 Leverage NR	CAC 40 <sup>®</sup> NR	6	Reset if Underlying Index < 85% of close of previous day	FR0013362852	100,000 at 31Dec2008
CAC7L	CAC 40 <sup>®</sup> X7 Leverage NR	CAC 40 <sup>®</sup> NR	7	Reset if Underlying Index < 88% of close of previous day	FR0013362860	100,000 at 31Dec2008
CA10L	CAC 40 <sup>®</sup> X10 Leverage NR	CAC 40 <sup>®</sup> NR	10	Reset if Underlying Index < 91% of close of previous trading day	FR0013362993	1,000,000 at 31Dec2010
C12LE	CAC 40 <sup>®</sup> X12 Leverage NR	CAC 40 <sup>®</sup> NR	12	Reset if Underlying Index < 93% of close of previous trading day	FR0013186939	10,000 at 30Jun2016
C15LE	CAC 40 <sup>®</sup> X15 Leverage NR	CAC 40 <sup>®</sup> NR	15	Reset if Underlying Index < 94% of close of previous trading day	FR0013186921	10,000 at 30Jun2016
CLE15	CAC 40 X15 Leverage NR	CAC 40 <sup>®</sup> NR	15	Reset if Underlying Index < 94% of close of previous trading day	FR0013504735	10,000 at 27 March 2020

Mnemo	Full name	Underlying index	Factor	Rule for exceptional trading circumstances	ISIN	Base level and date
CACSH	CAC 40® Short GR	CAC 40® GR	-1	Suspend if Underlying Index >125% of close of previous day	QS0011095831	1,000 at 31Dec2002
CAC2S	CAC 40® Double Short GR	CAC 40® GR	-2	Suspend if Underlying Index >125% of close of previous day	QS0011146865	1,000 at 31Dec2002
CACXB	CAC 40® Xbear GR	CAC 40® GR	-2	Suspend if Underlying Index >125% of close of previous day	QS0011095856	1,000 at 31Dec2002
CAC3S	CAC 40® X3 Short GR	CAC 40® GR	-3	Reset if Underlying Index > 115% of close of previous day	FR0013362688	10,000 at 31Dec2008
CAC4S	CAC 40® X4 Short GR	CAC 40® GR	-4	Reset if Underlying Index > 115% of close of previous day	FR0013362837	10,000 at 31Dec2008
CAC5S	CAC 40® X5 Short GR	CAC 40® GR	-5	Reset if Underlying Index > 115% of close of previous day	FR0013360666	10,000 at 31Dec2008
CAC6S	CAC 40® X6 SHORT GR	CAC 40® GR	-6	Reset if Underlying Index > 115% of close of previous day	FR0013362878	100,000 at 31Dec2008
CAC7S	CAC 40® X7 SHORT GR	CAC 40® GR	-7	Reset if Underlying Index > 112% of close of previous day	FR0013364395	100,000 at 31Dec2008
CA10S	CAC 40® X10 SHORT GR	CAC 40® GR	-10	Reset if Underlying Index > 109% of close of previous day	FR0013361573	1,000,000 at 31Dec2010
CA12S	CAC 40® X12 SHORT GR	CAC 40® GR	-12	Reset if Underlying Index > 107% of close of previous day	FR0013361649	10,000 at 31Dec2012
CA15S	CAC 40® X15 SHORT GR	CAC 40® GR	-15	Reset if Underlying Index > 106% of close of previous day	FR0011627892	10,000 at 1Oct2013



Mnemo	Full name	Underlying index	Factor	Rule for exceptional trading circumstances	ISIN	Base level and date
CSH15	CAC 40® X15 SHORT GR	CAC 40® GR	-15	Reset if Underlying Index > 106% of close of previous day	FR0013504776	10,000 at 27 March 2020
<b>PSI 20® based</b>						
PSILV	PSI 20® Leverage	PSI 20®	2	Suspend if Underlying Index < 75% of close of previous day	QS0011095922	1,000 at 31Dec2002
PSITL	PSI 20® Leverage GR	PSI 20® GR	2	Suspend if Underlying Index < 75% of close of previous day	QS0011179254	1,000 at 31Dec2002
PSI3L	PSI 20® X3 Leverage GR	PSI 20®	3	Suspend if Underlying Index < 75% of close of previous day	QS0011146949	10,000 at 31Dec2002
PS3LN	PSI 20® X3 Leverage NR	PSI 20® NR	3	Suspend if Underlying Index < 75% of close of previous day	PTINO0220004	10,000 at 31Dec2013
PSISH	PSI 20® Short GR	PSI 20® GR	-1	Suspend if Underlying Index >125% of close of previous day	QS0011095948	1,000 at 31Dec2002
PSI2S	PSI 20® Double Short GR	PSI 20® GR	-2	Suspend if Underlying Index >125% of close of previous day	QS0011146956	1,000 at 31Dec2002
PSIXB	PSI 20® Xbear GR	PSI 20® GR	-2	Suspend if Underlying Index >125% of close of previous day	QS0011100862	1,000 at 31Dec2002
PSI3S	PSI 20® Triple Short GR	PSI 20® GR	-3	Suspend if Underlying Index >125% of close of previous day	QS0011146964	10,000 at 31Dec2002
<b>ISEQ® 20 based</b>						
ISELV	ISEQ® 20 Leverage	ISEQ® 20	2	Suspend if Underlying Index < 75% of close of previous day	IE00B2QF4Y48	1,000 at 31Dec2008

Version notes:

19-01 Inclusion of ISEQ 20 Leverage index; removal table reverse splits

19-02 Updated ISIN Reference several indices (CAC3L CAC3S CAC4L CAC5L CAC4S CAC5S CAC6L CAC7L CAC6S CAC7S AEX7S CA10L CA10S CA12S )

19-03 Change of EONIA reference to recalibrated EONIA (€STR plus a spread); update of governance naming.

20-01 Introduction of 4 new indices

20-02 ESG disclosures tables addition

## **2. GOVERNANCE AND DISCLAIMER**

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### **2.1 INDICES**

This rule book applies to the leveraged, short, and bear indices owned by Euronext N.V. or its subsidiaries (hereinafter jointly “Euronext”), based on the following indices:

- AEX®
- BEL 20®
- CAC 40®
- PSI 20®
- ISEQ 20®

Hereinafter referred to as “index”.

### **2.2 ADMINISTRATOR**

Euronext Paris is the Administrator of the index. The Administrator is responsible for all aspects of the management of the index. Within the scope of the Administrator, Index Design is responsible for decisions regarding the interpretation of these rules.

### **2.3 CASES NOT COVERED IN RULES**

In cases which are not expressly covered in these rules, operational adjustments will take place along the lines of the aim of the index. Operational adjustments may also take place if, in the opinion of Index Design, it is desirable to do so to maintain a fair and orderly market in derivatives on this index and/or this is in the best interests of the investors in products based on the index and/or the proper functioning of the markets.

### **2.4 RULE BOOK CHANGES**

These rules may be supplemented, amended in whole or in part, revised or withdrawn at any time. Supplements, amendments, revisions and withdrawals may also lead to changes in the way the index is compiled or calculated or affect the index in another way.

### **2.5 LIABILITY**

Euronext is not liable for any losses resulting from supplementing, amending, revising or withdrawing the rules for the index.

Euronext will do everything within its power to ensure the accuracy of the composition, calculation, publication and adjustment of the index in accordance with relevant rules. However Euronext is not liable for any inaccuracy in index composition, share prices, calculations and the publication of the index, the information used for making adjustments to the index and the actual adjustments. Furthermore, Euronext does not guarantee the continuity of the composition of the index, the continuity of the method of calculation of the index, the continuity of the dissemination of the index levels, and the continuity of the calculation of the index.

### **2.6 OWNERSHIP AND TRADEMARKS**

Euronext owns all intellectual and other property rights to the index, including the name, the composition and the calculation of the index. AEX®, BEL 20®, CAC 40®, ISEQ 20® and PSI 20® are registered trademark(s) of Euronext.

### 3. CALCULATION

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#### 3.1 DEFINITION AND COMPOSITION OF THE INDEX

The leverage index tracks the performance of a strategy that has a multiple (K) exposure to an underlying index with the support of short-term financing.

The Short or Bear index tracks the performance of a strategy which reverses a multiple (K) exposure to the underlying index by combining a short position on the underlying index and exposure to a risk-free money-market instrument, (the recalibrated EONIA (€STR plus a spread) or another rate). The latter exposure consists of the money invested in the index plus the multiple (K) short positions.

#### 3.2 CALCULATION OF THE LEVERAGE INDICES

The general formula of the Leverage indices is defined as follows:

$$LI_t = LI_T \left[ 1 + K \left( \frac{UI_t}{UI_T} - 1 \right) \right] - (K - 1) LI_T \left[ \frac{IR_T}{360} \right] D_{t,T} - a(K - 1) \times LI_T \left[ \frac{SPR_T}{360} \right] D_{t,T}$$

Where:

$T$  = Rebalancing date; for daily indices this is the previous business day.

$LI_t$  = Leverage index level at time of calculation t

$LI_T$  = Closing Leverage index level on the previous calculation day

$UI_t$  = Underlying index level (see Index summary) at time of calculation t

$UI_T$  = Closing Underlying Index level on the last rebalancing day T

$IR_T$  = Applicable interest rate as at the rebalancing date T. For daily indices this is recalibrated EONIA (€STR plus a spread).

$D_{t,T}$  = the number of days between the day of the calculation and T, the rebalancing day

SPRT = Applicable interest rate spread over the  $IR_T$

a = Applicable factor to apply spread over IR if not applied, a=0

K = Leverage factor

#### 3.3 CALCULATION OF THE BEAR AND SHORT INDICES

The general formula of the Short indexes is defined as follows:

$$BI_t = BI_T \left[ 1 - K \left( \frac{UI_t}{UI_T} - 1 \right) \right] + (K + 1) BI_T \left[ \frac{IR_T}{360} \right] D_{t,T} - K.a.BI_T \left[ \frac{FIN_T}{360} \right] D_{t,T}$$

$T$  = Rebalancing date; for daily indices this is the previous business day.

$BI_t$  = Short or Bear index level at time of calculation t

$BI_T$	= Closing Short index level on the previous calculation day
$UI_t$	= Underlying index level (see Index summary) at time of calculation t
$UI_T$	= Closing Underlying Index level on the previous calculation day
$D_{t,T}$	= the number of days between the day of the calculation and T, the rebalancing day
$IR_T$	= Applicable interest rate as at the rebalancing date T. For daily indices this is recalibrated EONIA (€STR plus a spread).
$FIN_T$	= Financing Adjustment rate. The rate reflecting the cost specifically associated with the strategy. The rate may be different for some underlying indices or may not be applied for specific indices.
$\alpha$	= Applicable factor to apply FIN. If FIN rate is not applied $\alpha=0$ .
K	= Short factor

### 3.4 REVERSE SPLIT OF INDEX LEVEL

If an index has dropped below 10 it may qualify for a reverse split. This rule is applied to the indices with a factor 4 or higher or -4 or less. For the reverse split the Compiler will use a standard reverse ratio of 1 000.

#### *Periodical Review*

Indices are reviewed each month on the first Friday. If an index level has reached a closing level below 10 on the previous day, the index level will be adjusted 2 weeks later by a reverse split.

#### *Implementation of reverse split*

After close of business on the 3<sup>rd</sup> Friday of the month, the closing level will be multiplied by 1,000 (one thousand).

In case the Friday is not a trading day, the review or implementation will be on the day before.

### 3.5 SPLIT OF INDEX LEVEL

If an index has risen above 750.000 it may qualify for a split.

This rule is applied to the indices with a factor 4 or higher or -4 or less. For the split the Compiler will use a standard ratio of 1 000.

#### *Periodical Review*

Indices are reviewed each month on the first Friday. If an index level has reached a closing level above 750 000 on the previous day, the index level will be adjusted 2 weeks later by a split.

#### *Implementation of split*

After close of business on the 3<sup>rd</sup> Friday of the month, the closing level will be divided by 1 000 (one thousand).

In case the Friday is not a trading day, the review or implementation will be on the day before.

### 3.6 FINANCING ADJUSTMENT RATE (FIN)

The Financing Adjustment Rate is replacing the Repo rate and is determined on 20 bps from 1-Nov-2017.

## 4. PUBLICATION

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### 4.1 DISSEMINATION OF INDEX VALUES

#### 4.1.1 Opening

The calculation of the index starts as soon as the official index levels of the underlying indexes are available.

#### 4.1.2 Calculation and dissemination

The index is calculated based on the most recent prices of transactions concluded on Euronext Markets. The level of the index is in principle published every 15 seconds. The index is calculated from 09:00 hours CET until Euronext Markets stop regular daytime trading on the days when Euronext Markets are open for trading.

#### 4.1.3 Closing level

The calculation of the closing index levels is based on the respective official underlying index closing levels published by Euronext.

### 4.2 EXCEPTIONAL MARKET CONDITIONS AND CORRECTIONS

#### 4.2.1 Unavailability of the underlying index level

In case the level of the underlying index is not available during a period outside the regular closing time of the Euronext markets, the level of the index will not be calculated.

If the unavailability extends over the closing auction time of the Euronext markets, the closing value of the index will be the last level known before the unavailability of the underlying index.

#### 4.2.2 Extreme market movements

In case the level of the underlying index rises or falls more than a predefined percentage relative to the close of the previous trading day, the index will be either suspended or reset (see index summary).

#### 4.2.3 Procedure for Suspension

If an index is **suspended**, the Compiler will confirm the index level to be considered as the closing index value at the market close.

#### 4.2.4 Procedure for reset of daily leveraged/short indices

In case the level of the underlying index rises or falls by more than a predefined percentage relative to its close of the previous trading day, the Leverage or Short Index will be reset. If an index is **reset**, the index will be adjusted intraday:

- For leverage calculations only downtrend movements will trigger a reset
- For short calculations only uptrend movements will trigger the reset.

Numerically, the intraday reset condition is defined as follows (with  $\alpha > 0$ ):

$$\frac{UI_t}{UI_T} < \alpha\% \quad (\text{C1-L}) \text{ for Leverage indices}$$

Or

$$\frac{UI_t}{UI_T} > \alpha\% \quad (\text{C1-S}) \text{ for Short/Bear indices}$$

Where:

- $UI_t$  is the real-time price of the index at time of calculation time t;
- $UI_T$  is the official closing level of the index on the previous rebalance day;
- $\alpha\%$  = as per the Index Summary section above under the column "Rule in case of extreme market movements".

**For Leverage indices**, if condition (C1-L) is met at calculation time t:

- The calculation of the index is suspended temporarily (i.e. the level that was published just before the condition is met will keep on being published).
- The prices of the Underlying Index are observed during 5 full minutes.
- The **minimum price** of the Underlying Index during the 5-minute observation period is used to reset the Leverage Index.

**For Short/Bear indices**, if condition (C1-S) is met at calculation time t:

- The calculation of the index is suspended temporarily (i.e. the level that was published just before the condition is met will keep on being published).
- The prices of the Underlying Index are observed during 5 full minutes.
- The **highest price** of the Underlying Index during the 5-minute observation period is used to reset the Leverage Index.

Once the observation period is over the calculation of the index is resumed as per the formula below:

$$LI_t = LI_{R1} \left[ 1 + K \left( \frac{UI_t}{UI_{R1L}} - 1 \right) \right]$$

Or

$$SI_t = SI_{R1} \left[ 1 - K \left( \frac{UI_t}{UI_{R1H}} - 1 \right) \right]$$

Where:

$UI_{R1L}$  is the lowest recorded index level over an observation period of 5 minutes following calculation time t (time when the threshold was crossed);

$LI_{R1}$  is the level of the index using index level  $UI_{R1L}$ ;

$ON_T$ : is the Overnight rate: recalibrated EONIA (€STR plus a spread)

$$LI_{R1} = LI_{T-1} \left\{ 1 + K \left[ \frac{UI_{R1L}}{UI_T} - 1 \right] - (K - 1) * \left[ \frac{ON_T}{360} \right] * D_{T,T-1} - (K - 1) * \left[ \frac{SPR_T}{360} \right] * D_{T,T-1} \right\}$$

$UI_{R1H}$  is the highest recorded index level over an observation period of 5 minutes following calculation time t (time when the threshold was crossed);

$SI_{R1}$  is the level of the index using index level  $UI_{R1H}$ ;

$$SI_{R1} = SI_{T-1} \left\{ 1 - K \left[ \frac{UI_{R1H}}{UI_T} - 1 \right] + (K + 1) * \left[ \frac{ON_T}{360} \right] * D_{T,T-1} - K * \left[ \frac{FIN_T}{360} \right] * D_{T,T-1} \right\}$$

Note that no additional refinancing costs are calculated after an intraday reset occurs.

An intraday reset may occur more than once during the same scheduled calculation date. After a first intraday reset occurs, the condition becomes the following:

$$\frac{UI_t}{UI_{R1L}} < \alpha\% \quad \text{(C2-L) for Leverage indices}$$

Or

$$\frac{UI_t}{UI_{R1H}} > \alpha\% \quad \text{(C2-S) for Short/Bear indices}$$

Where:

$UI_t$  is the index level used at time of calculation t;

$UI_{R1L}$  as defined above;

$UI_{R1H}$  as defined above;

$\alpha\%$  as defined above.

If the above condition (C2) is met, another intraday reset is triggered. The calculation in real-time resumes as follows:

$$LI_t = LI_{R2} \left[ 1 + K \left( \frac{UI_t}{UI_{R2L}} - 1 \right) \right]$$

Or

$$SI_t = SI_{R2} \left[ 1 - K \left( \frac{UI_t}{UI_{R2H}} - 1 \right) \right]$$

Where:

$UI_{R2L}$  is the lowest recorded index level over an observation period of 5 minutes following calculation time  $t$  (time when condition (C2-L) is met).

$$LI_{R2} = LI_{R1} \left[ 1 + K \left( \frac{UI_{R2L}}{UI_{R1L}} - 1 \right) \right]$$

$UI_{R2H}$  is the lowest recorded index level over an observation period of 5 minutes following calculation time  $t$  (time when condition (C2-S) is met).

$$SI_{R2} = SI_{R1} \left[ 1 - K \left( \frac{UI_{R2H}}{UI_{R1H}} - 1 \right) \right]$$

The same procedure is followed for any other intraday reset following another crossing of the predefined threshold.

The closing level of the index will be calculated in accordance with the last parameters defined for the last reset event as described above.

In case  $LI_{R1} \leq 0$  or  $SI_{R1} \leq 0$ , the index level will be fixed at 0.001. This index level will continue to be broadcasted for 4 weeks after the reset occurred. Subsequently the index will be discontinued.

### **4.3 ANNOUNCEMENT POLICY**

The announcement policy is described in the Euronext Indices Announcement policy document that is available on [indices.euronext.com/index-rules](https://indices.euronext.com/index-rules).



## 5. ESG DISCLOSURES

EXPLANATION OF HOW ESG FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY	
Item 1. Name of the benchmark administrator.	Euronext Paris
Item 2. Type of benchmark	Equity Benchmark
Item 3. Name of the benchmark or family of benchmarks.	<b>LeverageShort indices</b>
Item 4. Does the benchmark methodology for the benchmark or family of benchmarks take into account ESG factors?	No
Item 5. If the response to Item 4 is positive, please find below the ESG factors that are taken into account in the benchmark methodology and how they are used for selection, weighting and exclusion	
a) List of environmental factors considered:	Not applicable
b) List of social factors considered:	Not applicable
c) List of governance factors considered:	Not applicable
Item 6. Data and standards used.	
a) Data input. <i>(i) Describe whether the data are reported, modelled or, sourced internally or externally.</i> <i>(ii) Where the data are reported, modelled or sourced externally, please name the third party data provider.</i>	Not applicable
b) Verification of data and guaranteeing the quality of those data. <i>Describe how data are verified and how the quality of those data is ensured.</i>	Not applicable
c) Reference standards <i>Describe the international standards used in the benchmark methodology.</i>	Not applicable
<b>Information updated on:</b>	30 <sup>th</sup> April 2020