

## **Credit Suisse GEM 10% Risk Control (ER) Index**

Dated as of 20 March 2019

(may be amended from time to time)

**Index Sponsor**

Credit Suisse International  
One Cabot Square, London, E14 4QJ, United Kingdom

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## 1. Introduction

This document (the “**Index Rules**”) is published by Credit Suisse International of One Cabot Square, London, E14 4QJ, United Kingdom.

### 1.1. What is the Credit Suisse GEM 10% Risk Control (ER) Index?

The Credit Suisse GEM 10% Risk Control (ER) Index is an investible long-only index which allocates between global equities and US treasuries according to a dynamic allocation mechanism (the “**Index Strategy**”). The Index targets a volatility of 10% and aims to benefit tactically from the negative realised correlation between global equities and US treasuries to achieve simultaneous exposure to both Index Components subject to risk limits. The index is net of transaction cost which is charged on each rebalancing and of index calculation fee which is charged daily pro rata.

### 1.2. Parties

Index Sponsor	Credit Suisse International The Index Sponsor also acts as the administrator of the Index for purposes of Regulation (EU) 2016/1011
Index Calculation Agent:	Credit Suisse International (acting through its Risk Department)
Index Committee:	A committee whose membership comprises representatives from different functions within the Index Sponsor and which has responsibility for overseeing the role of the Index Sponsor and Index Calculation Agent under these Index Rules.

### 1.3. Related Index Definitions

Index Currency	USD
Index Calculation Day	Any day: (i) on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in London; (ii) which is an Index Component Calculation Day with respect to all Index Components; and (iii) which is a WMR Business Day
Index Component Calculation Day	With respect to any Index Component, any day on which the closing level of such Index Component is scheduled to be published by the relevant index sponsor or index administrator

Index Trading Day	Any day: <ul style="list-style-type: none"> <li>(i) which is an Index Calculation Day; and</li> <li>(ii) which is an Index Trading Day in the definition as given in the Credit Suisse HOLT Equity Factor Indices Index Rules dated 27 April 2018 with respect to the CS HOLT Equity Factor Global Multi Factor USD Net Total Return Index.</li> </ul>
Index Component	Each Index Component i as described in <b>Table 1: Index Components Description</b>
WMR Business Day	Any day on which WMR fixings are published at or around 4 p.m. London time by the WM Company / Reuters Currency Services as indicated on <a href="http://www.wmcompany.com">http://www.wmcompany.com</a>
Index Start Date	5 January 2004
Index Initialisation Date	6 January 2003
Index Launch Date	20 March 2019
Format	Excess Return

**Table 1: Index Components Description**

i	Index Component i (ICi)	Currency	Bloomberg Ticker	Asset Type	Value	Return Type
1	CS HOLT Equity Factor Global Multi-Factor USD Net Total Return Index	USD	CSHTGFN	Equity Index	Closing Price	Total Return
2	Credit Suisse 10-Year US Treasury Note Futures Index	USD	CSRFTYUE	Equity Index	Closing Price	Excess Return

## 2. Preliminary Calculations

### 2.1. Funding Component Definitions

Funding Calculation Day	Any day where the Funding Rate is published on Reuters
Funding Rate	The rate for deposits of three months in USD as displayed on Reuters page LIBOR01 (Bloomberg: US0003M)

### 2.2. Funding Component Calculation

The Funding Component Value is calculated by the Index Calculation Agent according to the following formula:

- In respect of the Index Start Date:

$$FC_0 = 1,000$$

In respect of any following Funding Calculation day c:

$$FC_c = FC_{c-1} \times \left[ 1 + FR_{c-1} \times \frac{D_{c-1,c}}{360} \right]$$

In respect of any Index Calculation Day t, the Funding Component Value is equal to:

- The Funding Component Value of Index Calculation Day t, if Index Calculation Day t is a Funding Calculation Day c
- The following formula otherwise:

$$FC_t = FC_{t_{fc}} \times \left[ 1 + FR_{t_{fc}} \times \frac{D_{t_{fc},t}}{360} \right]$$

Where:

$FC_0$	The Funding Component Value on the Index Start Date;
$FC_c$	The Funding Component Value on the Funding Calculation Day c;
$FR_{c-1}$	The Funding Rate on the Funding Calculation Day c-1. Where such rate is not available, the rate will be determined by the Index Calculation Agent, taking into considerations the prevailing swap market rates
$D_{c-1,c}$	The number of calendar days from but excluding Funding Calculation Day c-1 to and including Funding Calculation Day c;
$FC_t$	The Funding Component Value on the Index Calculation Day t;
$FC_{t_{fc}}$	The Funding Component Value on the Funding Calculation Day $t_{fc}$ ;
$t_{fc}$	The Funding Calculation Day immediately preceding Index

	Calculation Day t;
$FR_{t_{fc}}$	The Funding Rate on the Funding Calculation Day $t_{fc}$ . Where such rate is not available, the rate will be determined by the Index Calculation Agent, taking into considerations the prevailing swap market rates
$D_{t_{fc},t}$	The number of calendar days from but excluding Funding Calculation Day $t_{fc}$ to and including Index Calculation Day t;

## 2.3. Adjusted Index Component Value

### 2.3.1. Excess Return Index Component

The Adjusted Index Component Value of Index Component i, where Index Component i Return Type is specified as “Excess Return” in Table 1 is calculated by the Index Calculation Agent according to the following formula:

- In respect of the Index Start Date:

$$AIC_{i,0} = 1,000$$

- In respect of any following Index Calculation Day t:

$$AIC_{i,t} = AIC_{i,t-1} \times \frac{IC_{i,t}}{IC_{i,t-1}}$$

Where:

$AIC_{i,0}$	The Adjusted Index Component Value of Index Component i on the Index Start Date;
$AIC_{i,t}$	The Adjusted Index Component Value of Index Component i on Index Calculation Day t;
$AIC_{i,t-1}$	The Adjusted Index Component Value of Index Component i on Index Calculation Day t-1;

### 2.3.2. Total Return Index Component

The Adjusted Index Component Value of Index Component i, where Index Component i Return Type is specified as “Total Return” in Table 1, is calculated by the Index Calculation Agent according to the following formulae:

- In respect of the Index Start Date:

$$AIC_{i,0} = 1,000$$

- In respect of any following Index Calculation Day t:

$$AIC_{i,t} = AIC_{i,t-1} \times \left[ 1 + \left( \frac{IC_{i,t}}{IC_{i,t-1}} - \frac{FC_t^{CCY_i}}{FC_{t-1}^{CCY_i}} \right) \right]$$

Where:

$FC_t^{CCY_i}$

The Funding Component Value denominated in currency CCY<sub>i</sub> on Index Calculation Day t;

$FC_{t-1}^{CCY_i}$

The Funding Component Value denominated in currency CCY<sub>i</sub> Index Calculation Day t-1.

### 3. Rebalancing Methodology

#### 3.1. Return Calculation

On any Index Calculation Day  $t$ , the Return for Index Component  $i$  is calculated by the Index Calculation Agent as:

$$\text{Return}_{i,t}^{\text{Tenor}} = \ln\left(\frac{AIC_{i,t}}{AIC_{i,t-obs}}\right)$$

Where:

$\text{Return}_{i,t}^{\text{Tenor}}$	The Return for Index Component $i$ on Index Calculation Day $t$ with respect to the Tenor;
$AIC_{i,t}$	The Adjusted Index Component Value of Index Component $i$ on the Index Calculation Day $t$ ;
$AIC_{i,t-obs}$	The Adjusted Index Component Value of Index Component $i$ on the Index Calculation Day $t - obs$ ;
$obs$	1 if Tenor is “Short Term”; or 5 if Tenor is “Long Term”

#### 3.2. Realised Volatility Calculation

On any Index Calculation Day  $t$ , the Realised Volatility of an Index Component  $i$  is calculated by the Index Calculation Agent as follows:

- With respect to the Initialisation Date and the 4 immediately following Index Calculation Days:

$$\sigma_{i,0}^{\text{Tenor}} = 0$$

- With respect to any following Index Calculation Day  $t$ :

$$\sigma_{i,t}^{\text{Tenor}} = \sqrt{\lambda \times \sigma_{i,t-1}^{\text{Tenor}^2} + \frac{252}{obs} \times (1 - \lambda) \times \text{Return}_{i,t}^{\text{Tenor}^2}}$$

Where:

$\sigma_{i,t}^{\text{Tenor}}$	The Realised Volatility for Index Component $i$ on Index Calculation Day $t$ with respect to the Tenor
$\lambda$	0.93 if Tenor is “Short Term”; or

0.98 if Tenor is “Long Term”

### 3.3. Covariance Calculation

On any Index Calculation Day  $t$ , the Realised Covariance between the Index Component 1 and the Index Component 2 is calculated by the Index Calculation Agent as:

- With respect to the Initialisation Date and the 4 immediately following Index Calculation Days:

$$COV_0^{Tenor} = 0$$

- With respect to any following Index Calculation Day  $t$ :

$$COV_t^{Tenor} = \lambda \times COV_{t-1}^{Tenor} + \frac{252}{Obs} \times (1 - \lambda) \times Return_{1,t}^{Tenor} \times Return_{2,t}^{Tenor}$$

Where:

$COV_t^{Tenor}$  The Realised Covariance between Index Component 1 Index Component 2 on Index Calculation Day  $t$  with respect to the Tenor;

### 3.4. Correlation Calculation

With respect to any Index Calculation Day  $t$  falling on or after the Index Start Date, the Correlation between Index Component 1 and Index Component 2 is determined as follows:

$$\rho_t^{Tenor} = \frac{COV_t^{Tenor}}{\sigma_{1,t}^{Tenor} \times \sigma_{2,t}^{Tenor}}$$

Where:

$\rho_t^{Tenor}$  The Correlation between Index Component 1 and Index Component 2 on Index Calculation Day  $t$  with respect to the Tenor;

### 3.5. Target Weights Calculation

In respect of any Index Calculation Day  $t$ , the Target Weight for Index Component 1  $TW_{1,t}$  is calculated as follows:



$$TW_{1,t} = \text{Min} \left[ \text{MaxAlloc}, \text{Max} \left( 0, \frac{\text{VolBudget}}{\sigma_{1,t-Lag}^{\text{Realised}}} \right) \right]$$

In respect of any Index Calculation Day t, the Target Weight for Index Component 2  $TW_{2,t}$  is calculated as follows:

$$TW_{2,t} = \text{Max} \left[ 0, \text{Min} \left( \text{MaxAlloc} - TW_{1,t}, \frac{-2 \times \text{VolBudget} \times \rho_{t-Lag}^{\text{Realised}}}{\sigma_{2,t-Lag}^{\text{Realised}}} \right) \right]$$

Where:

<i>MaxAlloc</i>	150%
<i>VolBudget</i>	10%
$\sigma_{1,t-Lag}^{\text{Realised}}$	$\text{Max}(\sigma_{1,t-Lag}^{\text{Short Term}}, \sigma_{1,t-Lag}^{\text{Long Term}})$
$\sigma_{2,t-Lag}^{\text{Realised}}$	$\text{Max}(\sigma_{2,t-Lag}^{\text{Short Term}}, \sigma_{2,t-Lag}^{\text{Long Term}})$
$\rho_{t-Lag}^{\text{Realised}}$	$\text{Max}(\rho_{t-Lag}^{\text{Short Term}}, \rho_{t-Lag}^{\text{Long Term}})$
<i>Lag</i>	2

### 3.6. Weights Calculation

On any Index Calculation Day t from (and including) the Index Start Date, the Weight of Index Component i is calculated by the Index Calculation Agent as:

- if Index Calculation Day t is the Index Start Date, then  $W_{i,0} = TW_{i,0}$
- If the following three conditions are all met, then  $W_{i,t} = TW_{i,t}$  and such Index Calculation Day t is deemed an Index Rebalancing Day:
  - o  $\sum_i |TW_{i,t} - W_{i,t-1}| > \text{Band}$ ;
  - o  $W_{i,t}$  is strictly not equal to  $W_{i,t-1}$  ;
  - o Index Calculation Day t is a valid Index Trading Day
- Otherwise  $W_{i,t} = W_{i,t-1}$

Where:

<i>Band</i>	10%
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## 4. Calculation of the Index Value

### 4.1. Unit Calculation

With respect to the Index Start Date, the Number of Units invested in Index Component  $i$  is calculated according to the following formula:

$$N_{i,0} = W_{i,0} \times \frac{Index_0}{AIC_{i,0}}$$

With respect to any following Index Calculation Day  $t$  which is an Index Rebalancing Day, the Number of Units invested in Index Component  $i$  is calculated according to the following formula:

$$N_{i,t} = W_{i,t} \times \frac{Index_{t-Lag}}{AIC_{i,t-Lag}}$$

With respect to any other Index Calculation Day:

$$N_{i,t} = N_{i,t-1}$$

Where:

$N_{i,0}$	Number of Units of Index Component $i$ in the Index in respect of Index Start Date;
$W_{i,0}$	Weight of Index Component $i$ in the Index as implemented on Index Start Date.
$N_{i,t}$	Number of Units of Index Component $i$ in the Index in respect of Index Calculation Day $t$ ;
$W_{i,t}$	Weight of Index Component $i$ in the Index as implemented on Index Calculation Day $t$ .
$Index_{t-Lag}$	The Index Value on Index Calculation Day $t-Lag$ ;
$AIC_{i,t-Lag}$	The Adjusted Index Component value of Index Component $i$ on the Index Calculation Day $t-Lag$ ;

### 4.2. Index Performance Calculation

The Index Performance from the Index Calculation Day  $t - 1$  to Index Calculation Day  $t$ , is calculated by the Index Calculation Agent according to the following formulae:

$$Perf_{t-1,t} = \sum_i N_{i,t-1} \times (AIC_{i,t} - AIC_{i,t-1})$$

Where:

$Perf_{t-1,t}$  The Index Performance from Index Calculation Day t-1 to Index Calculation Day t;

### 4.3. Index Rebalancing Cost

The Index Rebalancing Cost is calculated by the Index Calculation Agent according to the following formula:

- In respect of the Index Start Date:

$$RC_0 = 0$$

- In respect of any following Index Calculation Day t:

$$RC_t = \sum_i TC_i \times |N_{i,t-1} - N_{i,t}| \times AIC_{i,t}$$

Where:

$RC_0$  The Index Rebalancing Cost on Index Start Date;

$RC_t$  The Index Rebalancing Cost on Index Calculation Day t;

$TC_i$  The Transaction Cost for Index Component i as shown in **Table 2: Index Component Costs**;

$N_{i,t}$  Number of Units of Index Component i in the Index in respect of Index Calculation Day t;

$N_{i,t-1}$  Number of Units of Index Component i in the Index in respect of Index Calculation Day t-1;

$AIC_{i,t}$  The Adjusted index Component value of Index Component i on the Index Calculation Day t;

**Table 2: Index Component Costs**

i	Index Component i (ICi)	Transaction Cost (TCi)
1	CS HOLT Equity Factor Global Multi-	0.05%

Factor USD Net Total Return Index		
<b>2</b>	Credit Suisse 10-Year US Treasury Note Futures Index	0.025%

#### 4.4. Index Value

The Index Value is calculated by the Index Calculation Agent according to the following formula:

- In respect of the Index Start Date:

$$Index_0 = 1,000$$

- In respect of any following Index Calculation Day t:

$$Index_t = Index_{t-1} \times \left[ 1 - Fee \times \frac{D_{t-1,t}}{365} \right] + Perf_{t-1,t} - RC_{t-1}$$

Where:

$Index_0$	The Index Value on the Index Start Date;
$Index_t$	The Index Value on Index Calculation Day t;
$Index_{t-1}$	The Index Value on Index Calculation Day t-1;
$Fee$	The annual Index Fee and is equal to 3.5%
$Perf_{t-1,t}$	The Index Performance from Index Calculation Day t-1 to Index Calculation Day t;
$RC_{t-1}$	The Index Rebalancing Cost on Index Calculation Day t-1;

## **5. Publication of the Index Value**

The Index Calculation Agent retains the right to delay publication of the Index if it reasonably believes there are circumstances that prevent the correct calculation of such Index.

The Index will be calculated by the Index Calculation Agent and published on Bloomberg Calculation and publication of the Index in respect of each Index Calculation Day  $t$  is expected to take place on the Index Calculation Day following the relevant Index Calculation Day  $t$ .

In the event that the Index Value is published by the Index Calculation Agent and is amended after it is initially published, the amended Index Value will be considered the official fixing level and used in all applicable calculations. In the event that the published value of any Index Component or other Index input that could impact a calculation of the Index Value, is changed or amended in respect of a time period prior to the day on which the Index Value is being determined, the Index Calculation Agent shall be under no obligation to recalculate the Index Value or make any corresponding adjustment to the Index Value in order to take account of such change by altering the Index Value. The Index Calculation Agent, in consultation with the Index Committee, nonetheless, will have the discretion to make appropriate adjustments in good faith and in order to achieve a commercially reasonable outcome and (where there is a corresponding applicable regulatory obligation) shall take into account whether fair treatment is achieved by any such adjustment in accordance with its applicable regulatory obligations, in any particular situation, in light of the facts and circumstances of such situation.

The Index may be replaced by a successor index.

### **5.1. Index Precision**

The Index Values will be rounded to 2 decimal places when published.

## 6. Amendment of the Index Rules; Index Component Substitution; Withdrawal of the Index

The Index Sponsor may in consultation with the Index Committee, supplement, amend (in whole or in part), revise, rebalance or withdraw the Index at any time if one of the following occurs:

- a) there is any event or circumstance that in the determination of the Index Sponsor makes it impossible or impracticable to calculate the Index pursuant to the Index Rules;
- b) a change to the Index Rules is required to address an error, ambiguity or omission in the determination of the Index Sponsor; or
- c) the Index Sponsor determines that an Extraordinary Event has occurred.
- d) The Index Sponsor determines that an Index Component Disruption Event has occurred.

A supplement, amendment, revision or rebalancing may lead to a change in the way the Index is calculated or constructed. Such changes may include, without limitation, substitution of an Index Component, or changes to the Index Strategy.

**“Index Component Disruption Event”** means any of an Equity Index Disruption Event or a Commodity Index Disruption Event

**“Extraordinary Event”** means any of the following events or circumstances:

- a) change in either (i) the liquidity of any Index Component (including the application of any gating, side-pocketing or other similar arrangement), (ii) the form of payment of a transaction linked to any Index Component, or (iii) the trading volume, terms or listing of any Index Component;
- b) change in any applicable law or regulation, or any decision or promulgation of any change in the interpretation by any court, tribunal or regulatory authority of any applicable law or regulation;
- c) any event or circumstance that means the value of an Index Component is, in the determination of the Index Sponsor, unreliable;
- d) an Index Component is permanently discontinued or otherwise unavailable;
- e) change in the method by which the value of an Index Component is calculated;
- f) any event that, in the determination of the Index Sponsor (and/or its affiliates), has a material adverse effect on the ability of a market participant to establish, maintain, value, rebalance or unwind a hedge position (which may include physical investments or entering into futures contracts or OTC derivatives) in relation to an investment product linked to the Index;
- g) any other event which, either (i) in the determination of the Index Sponsor has a material adverse impact on the ability of the Index Calculation Agent, or Index Sponsor to perform its duties, or (ii) in the determination of the Index Sponsor, serves to frustrate or affect the purpose or aims of the Index Strategy (for example if the Index Sponsor determines at any time that there is a material risk of an Index Value becoming negative), or (iii) in the determination of the Index Sponsor, the overall notional amount of products linked to

the Index falls to a size which renders the continuation of the Index economically unviable for the Index Sponsor.

which, in the case of each of (a) – (e) above, has or will have, as determined by the Index Sponsor in its discretion, a material effect either on the performance of the Index, or the ability of the Index Calculation Agent to calculate the value of the Index, or the ability of the Index to achieve the Index Strategy, or the ability of a hypothetical investor to replicate the Index.

Following any withdrawal of the Index as described above the Index Sponsor may, but is not obliged to do so, replace the Index with a successor index and/or replace the Strategy with a similar successor strategy or an entirely new strategy at any time, as it deems appropriate in its discretion.

## **7. Index Disruption Events**

### **7.1. Index Disruption**

Where, in the determination of the Index Sponsor, an Index Disruption Event has occurred or is existing and subsisting in respect of any Index Calculation Day (a “Disrupted Day”), the Index Sponsor may in respect of such Disrupted Day (i) suspend the calculation and publication of an Index Value and/or (ii) determine an Index Value on the basis of estimated or adjusted data and publish an estimated level of an Index Value and/or, the Index Sponsor may, following such Disrupted Day, take any action including but not limited to designation of alternative price sources, reconstitution of the Index or a temporary change of Weights.

Where the Index Sponsor uses estimated or adjusted data pursuant to this section, it shall estimate or adjust such data with the primary intention of maintaining, so far as commercially reasonable, consistency of the exposure of the Index to the Strategy. Any estimate of the value of an Index Component in respect of a Disrupted Day shall be made by the Index Sponsor using the methodology and calculations for determining the value of such Index Component last-in-effect prior to the occurrence of the Disrupted Day.

For these purposes, “Index Disruption Event” means a General Disruption Event, or any Index Component Disruption Event.

### **7.2. General Disruption Events**

In the determination of the Index Sponsor, the following events are each a “General Disruption Event”:

- a) a closure of the money markets denominated in a relevant currency as determined by the Index Sponsor other than for ordinary public holidays, or a restriction or suspension in trading in these markets that would materially impact the determination arising in the construction or calculation of the Index and an Index Value;
- b) the failure, suspension or postponement of any calculation within the Index Strategy in respect of any Index Calculation Day, any event resulting in a breakdown in any means of communication or a procedure normally used to enable the determination of an Index Value, any other event, in the determination of the Index Sponsor preventing the prompt or accurate determination of an Index Value, or the Index Sponsor concludes that as a consequence of any such event that the last reported Index Value should not be relied upon; and
- c) the occurrence, in respect of any security, option, futures, derivative or foreign exchange contract or other instrument referenced in the calculation of the Index or any Index Component of (i) any suspension of or limitation imposed on trading by any relevant exchange or other trading facility, (ii) the closure of any relevant exchange or other trading facility before its scheduled closing time, or (iii) any other event that disrupts or



impairs, as determined by the Index Sponsor, the ability of market participants in general to effect transactions in, or obtain market values for, the relevant contract.

### 7.3. Equity Index Disruption Events

The provisions of this Section shall apply only in relation to Index Components which are of the Asset Type "Equity Index" (as set out in Table 1) (each an "**Equity Index**"). In the determination of the Index Sponsor, with respect to any Equity Index, the following events are each an "Equity Index Disruption Event":

- a) a Market Disruption Event
- b) an Equity Index Adjustment Event; or
- c) any event that disrupts or impairs (as determined by the Index Sponsor) the ability of market participants (or the Index Sponsor and/or its affiliates) in general to effect transactions in, or obtain market values for, futures or options contracts referencing an Equity Index.

For these purposes:

**"Component"** means, in respect of an Equity Index, any share, security, commodity, rate, index or other component included in such Equity Index, as determined by the Index Sponsor.

**"Disruption Threshold"** means 50% of the Equity Index value on the Index Start Date.

**"Early Closure"** means, in respect of an Equity Index, the closure on any Exchange Business Day of any relevant Exchange or Related Exchange prior to its scheduled closing time, unless such earlier closing time is announced by such Exchange or Related Exchange at least one hour prior to the earlier of (i) the actual closing time for the regular trading session on such Exchange or Related Exchange on such Exchange Business Day and (ii) the submission deadline for orders to be entered into the Exchange or Related Exchange system for execution at the scheduled closing time on such Exchange Business Day;

**"Equity Index Adjustment Event"** means, in respect of an Equity Index, an Equity Index Cancellation, an Equity Index Disruption or an Equity Index Modification.

**"Equity Index Cancellation"** means, in respect of an Equity Index, the relevant Equity Index Sponsor, if applicable, permanently cancels such Equity Index.

**"Equity Index Disruption"** means, in respect of an Equity Index, the relevant Equity Index Sponsor, if applicable, fails to calculate and announce such Index, as determined by the Issuer, on a day on which it was scheduled to do so;

**"Equity Index Modification"** means, in respect of an Equity Index, the relevant Equity Index Sponsor or Successor Sponsor, if applicable, makes or announces that it will make a material change in the formula for, or the method of, calculating such Equity Index, or in any other way materially modifies such Equity Index (other than a modification prescribed in that formula or method to maintain such Equity Index in the event of changes in the Components, capitalisation and/or other routine events).

**"Equity Index Sponsor"** means, in relation to an Equity Index, the corporation or other entity as determined by the Index Sponsor that (a) is responsible for setting and reviewing the rules and procedures and the methods of calculation and adjustments if any, related to such Equity Index, and (b) announces (directly or through an agent) the level of such Equity Index on a regular basis during each Scheduled Trading Day failing whom such person acceptable to the Index Sponsor who calculates and announces the Equity Index or any agent or person acting on behalf of such person;

**"Exchange Disruption"** means, in respect of an Equity Index, any event (other than an Early Closure) that disrupts or impairs (as determined by the Index Sponsor) the ability of market participants in general (a) to effect transactions in, or obtain market values for, (in the case of a Multi-Exchange Index) any Component of the Equity Index (and, if the Index Sponsor in its discretion so determines, any depositary receipts in respect of such securities) on any relevant Exchange or (in the case of a Single-Exchange Index) Components that comprise a percentage equal to the Disruption Threshold or more of the level of the Equity Index on any relevant Exchange, or (b) to effect transactions in, or obtain market values for, futures or options relating to the relevant Equity Index on any relevant Related Exchange;

**"Exchange"** means, in respect of any Components of an Equity Index, the stock exchange(s) or quotation system(s) (from time to time) on which, in the determination of the Equity Index Sponsor, such Components are listed or quoted and, if the Index Sponsor in its discretion so determines, on which any depositary receipts in respect of such Components are listed or quoted in which event references to the Components of an Equity Index may, where the Index Sponsor determines the context to permit, include such depositary receipts;

**"Exchange Business Day"** means, in respect of:

- (a) a Single-Exchange Index, any Scheduled Trading Day on which each Exchange and each Related Exchange are open for trading during their respective regular trading sessions; and
- (b) a Multi-Exchange Index, any Scheduled Trading Day on which the Equity Index Sponsor publishes the level of the Equity Index and each Related Exchange is open for trading during its regular trading session,

notwithstanding in either case any such Exchange or Related Exchange closing prior to its Scheduled Closing Time;

**"Hedging Shares"** means, in respect of a Component, the number of shares in such Component that, as determined by the Index Sponsor (and/or its affiliates), a market participant requires to hedge the equity price risk of entering into and performing its obligations with respect to all investment products linked to the Index;

**"Market Disruption Event"** means, in respect of an Equity Index, the occurrence or existence of a Trading Disruption or an Exchange Disruption, which in either case the Index Sponsor determines is material, at any time during the one-hour period that ends at the scheduled closing time of the Relevant Exchange, or an Early Closure provided that, in the case of a Multi-Exchange Index (other than where the Market Disruption Event relates to futures or options contracts relating to that Equity Index), the Components of the Equity Index in respect of which an Early Closure, Exchange Disruption and/or Trading Disruption occurs or exists amount, in the determination of the Index Sponsor, in aggregate to a percentage equal to the Disruption

Threshold or more of the level of the Equity Index. For the purpose of determining whether a Market Disruption Event exists at any time in respect of a Component included in the relevant Equity Index at any time, then the relevant percentage contribution of that Component to the level of the relevant Equity Index shall be based on a comparison of (i) the portion of the level of the relevant Equity Index attributable to that Component, and (ii) the overall level of the relevant Equity Index, in each case immediately before the occurrence of such Market Disruption Event, as determined by the Index Sponsor.

**"Multi-Exchange Index"** means any Equity Index which is determined by the Index Sponsor as being composed of Components which are principally traded on more than one exchange.

**"Related Exchange"** means in relation to an Equity Index, each exchange or quotation system where trading has a material effect (as determined by the Index Sponsor) on the overall market for futures or options contracts relating to such Equity Index;

**"Scheduled Trading Day"** means, in respect of:

- (a) a Single-Exchange Index, any day on which each Exchange and each Related Exchange for such Single-Exchange Index are scheduled to be open for trading for their respective regular trading sessions;
- (b) a Multi-Exchange Index, any day on which the Equity Index Sponsor is scheduled to publish the level of the Multi-Exchange Index and each Related Exchange for such Multi-Exchange Index is scheduled to be open for trading for its regular trading session;
- (c) any Component referenced by an Equity Index which is a share, any day on which the relevant Exchange and the relevant Related Exchange for such share (as defined in Section 9.3 above as if such share were a Stock) are scheduled to be open for trading for their respective regular trading sessions; and
- (d) any Component which is not a share, any day on which the value, level or price, as is applicable, is scheduled to be published or disseminated, or is otherwise scheduled to be available.

**"Single-Exchange Index"** means any Index which is determined by the Index Sponsor to be composed of Components which are all principally traded on the same exchange.

**"Trading Disruption"** means, in respect of an Equity Index, any suspension of or limitation imposed on trading by the relevant Exchange or Related Exchange or otherwise and whether by reason of movements in price exceeding limits permitted by the relevant Exchange or Related Exchange or otherwise (a) on any relevant Exchange(s) relating to (in the case of a Multi-Exchange Index) any Component of the Equity Index or (in the case of a Single-Exchange Index) Components that comprise a percentage equal to the Disruption Threshold or more of the level of the Equity Index, or (b) in futures or options contracts relating to the relevant Equity Index on any relevant Related Exchange.

## **8. Discretionary Determinations by Index Sponsor and Index Calculation Agent**

Provided always that all calculations and determinations and exercises of discretion made by the Index Sponsor and the Index Calculation Agent under these Index Rules shall be made in good faith and in a commercially reasonable manner and (where there is a corresponding applicable regulatory obligation) shall take into account whether fair treatment is achieved by any such calculation, determination and exercise of discretion in accordance with its applicable regulatory obligations.

## 9. Important Disclaimer Information

### 9.1. Credit Suisse

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CS as Index Administrator is the final authority on the Index and the interpretation and application of the Index Rules.

CS as Index Administrator may supplement, amend (in whole or in part), revise or terminate these Index Rules in compliance with applicable law and regulation at any time. The Index Rules may change without prior notice.

CS will apply the Rules in its discretion acting in good faith and in a commercially reasonable manner and (where there is a corresponding applicable regulatory obligation) shall act independently and honestly in its capacity as the Index Administrator and take into account

whether fair treatment is achieved by any such calculation, determination and exercise of discretion in accordance with its applicable regulatory obligations, and in doing so may rely upon other sources of market information.

Neither CS as Index Administrator nor CS as Index Calculation Agent warrants or guarantees the accuracy or timeliness of calculations of Index values or the availability of an Index value on any particular date or at any particular time.

Neither CS nor any of its affiliates (including their respective officers, employees and delegates) shall be under any liability to any party on account of any loss suffered by such party (however such loss may have been incurred) in connection with anything done, determined, interpreted, amended or selected (or omitted to be done, determined or selected) by it in connection with the Index and the Index Rules, unless such loss is caused by CS or any of its affiliates' Fault. Without prejudice to the generality of the foregoing and unless caused by CS or any of its affiliates' Fault, neither CS nor any of its affiliates shall be liable for any loss suffered by any party as a result of any determination, calculation, interpretation, amendment or selection it makes (or fails to make) in relation to the construction or the valuation of the Index and the application of the Index Rules and, once made, neither CS nor any of its affiliates shall be under any obligation to revise any calculation, determination, amendment, interpretation and selection made by it for any reason. Neither CS nor any of its affiliates makes any warranty or representation whatsoever, express or implied, as to the results to be obtained from the use of the Index, or as to the performance and/or the value thereof at any time (past, present or future).

The strategy underlying the Index (the "Index Strategy") is a proprietary strategy of the Index Administrator. The Index Strategy is subject to change at any time by the Index Administrator but subject to consultation with the Index Committee or otherwise as required by applicable law and regulations. Neither CS nor its affiliates shall be under any liability to any party on account of any loss suffered by such party, unless such loss is caused by CS's Fault in connection with any change in any such strategy, or determination or omission in respect of such strategy.

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