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Version 5

# Index Guide
# as to
# 4X Long Index linked to Coffee C® Future
## (ISIN CH0286842254)

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This Index Guide describes the composition and calculation of the *Factor Index* specified below. The *Index Calculation Agent* makes the Index Guide available on the *Information Page*. The Index Guide constitutes the basis for calculating and publishing the *Factor Index*.

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|---|---|
| Index Name: | 4X Long Index linked to Coffee C® Future (the "**Factor Index**") |
| Reference Instrument: | Coffee Future |
| Index Calculation Agent: | Bank Vontobel AG, Gotthardstrasse 43, 8002 Zurich, Switzerland |
| Information Page: | https://indices.vontobel.com |
| ISIN: | CH0286842254 |
| Valor: | 28684225 |
| WKN: | A162GS |

This Index is part of the family of Vontobel Leveraged Long and Short indices ("**Factor Indices**").

**The Factor Indices are not recognized financial indices but are customized indices conceived by Bank Vontobel AG in its capacity as Index Calculation Agent, their sole function being to act as underlying for a certain type of security (so-called Factor Certificates).**

The Index Calculation Agent will perform the calculation and composition of the Factor Index with the utmost care. However, the Index Calculation Agent does not guarantee that the calculation of the indices or of any other parameters required for the composition and calculation, as in accordance with this Index Guide, will be free from error.

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## A) Index description

The *Factor Index* reflects price movements of the *Reference Instrument* with a leverage factor of 4. An increase in the price of the *Reference Instrument* since the most recent calculation of an *Index Closing Value* results in a positive change of the *Factor Index* as compared to the previous price of the *Factor Index* and vice versa. The *Factor Index* therefore reflects a "long" strategy.

The *Factor Index* consists of a leverage component and a financing component.

***Leverage component***

The leverage component tracks an investment in the *Reference Instrument*, whereby movements in the price of the *Reference Instrument* are multiplied by the *Leverage* (Factor). This leverage effect occurs with either positive or negative movements in the price of the *Reference Instrument*, having a disproportionate effect on the value of the *Factor Index*.

For example (leaving aside the financing component):

- An increase in the price of the *Reference Instrument* (as compared to the most recent *Valuation Price* of the *Reference Instrument*) by 2% results in an increase in the *Factor Index* by 4 x 2%;

- A decrease in the price of the *Reference Instrument* (as compared to the most recent *Valuation Price* of the *Reference Instrument*) by 2% results in a decrease in the *Factor Index* by 4 x 2%.

***Financing component***

The financing component reflects the income and costs that would be incurred in the event of a corresponding investment in the *Reference Instrument*.

Since an investment in futures does not involve the purchase of the reference asset underlying the future but simply consists of entering into a corresponding position in a futures contract, no expenditure is incurred for the acquisition of the reference asset underlying the future. Instead, the only requirement is to make a margin payment based on the position entered into in accordance with the rules and regulations of the *Reference Exchange*. The financing costs for the margin payment are reflected in the financing component.

The financing component also reflects the income that would be earned from a risk-free investment in line with the strategy of the leverage component and at the relevant *Interest Rate*.

Additionally, a fee charged by the *Index Calculation Agent* for the calculation and administration of the *Factor Index* is added (*Index Fee*).

If the costs of the margin payment and the *Index Fee* exceed the interest income based on the applicable *Interest Rate* on a particular day, the value of the *Factor Index* on that day is reduced.

## B) Index definitions

The definitions below shall apply for the purposes of this index description.

"**Adjustment Date**" means the first *Index Calculation Day* of each calendar month.

"**Extraordinary Adjustment Event**" means any of the following events as they relate to the *Reference Instrument*:

(a) changes in the conditions on which the *Reference Instrument* is based or the principal features of the contract on the *Reference Exchange*,

(b) other changes relating to the *Reference Instrument* by or on the *Reference Exchange*.

"**Valuation Price**" of the *Current Reference Instrument* for an *Index Calculation Day* means – subject to an *Extraordinary Adjustment* of the index calculation pursuant to section D) – the settlement price of the *Current Reference Instrument* determined and published on the *Reference Exchange*. For the sake of clarity: following a *Rollover* (see below), the *Valuation Price* of the new *Current Reference Instrument* is applicable for the continuing calculation of the *Factor Index* in accordance with section C).

If an *Index Calculation Day* is not a *Trading Day*, the *Valuation Price* for the immediately preceding *Index Calculation Day* shall continue to apply (adjusted where necessary, in the reasonable discretion of the *Index Calculation Agent*, if and to the extent that a *Rollover* has taken place since the preceding *Index Calculation Day*). If no *Valuation Price* for the *Current Reference Instrument* is determined or published on a *Trading Day*, the *Index Calculation Agent* shall determine the *Valuation Price* of the *Reference Instrument* for that day on the basis of the most recent prices set for the *Reference Instrument* in its due discretion.

"**Financing Spread**" represents (in the form of a premium over the applicable *Interest Rate*) the costs of the margin payment which may be incurred for investments in the *Reference Instrument* in line with the strategy replicated by the *Factor Index*.

The *Financing Spread* on the *Index Start Date* corresponds to the *Initial Financing Spread*. The *Index Calculation Agent* then adjusts the "**Current Financing Spread**" in its due discretion on each *Adjustment Date* to reflect current market conditions and publishes it in accordance with section E) of this index description. The adjusted *Financing Spread* shall apply immediately as from the relevant *Adjustment Date*.

"**Initial Financing Spread**" is 1.0% per annum.

"**Trading Day**" means every day on which the *Current Reference Instrument* is traded on the *Reference Exchange*.

"**Leverage**" is 4. It describes the effect of a change in the *Reference Instrument* on the respective *Factor Index*.

"**Index Calculation Agent**" means Bank Vontobel AG, Gotthardstrasse 43, 8002 Zurich, Switzerland.

"**Index Calculation Day**" means every day from Monday to Friday.

"**Index Fee**" is 1.0% per annum. The *Index Fee* is charged each calendar day, beginning as of the *Index Start Date*. It is calculated on the basis of a 360-day year and the most recently calculated *Index Closing Value*.

"**Index Closing Value**" is calculated for each *Index Calculation Day* by the *Index Calculation Agent* in accordance with section C) 1) of this index description on the basis of the *Valuation Price* of the *Current Reference Instrument* for that *Index Calculation Day* and published in accordance with section E) of this index description.

"**Index Start Date**" means 26 June 2015.

"**Index Start Value**" is '100 index points and represents the Index Closing Value on Index Calculation Day T=0 for the purposes of calculating the index in accordance with C).

"**Index Currency**" means USD.

"**Information Page**" means https://indices.vontobel.com.

"**Contract Months**" means the expiry months March, May, July, September and December.

"**Reference Instrument Price**" means at any time during the trading period on the *Reference Exchange* the price of the *Current Reference Instrument* on the *Reference Exchange*, as determined by the *Index Calculation Agent*.

"**Reference Exchange**" means IntercontinentalExchange (ICE).

"**Reference Instrument**" means Coffee Future.

| | |
|---|---|
| Currency: | USD |
| ISIN: | US6289851031 |
| Bloomberg symbol: | KC1 Comdty |

"**Current Reference Instrument**" means the *Initial Reference Instrument* from the *Index Start Date* until the first *Rollover Date*. Once the *Index Closing Value* on the first *Rollover Date* has been calculated and determined, this *Reference Instrument* loses its validity and is replaced by the *Reference Instrument* contract for the *Contract Months* specified above next falling due on the *Reference Exchange*. On each subsequent *Rollover Date*, following the calculation and determination of the *Index Closing Value*, the *Current Reference Instrument* is replaced in turn by the *Reference Instrument* contract falling due on the *Reference Exchange* in the next following *Contract Month* (respectively a "**Rollover**").

Each *Rollover* is published by the *Index Calculation Agent* in accordance with section E).

"**Initial Reference Instrument**" means Coffee Future March 2017.

"**Rollover Date**" is determined in each case by the *Index Calculation Agent* in its reasonable discretion and falls within a period of ten *Trading Days* prior to the last Trading Day of the *Current Reference Instrument* on the *Reference Exchange*. In the event that the first notice day of the *Current Reference Instrument* falls prior to its last *Trading Day* on the *Reference Exchange*, the period for the *Rollover Date* shall begin ten *Trading Days* before the first notice day and shall end with the last Trading Day of the Current Reference Instrument.

"**Barrier**" is 21%. It indicates the maximum permitted negative change in price of the *Current Reference Instrument* compared with its most recent *Valuation Price* before an *Intraday Index Adjustment* takes place.

"**Interest Rate**" means USD LIBOR O/N (overnight).

LIBOR stands for London InterBank Offered Rate. LIBOR is an average interest rate based on information submitted by the contributing banks. The panel banks indicate the interest rates at which they are able to refinance their own interbank activities in the relevant currency for the relevant term on an unsecured basis. To calculate the reference interest rate, the highest and lowest quartiles of these interest rates are eliminated, and the remaining interest rates are averaged. LIBOR is calculated for 7 different terms and 5 different currencies. The LIBOR interest rates (ICE Libor) are administered by ICE Benchmark Administration Limited (IBA) and determined each business day at 11 a.m. (London time). LIBOR O/N (overnight) stands for terms of 1 day.

If the *Interest Rate* is not set or published on an *Index Calculation Day*, the *Interest Rate* applied on the immediately preceding *Index Calculation Day* is used to calculate the index in accordance with section C).

If the *Interest Rate* has neither been set nor published for ten consecutive *Index Calculation Days*, the *Index Calculation Agent* has the right and obligation to stipulate in its reasonable discretion an alternative relevant *Interest Rate* which has functions comparable to the previous *Interest Rate*.

## C) Index calculation

The *Factor Index* shall be calculated for the first time on the *Index Start Date*. The initial level of the index on the *Index Start Date* corresponds to the *Index Start Value*. The respective current index level is calculated by the *Index Calculation Agent* on a continuous basis during the trading period of the *Reference Instrument* on the *Reference Exchange* on each *Index Calculation Day*, rounded to two decimal places and published in accordance with section E).

One index point corresponds to one unit of the *Index Currency*.

### C) 1) Index formula

The *Factor Index* is calculated for each time t during an *Index Calculation Day* T in accordance with the following formula:

$$IDX_t = IDX_{T-1} \times \left[ \underbrace{1 + L \times \left( \frac{R_t}{R_{T-1}} - 1 \right)}_{\text{Leverage component}} + \underbrace{\left( IR_{T-1} - FS_T - IG \right) \times \frac{d}{360}}_{\text{Financing component}} \right]$$

where:

| | | |
|---|---|---|
| T | = | current Index Calculation Day |
| $IDX_t$ | = | Index Value at time t on Index Calculation Day T |
| $IDX_{T-1}$ | = | Index Closing Value on Index Calculation Day T-1 which immediately precedes the current Index Calculation Day T |
| L | = | Leverage (Factor): 4 |
| $R_t$ | = | Reference Instrument Price of the *Current Reference Instrument* at time t |
| $R_{T-1}$ | = | Valuation Price of the *Current Reference Instrument* on Index Calculation Day T-1 |
| $IR_{T-1}$ | = | Interest Rate on Index Calculation Day T-1 |
| $FS_T$ | = | Financing Spread on Index Calculation Day T |
| IG | = | Index Fee |
| d | = | Number of calendar days between Index Calculation Days T-1 and T |

### C) 2) Intraday Index Adjustment

If at time s on *Index Calculation Day* T the *Reference Instrument Price* <u>falls below</u> the most recent *Valuation Price* of the *Current Reference Instrument* by more than 21% (*Barrier*), an "**Intraday Index Adjustment**" takes place, simulating a new day:

| | | |
|---|---|---|
| s | = | T, i.e. $IDX_{T-1}$ (new) = $IDX_s$ |
| $R_{T-1}$ (new) | = | $R_{T-1}$ (old) x 0.79 |
| d | = | 0 |

A new *Valuation Price* valid after time s ($R_{T-1}$ (new)) is calculated by multiplying the previous *Valuation Price* ($R_{T-1}$ (old)) by 0.79. The *financing component* remains unchanged. No additional interest or costs are incurred for the newly simulated day.

## D) Extraordinary adjustment of the index calculation

In the event of an *Extraordinary Adjustment Event* occurring in relation to the *Reference Instrument* or the *Current Reference Instrument*, respectively, the *Index Calculation Agent* will adjust the index calculation on the *Reference Date* (as defined below). In doing so, the *Index Calculation Agent* will endeavour – as far as possible – to calculate the *leverage component* as if no *Extraordinary Adjustment Event* had occurred.

The *Index Calculation Agent* will generally adjust the index calculation by correcting in its due discretion the relevant *Valuation Price* of the *Current Reference Instrument* on *Index Calculation Day* T-1 on the *Reference Date*, in order to factor into the index calculation the adjustments relating to the (*Current) Reference Instrument* made on the *Reference Exchange*.

The *Index Calculation Agent* may adjust the index calculation in some other manner if it deems this necessary in its due discretion in order to reflect differences between this *Factor Index* and the *Reference Instrument* traded on the *Reference Exchange*. Adjustments of this nature may relate in particular to the replacement of the *Reference Instrument* by another comparable *Reference Instrument* on another *Reference Exchange* and, where relevant, to the designation of a different *Reference Exchange* and a different *Reference Instrument Price*.

The list of *Extraordinary Adjustment Event*s cited in section B) is not exhaustive. The deciding factor is whether the *Reference Exchange* considers it necessary to adjust the contract size, the *Reference Instrument* or the designation of the relevant exchange for the determination of the price of the reference item of the *Reference Instrument*. In cases of doubt about the application of the adjustment rules,the *Index Calculation Agent* shall decide such questions in its reasonable discretion. The rules and regulations of the *Reference Exchange* shall apply in addition to the provisions set out above.

"**Reference Date**" within the meaning of this index description means the first *Index Calculation Day* on which the relevant *Reference Instruments* are traded on the *Reference Exchange* after taking the adjustment into account.

Adjustments relating to the *Factor Index* and all other measures taken under this section will be published by the *Index Calculation Agent* in accordance with section E).

## E) Notices

All notices pertaining to the *Factor Index* will be published on the *Information Page*. Such notices shall be deemed to have been given on the date on which they are first published.

Notices are given for information purposes only and do not represent a precondition for legal effectiveness.