



Goldman Sachs Commodity Enhanced Index

Index Rules – As of March 7th, 2023

Goldman Sachs Commodity Enhanced Index

1 Index Rules Summary

1.1 Index Description

The Goldman Sachs Commodity Enhanced Index (USD - Excess Return) (the “**Index**”) is a diversified commodity index designed to outperform its benchmark, the Bloomberg Commodity Excess Return Index (BCOM Index). The Index seeks outperformance under tracking error constraint by positioning its commodity exposure at various points on the commodity futures curve according to a proprietary algorithm run by the Index Sponsor.

The Index is calculated, published, and administered by Compass (the “**Index Calculation Agent**”). The Index is sponsored by Goldman Sachs Asset Management, L.P. (the “**Index Sponsor**”)

Main Characteristics

Bloomberg ticker:	COMMOENH Index
Type of Return:	Excess Return
Calculation Frequency:	Daily (end of day)
Publication Time:	End of Day
Launch Date:	21/01/2020
Currency:	USD

1.2 Mechanism

1.2.1 Indices Composition

The Index uses either a static or a dynamic rolling methodology applied on each contract, as described herein. The Underlying Contracts are based on the commodities listed in appendix 1 (each, a “Commodity”). The Index is comprised of commodity futures contracts on the 24 different Commodities that are part of the BCOM, each with specified delivery dates and traded on the Relevant Exchange in respect of such Commodity. From time to time, Commodities may be added to or removed from the BCOM resulting in a similar alteration to the composition of the Index.

1.2.2 Roll Mechanism

Rolls from one Underlying Contract to the next Underlying Contract are implemented during a period (the “Roll Period”) from the close of the 5th Calculation Date of any given month (the “Roll Start Date”) to the close of the 9th Calculation Date of such month (the “Roll End Date”), provided that if a Commodity Disruption Event occurs at any time during the Monthly Roll Period, any required and appropriate adjustments shall be made with respect to the calculation of the Index by the Index Calculation Agent to reflect the fact that the Roll of certain Eligible Components may need to be postponed as outlined in the Index Disruption Event section of this document.

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1.3 Technical Rectification of Index Rules

The Index Rules may be amended from time to time, consistent with the economic strategy of the Index, by the Index Sponsor acting in good faith and a commercially reasonable manner to cure ambiguities, errors, and omissions, if any.

For convenience, the Index Sponsor may from time to time replace a data provider, publisher or source of Market Data or Index Data (a “**Data Provider**”), provided that the relevant data content remains equivalent. In any case where the Index Sponsor reasonably determines that the replacement of a Data Provider is necessary or desirable whilst the data content may not remain strictly equivalent, the Index Sponsor shall select such replacement Data Provider (a) in a commercially reasonable manner; (b) consistent with the objectives of the Index; and (c) in compliance with the Index Sponsor’s internal procedures for Index modification.

IMPORTANT:

The Index seeks to track the performance of hypothetical long positions in futures contracts; however, the Index does not actually invest in or hold any futures contracts or any other instruments. An investor in any product linked to the performance of the Index (if any) will have no rights whatsoever to any futures contracts or any other instruments or securities underlying the Index or the Intermediate Indices. The Index is a statistical measure of the performance of a systematic model; it is not an investment fund, pool or any other investment vehicle.

The strategy tracked by the Index is not guaranteed to be successful.

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2 Terms and definitions

2.1 Terms and definitions relating to the Index

Basket Components	means any Underlying Contract.
Benchmark Index	means the Bloomberg Commodity Index (Bloomberg Ticker: BCOM <Index>), which corresponds to the Passive Strategy of the Index.
Benchmark Index Methodology	means the methodology specified in the “Index Methodology - the Bloomberg Commodity Index Family” dated January 2018.
Benchmark Index Sponsor	means Bloomberg Finance L.P.
Calculation Date	means any Scheduled Calculation Date.
Commodity Disruption Event	means any occurrence or existence of any event listed in section 3.2.
Index	means the Goldman Sachs Commodity Enhanced Index (USD - Excess Return) (Bloomberg Ticker: COMMOENH Index).
Index Business Day	as defined in the Benchmark Index Methodology. Means any day on which the Benchmark Index is scheduled to be calculated. For the avoidance of doubt, the Index Business Day and the Calculation Date are identical.
Index Calculation Agent	means Compass Financial Technologies.
Index Currency	U.S. 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, as defined in section 3.
Index Launch Date, “t0”	means 21st of January 2020.
Index 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 Valuation Time, pursuant to the Index rules set out in section 3.
Reweighting Date	means the fourth (4th) Calculation Date of January of each year.
Roll End Date, “tRollEnd”	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).

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Roll Start Date, "tRollStart"	means the fifth (5th) Calculation Date of each month.
Scheduled Calculation Date	means any day other than a Saturday or Sunday on which the Benchmark Index is scheduled to be calculated as specified in the Benchmark Index Methodology.
$t_{RW(t,i)}$	means, in respect of Calculation Date (t), the ith following Reweighting Date. For the avoidance of doubt, $t_{RW(t,i)}$ is the Reweighting Date immediately preceding Reweighting Date $t_{RW(t,i+1)}$. If t_1 and t_2 are two consecutive Reweighting Dates, given a Calculation Date (t) with $t_1 \leq t < t_2$ then $t_{RW(t,0)} = t_1$.
Valuation Time	means 4:00 PM New York Time.

2.2 Terms and definitions relating to a Commodity

Active Contract, "CC,A"	means, in respect of a Roll Period and Commodity C, a Contract into which the Index is invested before the Roll Start Date.
Active Strategy, "AS"	means, in respect of each Eligible Commodity, the futures contracts to be held in accordance with (i), the "Active Strategy Contract Table" defined in Appendix 3, and (ii), the "Contracts universe for the Active Strategy" defined in section 3.8.
Active Strategy Level, "AS(t, t_{RW(t,0)}), CRW(t - 1, C_{C,A}), CRW(t - 1, C_{C,NA}), C"	means, in respect of Calculation Date (t), a Reweighting Date ($t_{RW(t,0)}$), Commodity C and a Contract Roll Weight $CRW(t-1, C_{C,A})$ and $CRW(t-1, C_{C,NA})$, the Active Strategy Level, pursuant to the Index rules set out in section 3.3.
Aggressiveness Factor, "AF(t, C_{C,A})"	means, in respect of Calculation Date (t) and Commodity C, the Aggressiveness Factor applied to the Active Contract.
Aggressiveness Factor, "AF(t, C_{C,NA})"	means, in respect of Calculation Date (t) and Commodity C, the Aggressiveness Factor applied to the Next Active Contract.
Commodities Number, "Nc(t)"	means, in respect of Calculation Date (t), the number of commodities comprising the Index.
Commodity, "C"	means any commodity listed in the column entitled "Commodity" in section 1.3.
Commodity Exchange	means, in respect of a Commodity C, the exchange specified in the column entitled "Exchange" in section 1.3.
Commodity Index Percentage, "CIPC(Y)"	means, for any Commodity C and any calendar year Y, the target weight as defined by the Benchmark Index Sponsor for such calendar year.

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New target weights are announced on the Benchmark Index Sponsor's web site:

<http://www.bloombergindeces.com/bloomberg-commodity-index-family/>

Commodity Instruments	means an article of trade or commerce such as aluminum, WTI crude oil, Brent crude oil, corn, cotton, copper, live cattle, gold, silver, gasoline, NY Harbor ULSD, coffee, wheat, Kansas wheat, lean hogs, natural gas, nickel, zinc, lead, sugar, soybean, soybean oil, soybean meal and more generally any commodity, any index on the aforementioned or any other similar instrument specified in the Index Rules.
Contract, "CC"	means, in respect of 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.
Commodity Index Multiplier, "CIMc(t)"	means, in respect of a Commodity C and any calendar year Y, the Commodity Index Multiplier as defined by the Benchmark Index Sponsor for such calendar year. New Commodity Index Multipliers are announced on the Benchmark Index Sponsor's web site: http://www.bloombergindeces.com/bloomberg-commodity-index-family/
Contract Roll Weights, "CRW(t-1, CC)"	means, for a given Contract CC, the percentage of such Contract used in the calculation of the Index Level on a Calculation Date (t) during a Roll Period and defined in section 3.5.
Contract Settlement Level, "CSL(t, A, CC)"	means, in respect of a Calculation Date (t) and any Commodity C defined in section 1.3, the last available official closing price of the Contract CC related to the Active (A) Strategy, calculated and published by the Exchange associated with that Commodity C. The official closing price must be converted to U.S. dollar.
Contract Settlement Level, "CSL(t, P, CC)"	means, in respect of a Calculation Date (t) and any Commodity C defined in section 1.3, the last available official closing price of the Contract CC related to the Passive (P) Strategy, calculated and published by the Exchange associated with that Commodity C. The official closing price must be converted to U.S. dollar.
Daily Commodity Proportion	Roll means, in respect of a Calculation Date (t) and a Commodity C, the proportion of contracts which will be rolled.

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Exchange Business Day	means, in respect of a Basket Component, any Scheduled Trading Day on which each relevant Exchange and Related Exchange are open for trading during their respective regular trading sessions, notwithstanding any such Exchange or Related Exchange closing prior to its Scheduled Closing Time
Next Active Contract, "CC,NA"	means, in respect of a Roll Period and Commodity C, a Contract into which the Index will be rolling during such Roll Period.
Number of Contracts, "N(t,CC)"	means, in respect of any Calculation Date (t) and a Contract CC, the quantity of such contracts in the Index as determined pursuant to section 3.6.
Passive Strategy, "PS"	means, in respect of each Eligible Commodity, the futures contracts to be held in accordance with the "Passive Strategy Contract Table" defined in Appendix 2.
Passive Strategy Level, "PS(t, tRW(t, 0), CRW(t - 1, C_{C,A}), CRW(t - 1, C_{C,NA}), C)"	means, in respect of Calculation Date (t), a Reweighting Date (tRW(t,0)), a Commodity C and a Contract Roll Weight CRW(t-1,C _{C,A}) and CRW(t-1,C _{C,NA}), the Passive Strategy Level, pursuant to the Index rules set out in section .3.2.
Related Exchange	means, in respect of a Basket Component, each exchange or quotation system where trading has a material effect on the overall market for futures and options contracts relating to such Basket Component, any successor exchange or quotation system or any substitute exchange or quotation system to which trading in futures or options contracts relating to such Basket Component has temporarily relocated.
Scheduled Closing Time	means, in respect of an Exchange or Related Exchange, the scheduled weekday closing time of such Exchange or Related Exchange, without regard to after hours or any other trading outside of the regular trading session hours.
Scheduled Trading Day	means, in respect of a Basket Component, any day on which each Exchange and each Related Exchange for such Basket Component are scheduled to be open for trading for their respective regular trading sessions.
Underlying Contract	means any Contract of any Commodity C that is used in the calculation of the Index.
Universe Contract	means, in respect of a Commodity C applying a dynamic rolling methodology, all Contracts used in the Active Strategy to define the Next Active Contract.

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3 Index calculation

3.1 Determination of the Index of futures Level

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

$$\begin{aligned} & IL(t) \\ &= IL(t) \\ &- 1) \\ &\times \frac{\sum_{C=1}^{N_C(t)} [PS(t, t_{RW}(t, 0), CRW(t-1, C_{C,A}), CRW(t-1, C_{C,NA}), C) + AS(t, t_{RW}(t, 0), CRW(t-1, C_{C,A}), CRW(t-1, C_{C,NA}), C)]}{\sum_{C=1}^{N_C(t)} [PS(t-1, t_{RW}(t, 0), CRW(t-1, C_{C,A}), CRW(t-1, C_{C,NA}), C) + AS(t-1, t_{RW}(t, 0), CRW(t-1, C_{C,A}), CRW(t-1, C_{C,NA}), C)]} \end{aligned}$$

With,

$$IL(t_0) = 72.3453 \text{ (as of the Index LaunchDate)}$$

3.2 Determination of the Passive Strategy Level "PS(t,C)":

On every Calculation Date (t) at the Valuation Time, the Index Calculation Agent determines the Passive Strategy Level for each Commodity (C), according to the following formula:

$$\begin{aligned} & PS(t, t_{RW}(t, 0), CRW(t-1, C_{C,A}), CRW(t-1, C_{C,NA}), C) \\ &= N(t-1, C_{C,A}) \times [1 - AF(t-1, C_{C,A})] \times CSL(t, P, C_{C,A}) \\ &+ N(t-1, C_{C,NA}) \times [1 - AF(t-1, C_{C,NA})] \times CSL(t, P, C_{C,NA}) \end{aligned}$$

On any Calculation Date (t) outside a Roll Period, it simplifies to:

$$PS(t, t_{RW}(t, 0), CRW(t-1, C_{C,A}), 0, C) = N(t-1, C_{C,A}) \times [1 - AF(t-1, C_{C,A})] \times CSL(t, P, C_{C,A})$$

Regarding the Passive Strategy, the Index will be invested, in respect of each Commodity, according to the "Passive Strategy Contract Table" defined in Appendix 2.

3.3 Determination of the Active Strategy Level "AS(t,C)":

On every Calculation Date (t) at the Valuation Time, the Index Calculation Agent determines the Active Strategy Level for each Commodity (C), according to the following formula:

$$\begin{aligned} & AS(t, t_{RW}(t, 0), CRW(t-1, C_{C,A}), CRW(t-1, C_{C,NA}), C) \\ &= N(t-1, C_{C,A}) \times AF(t-1, C_{C,A}) \times CSL(t, A, C_{C,A}) \\ &+ N(t-1, C_{C,NA}) \times AF(t-1, C_{C,NA}) \times CSL(t, A, C_{C,NA}) \end{aligned}$$

On any Calculation Date (t) outside a Roll Period, it simplifies to:

$$AS(t, t_{RW}(t, 0), CRW(t-1, C_{C,A}), 0, C) = N(t-1, C_{C,A}) \times AF(t-1, C_{C,A}) \times CSL(t, A, C_{C,A})$$

Regarding the Active Strategy, the Index will be invested, in respect of each Commodity, according to the "Active Strategy Contract Table" defined in Appendix 3.

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3.4 Determination of the Aggressiveness Factor “AF(t,CC,A)” and “AF(t,CC,NA)”:

For each of the Eligible Commodity, the Index will hold Passive futures contracts in respect of the Passive Strategy and hold Active futures contracts in respect of the Active Strategy. The percentage allocation between the two, or the “Aggressiveness Factor”, will be determined per Commodity every month. The mix of Active futures contracts and Passive futures contracts will be implemented by splitting the CIM proportionally to reflect the Index Sponsor’s Aggressiveness Factor. The aggressiveness factors are determined every month on the close of 4th Calculation Date of the month and communicated on the first following Calculation Date before 12:00 am (Central European time).

For example, if the CIM of Crude Oil is 50 and the Index Sponsor decides to go 80% active and 20% passive in Crude Oil, the CIM of Crude Oil will be split to 40 and 10, respectively.

The Aggressiveness Factor may range anywhere from and including 0% up to and including 200%.

On the Calculation Date following the Roll End Date,

$$AF(t, C_{C,A}) = AF(t, C_{C,NA}).$$

If new Commodities are added to the Index, the default Aggressiveness Factor in respect of those Commodities will be 0 (zero) unless otherwise specified by the Index Sponsor.

3.5 Determination of the Contract Roll Weights “CRW(t-1, CC)”:

Subject to the occurrence of an Index Disruption Event affecting an Underlying Contract comprising the Index, the Contract Roll Weight for any Calculation Date (t) and any Underlying Contract (C_c), is determined as follows:

Calculation Date (t)	Active Contract Roll Weight, CRW(t-1, C _{c,A})	Next Active Contract Roll Weight, CRW(t-1, C _{c,NA})
$t \leq t_{RollStart}$	100%	0%
$t_{RollStart} + 1$	80%	20%
$t_{RollStart} + 2$	60%	40%
$t_{RollStart} + 3$	40%	60%
$t_{RollEnd}$	20%	80%

3.6 Determination of Number of Contracts “N(t,CC)”:

At the end of each Roll Period, the Next Active Contract replaces the Active Contract in place at the beginning of the Roll Period. On a Calculation Date (t), the Number of Contracts for any Underlying Contract (C_c) is determined as follows:

- (i) If the Calculation Date (t) is part of the Roll Period immediately following a Reweighting Date, the Number of Contracts, with respect to the Active contract and the Next Active Contract, is:

$$N(t, C_{C,A}) = CRW(t, C_{C,A}) \times CIM_C(t_{RW}(t, -1))$$

$$N(t, C_{C,NA}) = CRW(t, C_{C,NA}) \times CIM_C(t_{RW}(t, 0))$$

- (ii) Otherwise, on any other Calculation Date (t), we have:

$$N(t, C_{C,A}) = CRW(t, C_{C,A}) \times CIM_C(t_{RW}(t, 0))$$

$$N(t, C_{C,NA}) = CRW(t, C_{C,NA}) \times CIM_C(t_{RW}(t, 0))$$

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3.7 Determination of the Commodity Index Multiplier "CIMc(t)":

On every Reweighting Date (t_{RW}), the Benchmark Index Sponsor will use the new Commodity Index Multipliers for the Benchmark Index (BCOM <Index>)

New Commodity Index Multipliers are announced on the Benchmark Index Sponsor's web site.

<http://www.bloombergindeces.com>

3.8 Contracts universe for the Active Strategy:

Every month, on the close of 4th Calculation Date, the Active Strategy's Next Active Contracts are determined by a proprietary algorithm designed and maintained by the Index Sponsor regarding the following commodities:

Natural Gas (NG), NY Harbor ULSD (HO), RBOB Gasoline (XB), WTI Crude Oil (CL), Brent Crude Oil (CO), Low Sulphur Gas Oil (QS) Aluminium (LA), Copper (HG), Nickel (LN), Zinc (LX) and Lead (LL).

The Active Strategy's Next Active Contracts are communicated on the first following Calculation Date before 12:00 am (Central European time).

The universe of eligible contracts for each commodity is described below.

Contracts Universe for NG, CL, XB, QS and HO:

On every n^{th} month of the year, the Active Strategy can hold any contracts that have delivery months between $n+2$ months and $n+12$ months.

Contracts Universe for CO:

On every n^{th} month of the year, the Active Strategy can hold any contracts that have delivery months between $n+3$ months and $n+12$ months.

Contracts Universe for LA, LX, LN and LL:

On every n^{th} month of the year the Active Strategy can hold any contracts that have delivery months between $n+2$ months and $n+11$ months.

Contracts Universe for HG:

On every n^{th} month of the year the Active Strategy can hold any contracts that have delivery months between $n+2$ months and $n+8$ months.

To avoid any doubt, only H, K, N, U and Z contracts will be considered as eligible.

Determination of the active contracts for NG, HG, CO, LA, LX, QS, LN and LL:

The active contracts for NG are fixed and defined in Appendix 3 for now but after an Event Management Committee, and at a date determined by the index sponsor, the rules will be amended to select explicitly the active contract as it done for the other commodities of this section.

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3.9 Rounding Rules:

The rounding policy is defined as follows:

Index Level is published with 4 decimal places.

Index Level is calculated with 8 decimal places.

The Aggressiveness Factors are calculated with 4 decimals.

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4. Index Disruption Event:

4.1 Index Disruption Remedies

If an Index Disruption Event, other than a Trading Disruption event related to Price Limits (see below), occurs on a Scheduled Calculation Date (a “**Disrupted Day**”), then the Calculation Agent, after instruction from the Index Sponsor, shall not calculate the Index Level on such Disrupted Day in which case the next Calculation Date shall be the first succeeding Scheduled Calculation Date that is not a Disrupted Day for any Index Component as determined by the Index Calculation Agent, after instruction from the Index Sponsor, unless each of the five Scheduled Calculation Dates immediately following the initial Disrupted Day is also a Disrupted Day for any Index Component, in which case:

- (i) the fifth Scheduled Calculation Date following the initial Disrupted Day, and each Scheduled Calculation Date that is a Disrupted Day thereafter, shall be deemed to be a Calculation Date (each, a “**Disrupted Calculation Date**”), notwithstanding the existence of an Index Disruption Event on such date and only for the purpose of determining an estimate of the Index Level; and
- (ii) on that fifth Scheduled Calculation Date and on each Disrupted Calculation Date thereafter, the Index Calculation Agent shall calculate the Index Level based on the level or price of the one or more Basket Component(s) that triggered the Index Disruption Event (such Basket Component(s) the “**Affected Basket Component(s)**”) last in effect prior to the occurrence of the relevant Basket Component Disruption Event.

In each case as determined in good faith, after instruction from the Index Sponsor.

For the sake of clarity, “Last [price(s)] in effect” should be understood as the official settlement price(s) of the Affected Basket Component(s), published by the relevant Exchange(s), one Calculation Date prior to the initial Disrupted Day.

Notwithstanding the foregoing section 3.1, on any day from the first Disrupted Calculation Date but no later than the twentieth Scheduled Calculation Date following the initial Disrupted Day, if an Index Disruption Event has been continuing on each such day, the Index Sponsor shall permanently cancel the Index on such twentieth Scheduled Calculation Date, unless the Index Sponsor decides that one of the following remedies (i) and (ii) (each a “**Index Disruption Remedy**”) constitutes a suitable remedy for such Index Disruption Event:

- (i) adjust any relevant terms of the Index Rules in a manner that preserves the economic characteristics of the Index; or
- (ii) continue the determination of the Index Level pursuant to section 3.1.ii for another maximum period of twenty Scheduled Calculation Dates (a “**Disruption Period Extension**”), provided that after such period, the Index Sponsor shall decide again between the Index Disruption Remedies, including a renewal of the Disruption Period Extension, subject to a maximum of three such extensions, including the first one.

If neither of the Index Disruption Remedies (i) and (ii) above constitutes suitable remedies for such Index Disruption Event, the Index Sponsor will permanently cancel the Index.

Price Limits

If a Trading Disruption event occurs on a Scheduled Calculation Date, by reason of movements in price exceeding limits permitted by the relevant Exchange, in respect of a Commodity Instrument that is an Underlying Contract, then the Calculation Agent, to calculate the Index Level, shall use the last Contract price published by the Exchange on this Scheduled Calculation Date.

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During the roll period

If the Index Disruption Event occurs on a Scheduled Calculation Date which is during the Roll Period that immediately follows a Reweighting Date, then the roll scheme is modified as follows:

- (i) on each Calculation Date (t), on which there is an Affected Basket Component(s), the $CRW(t-1, C_{C,A})$ and the $CRW(t-1, C_{C,NA})$ of such Affected Basket Component(s) with respect to the Calculation Date immediately succeeding the Calculation Date (t) will be equal to the $CRW(t-1, C_{C,A})$ and the $CRW(t-1, C_{C,NA})$ on Calculation Date (t). The Daily Commodity Roll Proportion on such Calculation Date will be equal to 0.
- (ii) on the first Calculation Date (t) on which no Index Disruption Event exists with respect to the Affected Basket Component(s), the $CRW(t-1, C_{C,A})$ and the $CRW(t-1, C_{C,NA})$ of such Basket Component(s) with respect to the Calculation Date immediately succeeding Calculation Date (t) will be such that the Daily Commodity Roll Proportion on Calculation Date (t) is equal to 20%.

If the Index Disruption Event occurs on a Scheduled Calculation Date which is during a Roll Period that does not immediately follow a Reweighting Date, then the roll scheme is modified as follows:

- (iii) on each Calculation Date (t), on which there is an Affected Basket Component(s), the $CRW(t-1, C_{C,A})$ and the $CRW(t-1, C_{C,NA})$ of such Affected Basket Component with respect to the Calculation Date immediately succeeding Calculation Date (t) will be equal to the $CRW(t-1, C_{C,A})$ and the $CRW(t-1, C_{C,NA})$ on Calculation Date (t). The Daily Commodity Roll Proportion on such Calculation Date will be equal to 0.
- (iv) within the Roll Period, on the first Calculation Date (t) on which no Index Disruption Event exists with respect to an Affected Basket Component(s), the $CRW(t-1, C_{C,A})$ and the $CRW(t-1, C_{C,NA})$ of such Basket Component(s) with respect to the Calculation Date immediately succeeding the Calculation Date (t) will be equivalent to the $CRW(t-1, C_{C,A})$ and the $CRW(t-1, C_{C,NA})$ that deemed to be on that day as defined in section 2.3.5. The Daily Commodity Roll Proportion on such Calculation Date will be equal to the sum of (1) the portion of Affected Basket Components that did not roll due to the Index Disruption Event and (2) the portion of Affected Basket Components scheduled to roll on such day, if any.

An Index Disruption Event that occurs on Basket Component(s) that are Passive futures contracts will be seen as an Index Disruption Event on the Basket Component(s) that are Active futures contracts, and vice versa.

If, for any Affected Basket Component(s), the Roll has not completed by the last trading date of such Affected Basket Component(s) (the "Future Expiration Date"), the Index Calculation Agent shall, after instruction from the Index Sponsor, (i) complete the Roll and (ii) determine the Index level in good faith and in a commercially reasonable manner, on the last trading date of such Affected Basket Component(s).

Consequently, the entire roll (or the portion of the roll that remains) will occur on the expiration date of such Affected Basket Component(s).

For the purposes of this section:

"Index Disruption Event" means in respect of any Index Component that is a Basket Component, the occurrence or existence of a Basket Component Disruption Event.

"Basket Component Disruption Event" means a Commodity Disruption Event as defined herein below.

4.2 Commodity Disruption Event

“**Commodity Disruption Event**” means, in respect of an Index Component that is a Commodity Instrument, any event that, in the reasonable opinion of the Index Calculation Agent, after instruction from the Index Sponsor, disrupts or impairs the determination of the level or price of such Commodity Instrument, and includes, without limitation the occurrence or existence of a Failure to Publish, Trading Disruption, Exchange Disruption or Early Closure,

Where,

- A. “**Failure to Publish**” means the failure by the relevant price source to make public the relevant price, or the temporary or permanent discontinuance or unavailability of the price source,
- B. “**Trading Disruption**” means, in respect of a Commodity Instrument that is an Underlying Contract, any suspension of or limitation on trading - imposed by the relevant Exchange or Related Exchange - (a) relating to such Commodity Instrument on the Exchange, or (b) relating to futures or options contracts relating to such Commodity Instrument on any relevant Related Exchange.
- C. “**Exchange Disruption**” means, in respect of a Commodity Instrument that is an Underlying Contract, any event (other than an Early Closure) that disrupts or impairs the ability of market participants in general to effect transactions in, or obtain market values for, (a) such Commodity Instrument or (b) futures or options contracts, or other derivatives on the relevant Related Exchange or over-the-counter market, relating to such Commodity Instrument,
- D. “**Early Closure**” means, in respect of a Commodity Instrument that is an Underlying Contract, the closure on any Exchange Business Day of:
 - (a) any relevant Exchange(s) relating to such Commodity Instrument or
 - (b) any Related Exchange for futures or options contracts relating to such Commodity Instrument,

prior to its Scheduled Closing Time unless such earlier closing is announced by such Exchange or Related Exchange (as the case may be) at least one hour prior to the earlier of (x) the actual closing time for the regular trading session on such Exchange or Related Exchange (as the case may be) on such Exchange Business Day and (y) the submission deadline for orders to be entered into the Exchange or Related Exchange system for execution at the relevant Scheduled Closing Time on such Exchange Business Day.

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5. Index Governance

5.1 Index Administrator

Compass Financial Technologies (France) is the Administrator of the Index ("the Index Administrator"). The Index Administrator is responsible for the day-to-day management of the Index and is also responsible for decisions regarding the interpretation of these rules.

5.2 Index Calculation Agent

Compass Financial Technologies is the Calculation Agent of the Index. It is responsible for the day-to-day management of Indices computation according to this methodology.

5.3 Index Committee – Supervisor

Compass Financial Technologies has established governance functions to review and provide challenges on all aspects of the Index determination process. Governance functions are managed by the Compass Oversight Committee.

The Compass Oversight Committee oversees all areas of the benchmark determination processes. It is responsible for supervising and controlling the Index operations team on all Compass Indices. It is also responsible for:

- a. Periodic review of incidents
- b. Making final decisions in case the Index operations team are not capable or allowed to take decisions
- c. Defining and implementing organisation procedures for the Index operations team
- d. Defining and overseeing measures that allow for mitigation of operational risks
- e. Supervising internal or external audit results
- f. The implementation and supervision of the potential codes of conduct that must be implemented

The Committee is comprised of senior representatives of Compass Financial Technologies and external industry experts.

Goldman Sachs Commodity Enhanced Index

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APPENDIX 1 – Underlying table

On every n^{th} month of the year the Active Strategy can hold any contracts that have delivery months between $n+a$ month's (included) and $n+b$ months (included).⁷ With a and b defined for each commodity. The delivery month corresponds to the name of the month of the contract. In the next appendix 2, the first line is the trans codification between the letters and the month.

	Commodity	Relevant Exchange	Ticker	Designated contracts or Eligible Component (Month letter codes)
1	WTI Crude Oil	NYMEX	CL	All futures contracts with a delivery month between $n+2$ months and $n+12$ months where n is the month of the close of the considered 4th Index business day. For avoidance of doubt in this case $a=2$ and $b=12$. For instance, on the 6 th of January 2023, eligible contracts are the ones starting from CLH23 (March) up to CLF24 (January Next Year), This definition of month is the same in all this appendix. Exceptionally on the 4 th Index business day of May 2020, we will consider $a = 4$ and $b = 12$ (only for the selection of CL).
2	NY Harbor ULSD	NYMEX	HO	As above
3	RBOB Gasoline	NYMEX	XB	As above
4	Natural Gas	NYMEX	NG	As above
5	Low Sulphur Gas Oil	ICE	QS	As above
6	Brent Crude Oil	ICE	CO	All futures contracts with a delivery month between $n+3$ months and $n+12$ months where n is after the calendar month to which the close of the considered 4th Index business day, belongs.
7	Aluminium	LME	LA	All futures contracts with a delivery month between $n+2$ months and $n+11$ months where n is after the calendar month to which the close of the considered 4th Index business day, belongs.
8	Zinc	LME	LX	As above
9	Nickel	LME	LN	As above
10	*Lead	LME	LL	As above
11	Copper	COMEX	HG	All futures contracts with a delivery month between $n+2$ months and $n+8$ months. Where n is after the calendar month to which the close of the considered 4 th Index business day, belongs.

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	Commodity	Relevant Exchange	Ticker	Designated contracts or Eligible Component (Month letter codes)
				To avoid any doubt, only H, K,N, U and Z contracts (or contracts that are included in the generic calendar) will be considered as eligible.
12	Gold	COMEX	GC	J M Q Z G
13	Silver	COMEX	SI	K N U Z H
14	Wheat (Chicago Wheat)	CBOT	W	K N U Z H
15	Wheat (Kansas Wheat)	KCBT	KW	K N U Z H
16	Corn	CBOT	C	K N U Z H
17	Soybeans	CBOT	S	K N X F H
18	Cotton	ICE-US	CT	K N Z H
19	Sugar	ICE-US	SB	K N V H
20	Coffee	ICE-US	KC	K N U Z H
21	Soybean Oil	CBOT	BO	K N Z F H
22	Soybean Meal	CBOT	SM	K N Z F H
23	Live Cattle	CME	LC	J M Q V Z G
24	Lean Hogs	CME	LH	J M N Q V Z G

*Lead was included in the Benchmark Index in January 2023.

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APPENDIX 2 - Passive Strategy Contract Table

Each cell shows the Commodity Contract invested at the end of the Roll Period of each month (Next Passive Contract). At the end of a Roll Period, the Next Passive Contract becomes the new Passive Contract.

Commodity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	F	G	H	J	K	M	N	Q	U	V	X	Z
NG	H	K	K	N	N	U	U	X	X	F	F	H
CL	H	K	K	N	N	U	U	X	X	F	F	H
CO	K	K	N	N	U	U	X	X	F	F	H	H
XB	H	K	K	N	N	U	U	X	X	F	F	H
HO	H	K	K	N	N	U	U	X	X	F	F	H
LC	J	J	M	M	Q	Q	V	V	Z	Z	G	G
LH	J	J	M	M	N	Q	V	V	Z	Z	G	G
W	H	K	K	N	N	U	U	Z	Z	Z	H	H
KW	H	K	K	N	N	U	U	Z	Z	Z	H	H
C	H	K	K	N	N	U	U	Z	Z	Z	H	H
S	H	K	K	N	N	X	X	X	X	F	F	H
BO	H	K	K	N	N	Z	Z	Z	Z	F	F	H
SM	H	K	K	N	N	Z	Z	Z	Z	F	F	H
LA	H	K	K	N	N	U	U	X	X	F	F	H
HG	H	K	K	N	N	U	U	Z	Z	Z	H	H
LX	H	K	K	N	N	U	U	X	X	F	F	H
LN	H	K	K	N	N	U	U	X	X	F	F	H
LL	H	K	K	N	N	U	U	X	X	F	F	H
GC	J	J	M	M	Q	Q	Z	Z	Z	Z	G	G
SI	H	K	K	N	N	U	U	Z	Z	Z	H	H
SB	H	K	K	N	N	V	V	V	H	H	H	H
CT	H	K	K	N	N	Z	Z	Z	Z	Z	H	H
KC	H	K	K	N	N	U	U	Z	Z	Z	H	H
QS	H	K	K	N	N	U	U	X	X	F	F	H

Exceptionally, for the year 2020, we will use the following table for CL:

Commodity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	F	G	H	J	K	M	N	Q	U	V	X	Z
CL	H	K	K	N	U	U	U	X	X	F	F	H

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APPENDIX 3 - Active Strategy Contract Table

Each cell shows the Commodity Contract invested at the end of the Roll Period of each month (Next Active Contract).
At the end of a Roll Period, the Next Active Contract becomes the new Active Contract.

Commodity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	F	G	H	J	K	M	N	Q	U	V	X	Z
NG	J	G*	H*	J*	J*	J*	J*	J*	J*	J*	J*	J*
CL	Contract will be decided by the Index Sponsor every month on the close of the 4th Index Business Day. The universe of eligible contracts for each commodity is described in section 3.8 and in Appendix 1.											
CO												
XB												
HO												
QS												
LC	M	M	Q	Q	V	V	Z	Z	G*	G*	J*	J*
LH	M	M	N	N	Q	V	Z	Z	G*	G*	J*	J*
W	N	N	N	U	U	Z	Z	N*	N*	N*	N*	N*
KW	N	N	N	U	U	Z	Z	N*	N*	N*	N*	N*
C	K	N	Z	Z	Z	Z	Z	H*	H*	H*	K*	K*
S	N	N	N	X	X	F*	F*	F*	N*	N*	N*	N*
BO	N	N	N	Z	Z	F*	F*	F*	N*	N*	N*	N*
SM	N	N	N	Z	Z	F*	F*	F*	N*	N*	N*	N*
LA	Contract will be decided by the Index Sponsor every month on the close of the 4th Index Business Day. The universe of eligible contracts for each commodity is described in section 3.8 and in Appendix 1.											
HG												
LX												
LN												
LL												
GC	J	J	M	M	Q	Q	Z	Z	Z	Z	G*	G*
SI	H	K	K	N	N	U	U	Z	Z	Z	H*	H*
SB	K	H*	H*	H*	H*	H*	H*	H*	K*	K*	K*	K*
CT	K	N	Z	Z	Z	H*	H*	H*	H*	H*	K*	K*
KC	Z	Z	Z	Z	Z	Z	Z	Z*	Z*	Z*	Z*	Z*