

S&P Commodities Curve Momentum Beta+ TR

(USD – Total Return)

Index Rules

Version as of 28th April 2014

1. Index Summary Description:

1.1. Index description

The S&P Commodities Curve Momentum Beta+ TR (USD - Total Return) (the “**Index**”) is designed to generate returns from investing simultaneously in a set of single commodities futures contracts (each an “**Underlying Contract**”) and a money market instrument (the “**Money Market Instrument**”). The Index is constructed pursuant to a systematic long-only strategy where positions are made up of single commodities Underlying Contracts, and in short-term money market instruments.

The Underlying Contracts contained in the Index are rolled monthly pursuant a predefined contract table (the “**Contract Table**”).

Rolls from one Underlying Contract to the next Underlying Contract are implemented during a period (the “**Roll Period**”) from the close of the fifth Calculation Date of any given month (the “**Roll Start Date**”) to the close of the ninth Calculation Date of such month (the “**Roll End Date**”).

The strategy uses purely quantitative signals, and it aims to benefit from the shape of the term-structure of each single commodity, and tends to assign a higher weight to the commodities being the most in backwardation, and a lower weight to the commodities being the most in contango, with the weights summing to 100%.

The weights the Underlying Contracts are reviewed on a monthly basis.

The Index is calculated real time and total return by S&P.

2. Index Rules:

2.1. Terms and definitions relating to the Index:

ACT(t-1, t)	means the number of days between the Calculation Date (t-1) (included) and Calculation Date (t) (excluded).
Calculation Date	means any Scheduled Trading Day other than a Saturday or Sunday on which the New York Stock Exchange (NYSE) is open for trading.
Most Recent Rebalancing Date, “t_{RR}(t)”	means in respect of a Calculation Date (t), the most recent Commodity Rebalancing Date, with such Calculation Date (t) excluded.
Index	means the SGI Commodities Curve Momentum Beta+ TR (USD - Total Return) (Bloomberg Ticker: SGICCLMT <Index>).
Index Calculation Agent	Standard & Poor’s Financial Services LLC. (“ S&P ”).
Index Components	means on any Calculation Date each Notional Commodity Indices that are used in the calculation of the Index and have a non-zero weight.
Index Currency	US Dollar (“USD”).
Index Disruption Event	means any event that prevents the Index Calculation Agent from correctly calculating or publishing the Index Level on such Calculation Date.

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Index Launch Date, “t0” 31/12/2009

Index Level, “IL(t,v)” means, in respect of any Calculation Date (t) and Valuation Time (v), the level of the Index calculated and published by the Index Calculation Agent on such date at such time, pursuant to the Section 3.1.2.

Index Closing Level, “IL(t)” means in respect of any Calculation Date (t), the level of the Index calculated and published by the Index Calculation Agent on such date at the Closing Valuation Time, pursuant to the Index rules set out in Section 3.1.1.

Excess Return Level, “ER(t,v)” means, in respect of any Calculation Date (t) and Valuation Time (v), the level of the excess return version of the Index calculated by the Index Calculation Agent on such date at such time, pursuant to the Section 3.1.4.

Excess Return Closing Level, “ER(t)” means in respect of any Calculation Date (t), the level of the excess return version of the Index calculated by the Index Calculation Agent on such date at the Closing Valuation Time, pursuant to the Index rules set out in Section 3.1.3.

Index Sponsor Société Générale (“SG”).

kth preceding calendar day, “CD(t,k)” means in respect to a Calculation Date (t), the kth calendar day preceding such Calculation Date (t excluded). If such day is not a Calculation Date, then it means the first Calculation Date preceding such day.

mth preceding monthly calendar day, “CM(t,m)” means in respect to a Calculation Date (t) being the nth calendar day of the month, the nth calendar day of the mth month preceding such Calculation Date. If such day is not a Calculation Date or does not exist, then it means the first Calculation Date preceding such day.

Roll End Date, “t_{RollEnd}”	means the ninth (9th) Calculation Date of each month.
Roll Period	means the period from the Roll Start Date (included) up to the Roll End Date (included).
Roll Start Date, “$t_{\text{RollStart}}$”	means the fifth (5th) Calculation Date of each month.
Target Rebalancing Date, “$t_{\text{RT}}(t)$”	means in respect of a Calculation Date (t), the first Calculation Date of any month strictly preceding such Calculation Date (t) where all the Commodity Exchanges are open for trading on such date.
Valuation Time	means with respect to the Index, any time between 04:00 am and 23:30 pm Paris time provided that the relevant data is available to enable the Index Calculation Agent to determine the Index Value.
Closing Valuation Time	means 6:30 p.m. (New York time).
Weight Determination Date, “WDD”	means the last Calculation Date of each month. For any Calculation Date t, $WDD < t$.

2.2. Terms and definitions relating to a Commodity:

Active Contract, “C_{Active}”	means, in respect of a Roll Period, any Index Component before such Roll Period, as defined in the Contract Table in Appendix 2.
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Contract Roll Weights, “CRW(t-1, C_C)”	means, for a given Contract, C _C , the percentage of such Contract used in the calculation of the Excess Return Level and Excess Return Closing Level on a Calculation Date (t) during a Roll Period, and defined in Section 3.3.3.
Contract Level, “CL(C_C, t,v)”	means, in respect of a Calculation Date (t), a Valuation Time (v), and a Contract (C _C), the latest traded price of the Contract (C _C), which appears on the “QR” Bloomberg Page of the Contract Ticker, which relates to a transaction on the Commodity Exchange dealt on or before such Valuation Time on sur Calculation Date.
Contract Ticker	<p>means in respect of a Contract C_C, the ticker defined as “<Commodity Prefix><Month><Year> Comdty”.</p> <p><Commodity Prefix> represents the letter as defined in the Commodity Offset Table in Appendix 1.</p> <p><Month> represents the letter corresponding to the month of the Contract as defined in the Contract Table in Appendix 2.</p> <p><Year> represents, on a particular day, the digit corresponding to the year of the expiry of the Contract.</p>
Contract Settlement Level, “CSL(C_C, t)”	means, in respect of a Calculation Date (t) and a Contract (C _C), the official closing price of the Contract (C _C), calculated and published on Bloomberg, as of Calculation Date (t).
Contract, “C_C”	means, in respect to a Commodity C, any actively traded futures contract that provides for physical delivery of, or is based on the price of, such deliverable Commodity, determined herein. For this purpose, the term “Contract” does not include any contract based on spread, differential or other relationship between different delivery months, locations, or other terms of features of the underlying Commodity C or contracts on such Commodity C.

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Expiration Date, “E(C_C)” means, in respect of any Contract (C_C), the date upon which such Contract is scheduled to expire.

Next Active Contract, “C_C Nextactive” means, in respect of a Roll Period, a Contract into which the Index will be rolling during such Roll Period.

Scheduled Trading Day means, in respect of any Contract, any day on which the Exchange of such Contract is open for trading during the regular trading session.

2.3. Terms and definitions relating to the Underlying Contracts:

Size of a set A, “ $\|A\|$ ” means for any set A, the number of elements in that set. If such set A does not contain any elements, the size of the set is equal to 0.

Back Contract, “ $CB_C(t)$ ” means in respect of a Calculation Date (t) and a Commodity C, the n^{th} contract to expire after WDD(t), with n being the nearby Contract offset $n(C)$ as specified in the Commodity Offset Table in Appendix 1.

Commodity Exchange means in respect to a Commodity C, the exchange specified in the column entitled “Exchange” of the Commodity Offset Table in Appendix 1.

Commodity Effective Weight, “ $W_C(t)$ ” means in respect of a Calculation Date (t), and the Commodity C Notional Commodity Index, the weight assigned to such Notional Commodity Index calculated in accordance with Section 3.4.

Commodity Rebalancing Date, “ $t_{RC}(t)$ ” means in respect of a Calculation Date (t), and a Commodity C, the first Calculation Date following WDD(t) (excluded) but preceding (excluded) Calculation Date (t), on which the Notional Commodity Index VI_C is unaffected by a Notional Commodity Index Disruption Event.

If such Calculation Date does not exist, $t_{RC}(t) = t_{RC}(WDD(t))$.

Commodity Target Weight, “ $WT_C(t)$ ” means in respect of a Calculation Date (t), and the Commodity C Notional Commodity Index, the weight assigned to such Commodity C determined as of such Calculation Date (t) in accordance with Section 3.5.

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Notional Commodity Index Level, “$NIL_C(t,v)$”	means in respect to a Calculation Date (t) and Valuation Time (v), and a Commodity C, the level of the associated Notional Commodity Index calculated by the Index Calculation Agent on such date at such Valuation Time, pursuant to the formula set out in Section 3.3.2.
Notional Commodity Index Closing Level, “$NIL_C(t)$”	means in respect to a Calculation Date (t), and a Commodity C, the level of the associated Notional Commodity Index calculated by the Index Calculation Agent on such date at the Closing Valuation Time, pursuant to the formula set out in Section 3.3.1.
Notional Commodity Index, “NI_C”	means in respect to a Commodity C, a theoretical commodity index associated with such Commodity C.
Commodity, “C”	means any commodity listed in the column entitled “Commodity” of the Commodity Offset Table in Appendix 1.
Curve Shape Signal, “$S_C(t)$”	means in respect of a Calculation Date (t), and any Commodity C, the signal determined as of such Calculation Date (t) in accordance with Section 3.5.1.
Front Contract, “$CF_C(t)$”	means in respect of a Calculation Date (t) and a Commodity C, the first contract to expire after $WDD(t)$.
Least Backwardated Commodities Set, “$LBCS(t)$”	means in respect to a Calculation Date (t), the set composed of the Notional Commodity Indices VI_C being the least in backwardation, as determined in accordance with section 3.5.
Momentum Filtered Bottom Commodities Set, “$MFBCS(t)$”	means in respect to a Calculation Date (t), the set composed of the Notional Commodity Indices VI_C issued from the Most Backwardated Commodities Set, and having been filtered according to their Price Time Signal, as determined in accordance with section 3.5.

Momentum Filtered Top Commodities Set, “MFTCS(t)”	means in respect to a Calculation Date (t), the set composed of the Notional Commodity Indices VI_C issued from the Least Backwardated Commodities Set, and having been filtered according to their Price Time Signal, as determined in accordance with section 3.5.
Most Backwardated Commodities Set, “MBCS(t)”	means in respect to a Calculation Date (t), the set composed of the Notional Commodity Indices VI_C being the most in backwardation, as determined in accordance with section 3.5.
Price Time Signal, “PT_C(t)”	means in respect of a Calculation Date (t), and any Notional Commodity Index VI_C , the signal determined as of such Calculation Date (t) in accordance with Section 3.5.2.
Notional Commodity Index Disruption Event	means in respect to any Notional Commodity Index VI_C , a Notional Commodity Index Disruption Event as defined in Section 4.2

2.4. Terms and definitions relating to the Money Market Instrument:

Money Market Instrument	means an interest rate identical to the yield of a 3-Month US Treasury Bill instrument.
Money Market Instrument Return, “MMR(t)”	means in respect of any Calculation Date (t), the rate of return of a synthetic investment in the Money Market Instrument, as determined by the Calculation Agent pursuant the formula set out in Section 3.2.
Treasury Bill Discount	means, in respect of any Calculation Date (t), the latest

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Rate, “TBDR(t)”

discount rate of the 3-Month US Treasury Bill (as displayed under “USB3MTA Index” Bloomberg Page, or any successor service or page for the purpose of displaying such rate, as determined by the Index Sponsor).

3. Index Calculation :

3.1.Determination of the Index Levels:

3.1.1.Determination of the Index Closing Level “IL(t)”:

The Index Closing Level will be calculated and published by the Index Calculation Agent on every Calculation Date (t) at the Closing Valuation Time, subject to the occurrence or existence of an Index Disruption Event or an Index Extraordinary Event, according to the following formula:

$$IL(t) = IL(t - 1) \times (1 + MMR(t))^{Act(t-1,t)-1} \times \left[\frac{ER(t)}{ER(t - 1)} + MMR(t) \right]$$

with,

$$IL(t_0) = 100 \text{ (as of the Index Launch Date)}$$

3.1.2.Determination of the Index Level “IL(t,v)”:

The Index Level will be calculated and published by the Index Calculation Agent on every Calculation Date (t) at the Valuation Time (v), subject to the occurrence or existence of an Index Disruption Event or an Index Extraordinary Event, according to the following formula:

$$IL(t, v) = IL(t - 1) \times (1 + MMR(t - 1))^{Act(t-1,t)-1} \times \left[\frac{ER(t, v)}{ER(t - 1)} + MMR(t - 1) \right]$$

3.1.3.Determination of the Excess Return Closing Level “ER(t)”:

The Excess Return Closing Level will be calculated by the Index Calculation Agent on every Calculation Date (t) at the Closing Valuation Time, according to the following formula:

$$ER(t) = ER(t_{RR}(t)) \times \left[1 + \sum W_C(t) \times \left(\frac{NIL_C(t)}{NIL_C(t_{RR}(t))} - 1 \right) \right]$$

with,

$ER(t_0) = 100$ (as of the Index Launch Date)

3.1.4.Determination of the Excess Return Level “ER(t,v)”:

The Excess Return Level will be calculated by the Index Calculation Agent on every Calculation Date (t) at the Valuation Time (v), according to the following formula:

$$ER(t, v) = ER(t_{RR}(t)) \times \left[1 + \sum W_C(t) \times \left(\frac{NIL_C(t, v)}{NIL_C(t_{RR}(t))} - 1 \right) \right]$$

3.2.Determination of the Money Market Instrument Return, “MMR(t)”:

The Money Market Instrument Return will be calculated by the Index Calculation Agent on every Calculation Date (t), according to the following formula:

$$MMR(t) = \left[\frac{1}{1 - \frac{91}{360} \times TBDR(t - 1)} \right]^{\frac{1}{91}} - 1$$

3.3.Determination of the Notional Commodity Index Levels:

3.3.1.Determination of the Notional Commodity Index Closing Level “NIL_C(t)”:

The Notional Commodity Index Closing Level will be calculated for each Commodity C, on every Calculation Date (t) at the Closing Valuation Time, according to the following formula:

$$\begin{aligned} &NIL_C(t) \\ &= NIL_C(t - 1) \\ &\times \left(\frac{CRW(t - 1, C_{CActive}) \times CSL(t, C_{CActive}) + CRW(t - 1, C_{CNextActive}) \times CSL(t, C_{CNextActive})}{CRW(t - 1, C_{CActive}) \times CSL(t - 1, C_{CActive}) + CRW(t - 1, C_{CNextActive}) \times CSL(t - 1, C_{CNextActive})} \right) \end{aligned}$$

with,

$$NIL_C(t_0) = 100 \text{ (as of the Index Launch Date)}$$

3.3.2.Determination of the Notional Commodity Index Level “NIL_C(t,v)”:

The Notional Commodity Index Level will be calculated for each Commodity C, on every Calculation Date (t) at the Valuation Time (v), according to the following formula:

$$\begin{aligned}
 &NIL_C(t, v) \\
 &= NIL_C(t - 1) \\
 &\times \left(\frac{CRW(t - 1, C_{CActive}) \times CL(t, v, C_{CActive}) + CRW(t - 1, C_{CNextActive}) \times CL(t, v, C_{CNextActive})}{CRW(t - 1, C_{CActive}) \times CSL(t - 1, C_{CActive}) + CRW(t - 1, C_{CNextActive}) \times CSL(t - 1, C_{CNextActive})} \right)
 \end{aligned}$$

3.3.3.Determination of the Contract Roll Weights, “CRW(t,C_c)”:

The composition of the Notional Commodity Index, determined according to the rules set out in the Sections above, is implemented progressively from the Roll Start Date (included) to the Roll End Date (included) (i.e. the Roll Period).

In effect, during the Roll Period, the composition of the Notional Commodity Index is modified, i.e. the active composition of the Notional Commodity Index, defined as the selection of Active Contracts and their related Contract Roll Weights (CRW_{Active}) (the “**Active Composition**”), is replaced by the next active composition of the Index, defined as the selection of Next Active Contracts and their related Contract Roll Weights (CRW_{NextActive}) (the “**Next Active Composition**”).

Subject to the occurrence of a Notional Commodity Index Disruption Event affecting a Contract comprising the Index, the Contract Roll Weight (CRW) for any date (t) is determined as follows:

Calculation Date (t)	Active Contract Weight, CRW(t-1, C_{CActive})	Next Active Contract Weight, CRW(t-1, C_{CNextActive})
$t \leq t_{RollStart}$	100%	0%
$t_{RollStart} + 1$	80%	20%
$t_{RollStart} + 2$	60%	40%
$t_{RollStart} + 3$	40%	60%
$t_{RollEnd}$	20%	80%

At the end of each Roll Period, the Next Active Contract replaces the Active Contract in place at the beginning of the Roll Period.

3.4. Determination of the Commodity Effective Weights “ $W_C(t)$ ”:

The Commodity Effective Weight is determined for each Notional Commodity Index VI_C by the Index Calculation Agent in accordance with the following formula:

If $t_{RR}(t) = t_{RC}(t)$ then

$$W_C(t) = WT_C(WDD(t))$$

Else, if $t_{RR}(t) > t_{RC}(t)$

$$W_C(t) = W_C(t_{RC}(t)) \times \frac{NIL_C(t_{RR}(t))}{NIL_C(t_{RC}(t))} \times \frac{ER(t_{RC}(t))}{ER(t_{RR}(t))}$$

3.5.Determination of the Commodity Target Weights “WT_C(t)”:

3.5.1. Determination of the Curve Shape Signal S_C(t):

On each Weight Determination Date WDD, the Index Calculation Agent determines the curve shape signal “S_C(WDD)” for every Commodity C as:

$$S_C(t) = 1 - \frac{CSL(CB_C(t), t)}{CSL(CF_C(t), t)}$$

3.5.2. Determination of the Price Time Signal PT_C(t):

On each Weight Determination Date WDD, the Index Calculation Agent determines the price time signal “PT_C(WDD)” for every Notional Commodity Index VI_C as follow:

$$PT_C(t) = \frac{\ln\left(\frac{VIL_C(t)}{VIL_C(CM(t, 1))}\right) - Average(t)}{StdDev(t)}$$

where

$$Average(t) = \frac{\sum_{i=1}^{52} \ln\left(\frac{VIL_C(CD(t, i * 7))}{VIL_C(CM(CD(t, i * 7), 1))}\right)}{52}$$

and

$$StdDev(t) = \sqrt{\frac{\sum_{i=1}^{52} \left[\ln\left(\frac{VIL_C(CD(t, i * 7))}{VIL_C(CM(CD(t, i * 7), 1))}\right) - Average(t) \right]^2}{51}}$$

3.5.3. Preliminary grouping of the Notional Commodity Indices:

On each Weight Determination Date WDD, the Index Calculation Agent classifies each Notional Commodity Index NI_C as follows:

- If $S_C(WDD) \geq Median\{S_i(WDD); 1 \leq i \leq 24\}$ and:

If $PT_C(WDD) \geq -1$, NI_C is added to the Most Backwardated Commodities Set MBCS(WDD)

If $PT_C(WDD) < -1$, NI_C is added to the Momentum Filtered Bottom Commodities Set MFBCS(WDD)

- Else If $S_C(WDD) < Median\{S_i(WDD); 1 \leq i \leq 24\}$ and:

If $PT_C(WDD) \leq 2.5$, NI_C is added to the Least Backwardated Commodities Set LBCS(WDD)

If $PT_C(WDD) > 2.5$, NI_C is added to the Momentum Filtered Top Commodities Set MFTCS(WDD)

3.5.4. Ranking of the Notional Commodity Indices:

On each Weight Determination Date WDD, the Index Calculation Agent ranks each Notional Commodity Index NI_C as follows:

- If $||MFTCS(WDD)|| > 0$ then

The Notional Commodity Indices comprising the Momentum Filtered Top Commodities Set MFTCS(WDD), are sorted, from the highest to the lowest $PT_C(WDD)$, and respectively assigned ranks from $\{13-||MFTCS(WDD)||$ to 12}.

For the avoidance of doubt, the ranking for each Notional Commodity Index comprising MFTCS(WDD) is illustrated as follow:

$$\left\{ \begin{array}{l} \text{the } NI_C \text{ with the highest } PT_C(WDD) \text{ is assigned the rank } \{13 - ||MFTCS(WDD)||\} \\ \vdots \\ \text{the } NI_C \text{ with the lowest } PT_C(WDD) \text{ is assigned the rank } \{12\} \end{array} \right.$$

- If $\|MFBCS(WDD)\| > 0$ then

The Notional Commodity Indices comprising the Momentum Filtered Bottom Commodities Set MFBCS(WDD), are sorted, from the highest to the lowest $PT_C(WDD)$, and respectively assigned ranks from $\{13$ to $12+\|MFBCS(WDD)\|\}$.

For the avoidance of doubt, the ranking for each Notional Commodity Index comprising MFBCS(WDD) is illustrated as follow:

$$\left\{ \begin{array}{l} \text{the } NI_C \text{ with the highest } PT_C(WDD) \text{ is assigned the rank } \{13\} \\ \vdots \\ \text{the } NI_C \text{ with the lowest } PT_C(WDD) \text{ is assigned the rank } \{12 + \|MFBCS(WDD)\|\} \end{array} \right\}$$

- If $\|MBCS(WDD)\| > 0$ then

The Notional Commodity Indices comprising the Most Backwardated Commodities Set MBCS(WDD), are sorted, from the highest to the lowest $S_C(WDD)$, and respectively assigned ranks from $\{1$ to $24\}$ but excluding any rank that have already been assigned.

- If $\|LBCS(WDD)\| > 0$ then

The Notional Commodity Indices comprising the Least Backwardated Commodities Set LBCS(WDD), are sorted, from the highest to the lowest $S_C(WDD)$, and respectively assigned ranks from $\{1$ to $24\}$ but excluding any rank that have already been assigned.

In the event that two or more commodities have identical curve shape signals, their relative placing follows their Position in the Eligible Underlying Index Table.

3.5.5. Weighting of the Notional Commodity Indices:

On each Weight Determination Date WDD(t), the Index Calculation Agent assigns to each Notional Commodity Index NI_C a Target Weight WT_C according to their rank and the following table :

Commodity Rank	Target Weight from WDD of April 2014 (included)	Target Weight before WDD of April 2014 (excluded)
1	7.333333%	8.333333%
2	7.05797%	7.971014%
3	6.78261%	7.608696%
4	6.50725%	7.246377%
5	6.23188%	6.884058%
6	5.95652%	6.521739%
7	5.68116%	6.159420%
8	5.40580%	5.797101%
9	5.13044%	5.434783%
10	4.85507%	5.072464%
11	4.57971%	4.710145%
12	4.30435%	4.347826%
13	4.02899%	3.985507%
14	3.75362%	3.623188%
15	3.47826%	3.260870%
16	3.20290%	2.898551%
17	2.92754%	2.536232%
18	2.65217%	2.173913%
19	2.37681%	1.811594%
20	2.10145%	1.449275%
21	1.82609%	1.086957%

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22	1.55073%	0.724638%
23	1.27536%	0.362319%
24	1.00000%	0.000000%

3.6. Rounding Rules:

The rounding policy is defined as follows:

Weights: 6 decimal places in %

All calculations: 8 decimal places

Index Level publication: 4 decimal places.

4. Consequences of an Index Disruption Event:

4.1. Disruption Event

If an Index Disruption Event exists on a Scheduled Trading Day for an Notional Commodity Index (a “**Disrupted Scheduled Trading Day**”), then the Index Calculation Agent shall not determine the level for the Index on such Scheduled Trading Day. The next Calculation Date following such Disrupted Scheduled Trading Day for which the Index Calculation Agent shall determine the level for the Index shall be the first succeeding Scheduled Trading Day on which the Index Calculation Agent determines that an Index Disruption Event no longer exists; *provided* that if the Index Calculation Agent determines that an Index Disruption Event exists on the five consecutive Scheduled Trading Days immediately following the initial Disrupted Scheduled Trading Day, then:

- (i) the fifth Scheduled Trading Day following the initial Disrupted Scheduled Trading Day, and each Scheduled Trading Day thereafter on which an Index Disruption Event continues to exist, shall be deemed to be a Calculation Date, notwithstanding the existence of an Index Disruption Event on such date(s), and

- (ii) the Index Calculation Agent shall determine, the level of Index as of the Closing Valuation Time on that fifth Scheduled Trading Day following the initial Disrupted Scheduled Trading Day, and as of the Closing Valuation Time on each Scheduled Trading Day thereafter on which an Index Disruption Event continues to exist (each, a “**Disrupted Calculation Date**”), based on each Notional Commodity Index Levels determined, after instruction from the Index Sponsor, in accordance with the formula for and method of calculating that Notional Commodity Index Level last in effect prior to the occurrence of the first day on which the relevant Index Disruption Event occurred using relevant market indicia on the relevant date(s) of determination;

4.2. Definition of an Notional Commodity Index Disruption Event

A “**Notional Commodity Index Disruption Event**” means the occurrence of any of the following events affecting an Index Component:

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- (i) the failure by the relevant Exchange or other relevant price source to determine or make public the settlement price for such Index Component;
- (ii) the material limitation imposed on trading, on the relevant Exchange, in such Index Component, provided that a limitation on trading shall be deemed to be material only if the relevant Exchange establishes limits on the range within which the price of the Contract may fluctuate and the settlement price of such Contract is at the upper or lower limit of that range, or
- (iii) the material suspension of trading, on the relevant Exchange, in such Index Component, provided that such suspension shall be deemed material only if (i) all trading in the relevant Contract is suspended for the entire Scheduled Trading Day or (ii) trading in the relevant Contract is suspended during the relevant Scheduled Trading Day on the relevant Exchange, such suspension is announced less than one hour preceding the commencement of such suspension and trading does not recommence prior to the regularly scheduled close of trading in such Index Component;
- (iv) the Index Calculation Date that is not a Scheduled Trading Day for an Index Component.

4.3. Consequences of a Notional Commodity Index Disruption Event

4.3.1. Consequences of a Notional Commodity Index Disruption Event outside of the Roll Period

If a Notional Commodity Index Disruption Event affects, on any Calculation Date, one or more Contracts comprising the Index, and such Calculation Date is not during a Roll Period, then the Index Calculation Agent shall determine the level of the Index on such Calculation Date as follows:

For each Contract affected by the Index Disruption Event, a settlement price will be determined, after instruction from the Index Sponsor, by retaining either (i) the settlement price of the Contract as determined or made public on that Scheduled Trading Day or (ii) the last trading price observed for such Contract prior to the occurrence of the relevant Index Disruption Event, using relevant market indicia on the relevant date(s) of determination

4.3.2. Consequences of an Index Disruption Event during a Roll Period

- (a) on the first Calculation Date on which a Notional Commodity Index Disruption Event affects one or more Index Components then the $CRW(t-1, C_{CActive})$ and the $CRW(t-1, C_{CNextActive})$ of such Index Component at the close of such Calculation Date will be equal to the $CRW(t-1, C_{CActive})$ and the $CRW(t-1, C_{CNextActive})$ of such Calculation Date. The Daily Roll Proportion at the close of such Calculation Date will be equal to 0.
- (b) Following such occurrence, on each Calculation Date immediately following such first Calculation Date on which a Notional Commodity Index Disruption Event still affects such Index Components, the $CRW(t-1, C_{CActive})$ and the $CRW(t-1, C_{CNextActive})$ of such Index Component with respect to such Calculation Date will be equal to the $CRW(t-1, C_{CActive})$ and the $CRW(t-1, C_{CNextActive})$ on the immediately preceding Calculation Date.
- (c) Within the Roll Period, on the first Calculation Date on which there is no Market Disruption Event affecting such Index Component, the $CRW(t-1, C_{CActive})$ and the $CRW(t-1, C_{CNextActive})$ of such Index Component with respect to such Calculation Date will be equivalent to the $CRW(t-1, C_{CActive})$ and the $CRW(t-1, C_{CNextActive})$ on the immediately preceding Calculation Date. The Daily Roll Proportion on such Calculation Date will be equal to the sum of (1) the portion of Index Components that did not roll due to the occurrence of a Notional Commodity Index Disruption Event affecting such Index Component and (2) the portion of Index Components scheduled to roll on such day, if any.
- (d) If, at the close of the Roll End Date, a Notional Commodity Index Disruption Event one or more Index Component, the entire roll (or the portion of the roll that remains) will occur on the first day on which a Market Disruption Event does not exist.

Notwithstanding the foregoing, in the event that a Notional Commodity Index Disruption Event continues to affect one or more Index Components on the fifth Business Day following the Roll End Date, the Index Calculation Agent shall:

- (i) roll the portion of Index Components that did not roll due to the occurrence of a Notional Commodity Index Disruption Event affecting such Index Component on the fifth Business Day . As a consequence, the entire roll (or the portion of the roll that remains) will occur on the fifth Business Day following the Roll End Date, and
- (ii) determine the Contract Settlement Level by using:
 - a. the Contract Settlement Level determined and published on the fifth Business Day following the Roll End Date, if any, or
 - b. the Contract Settlement Level calculated by the Calculation Agent in good faith and in a commercially reasonable manner.

4.4. Cancellation

Notwithstanding the foregoing Section 4.1, if an Index Disruption Event continues for twenty consecutive Scheduled Trading Days, then the Index Calculation Agent shall permanently cancel the Index on such twentieth Scheduled Trading Day.

5. Consequences of an Index Extraordinary Event:

5.1.

If a Notional Commodity Index is (i) not calculated and announced by the Index Sponsor but is calculated and announced by a successor Index Sponsor acceptable to the Index Calculation Agent, after instruction from the Index Sponsor, or (ii) replaced by a successor index using, in the determination of the Index Calculation Agent, after instruction from the Index Sponsor, the same or a substantially similar formula for and method of calculation as used in the calculation of such Notional Commodity Index, then in each case that successor index will replace such Notional Commodity Index. Additionally, if the Underlying Index ceases to be the underlying reference asset of an exchange-traded futures or option contract (if applicable), the Index Calculation Agent, after instruction from the Index Sponsor, may, but is not obligated to, replace the Underlying Index with a new index; *provided* that such new index uses, in the determination of the Index Calculation Agent, after instruction from the Index Sponsor, the same or a substantially similar formula for and method of calculation as used in the calculation of the original Eligible Underlying Index.

In the event that the Eligible Underlying Index is replaced under any circumstance described in the previous paragraph, that replacement index will be deemed a “**Successor Eligible Underlying Index**” for such Eligible Underlying Index. Such Successor Eligible Underlying Index will be used as a substitute for the original Eligible Underlying Index for all purposes, including for purposes of determining the Eligible Underlying Index Level and whether an Index Disruption Event exists with respect to such Eligible Underlying Index.

5.2.

If, with respect to an Eligible Underlying Index and a Scheduled Trading Day, the Eligible Underlying Index Sponsor announces on or prior to such Scheduled Trading Day that it will make a material change in the formula for or the method of calculating such Eligible Underlying Index or in any other way materially modifies such Eligible Underlying Index (other than a modification prescribed in that formula or method to maintain such Eligible Underlying Index for routine events), the Index Calculation Agent, after instruction from the Index Sponsor, may, but is not obligated to, calculate the Eligible Underlying Index Level on such Scheduled Trading Day in accordance with the formula for and method of calculating such Eligible Underlying Index last in effect prior to such change or cancellation, but using only those securities or instruments that comprised such Eligible Underlying Index immediately prior to such change or cancellation.

If at any time the method of calculating the Eligible Underlying Index, or the level thereof, is changed in a material respect, or if the Eligible Underlying Index is in any other way modified so that such Eligible Underlying Index does not, in the opinion of the Index Calculation Agent, after instruction from the Index Sponsor, fairly represent the Eligible Underlying Index Level had such changes or modifications not been made, then the Index Calculation Agent, after instruction from the Index Sponsor, may, but is not obligated to, make such calculations and adjustments as the Index Calculation Agent, after instruction from the Index Sponsor, determines necessary in order to arrive at a level of an index comparable to such Eligible Underlying Index as if such changes or modifications had not been made, and the Index Calculation Agent, after instruction from the Index Sponsor, will calculate the level of the Index with reference to such Eligible Underlying Index, as adjusted.

If the Index Calculation Agent makes any alternate calculations or adjustments in accordance with Section 5.2, the Index Calculation Agent shall permanently cancel the Index on the twentieth Scheduled Trading Day following the first day on which the Index Calculation Agent makes such alternate calculations or adjustments.

5.3.

If the Eligible Underlying Index Sponsor cancels the Eligible Underlying Index on or prior to any Scheduled Trading Day and no Successor Underlying Index exists, the Index Calculation Agent shall not determine the level for the Index for such Scheduled Trading Day. If such event exists and is not cured for twenty Scheduled Trading Days, the Index Calculation Agent shall permanently cancel the Index on such twentieth Scheduled Trading Day.

5.4.Contract Settlement Level Corrections

If the relevant Exchange fails to make available a Contract Settlement Level on a day that is a Scheduled Trading Day, or, in the reasonable judgment of the Index Sponsor, the Contract Settlement Level made available by the Exchange reflects a manifest error, the relevant calculation will be delayed until such time as such level is made available or corrected, as the case may be, provided that, if a Contract Settlement Level has not been made available, or the error has not been corrected by the Exchange prior to the Valuation Time, the Index Sponsor may, if it deems such action appropriate under the circumstances, determine the appropriate Contract Settlement Level for the relevant Contract in its reasonable judgment for purposes of calculating the Index. In

that event, the Index Sponsor will disclose the basis for its determination of such Contract Settlement Level.

In circumstances where the Index Sponsor makes various decisions, or where a resolution is adopted by the Index Scientific Committee as the case may be (together the “**Decisions**”), with respect to the methodology of calculation and/or the allocation of the Index, and the Index Calculation Agent determines that it can no longer calculate the Index to obtain the Index Levels according to the Index Rules as amended by such Decisions, the Index Calculation Agent shall notify the Index Sponsor of such impossibility together with the grounds thereof. Upon receipt of such notification, the Index Sponsor shall modify its decision or, as the case may be convene a new meeting of the Index Scientific Committee in order to adopt a new resolution, in a manner which would allow the calculation of the Index by the Index Calculation Agent provided that it preserves the economic construction of the Index (the “**New Decisions**”). Once made by the Index Sponsor or adopted by the Index Scientific Committee as the case may be, such New Decisions shall be sent to the Index Calculation Agent and be conclusive and binding.

S&P Commodities Curve Momentum Beta+ TR

(USD – Total Return)

Appendix 1 – Commodity Offset Table

k	Commodity	Commodity Prefix	Exchange	Nearby Contract Offset n(C)
1	Corn	C	CME	6
2	Cocoa	CC	ICE(US)	6
3	Crude Oil	CL	CME	13
4	Brent Crude Oil	CO	ICE	13
5	Cotton	CT	ICE(US)	6
6	Feeder Cattle	FC	CME	8
7	Gold	GC	CME	8
8	Heating Oil	HO	CME	13
9	Coffee	KC	ICE(US)	6
10	Kansas Wheat	KW	KBOT	6
11	Aluminum	LA	LME	13
12	Live Cattle	LC	CME	7
13	Lean Hogs	LH	CME	9
14	Lead	LL	LME	13
15	Nickel	LN	LME	13
16	Copper	LP	LME	13
17	Zinc	LX	LME	13
18	Natural Gas	NG	CME	13
19	Gas Oil	QS	ICE	13
20	Soybean	S	CME	8
21	Sugar	SB	ICE(US)	5
22	Silver	SI	CME	8
23	Wheat	W	CME	6
24	Unleaded Gasoline	XB	CME	13

S&P Commodities Curve Momentum Beta+ TR

(USD – Total Return)

Appendix 2 – Contract Table

K	Contract	Active Contract at the beginning of a Roll Start Date											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	C	K	K	N	N	U	U	Z	Z	Z	H	H	H
2	CC	K	K	N	N	U	U	Z	Z	Z	H	H	H
3	CL	J	K	M	N	Q	U	V	X	Z	F	G	H
4	CO	K	M	N	Q	U	V	X	Z	F	G	H	J
5	CT	K	K	N	N	Z	Z	Z	Z	Z	H	H	H
6	FC	J	K	Q	Q	Q	U	V	X	F	F	H	H
7	GC	J	M	M	Q	Q	Z	Z	Z	Z	G	G	J
8	HO	J	K	M	N	Q	U	V	X	Z	F	G	H
9	KC	K	K	N	N	U	U	Z	Z	Z	H	H	H
10	KW	K	K	N	N	U	U	Z	Z	Z	H	H	H
11	LA	J	K	M	N	Q	U	V	X	Z	F	G	H
12	LC	J	M	M	Q	Q	V	V	Z	Z	G	G	J
13	LH	J	M	M	N	Q	V	V	Z	Z	G	G	J
14	LL	J	K	M	N	Q	U	V	X	Z	F	G	H
15	LN	J	K	M	N	Q	U	V	X	Z	F	G	H
16	LP	J	K	M	N	Q	U	V	X	Z	F	G	H
17	LX	J	K	M	N	Q	U	V	X	Z	F	G	H
18	NG	J	K	M	N	Q	U	V	X	Z	F	G	H
19	QS	J	K	M	N	Q	U	V	X	Z	F	G	H
20	S	K	K	N	N	X	X	X	X	F	F	H	H
21	SB	K	K	N	N	V	V	V	H	H	H	H	H
22	SI	K	K	N	N	U	U	Z	Z	Z	H	H	H
23	W	K	K	N	N	U	U	Z	Z	Z	H	H	H
24	XB	J	K	M	N	Q	U	V	X	Z	F	G	H

