

# Nomura Commodity Futures Indices

02 June 2020

Index Determination	
<b>Index Sponsor</b>	Nomura International plc (“NIP”), who is responsible for the administration of the Index.
<b>Index Start Date</b>	For each index of the Nomura Commodity Futures Indices suite, the relevant Start Date as set out in the “Backtest Assumptions” in the Appendix below.
<b>Index Live Date</b>	The relevant Index Live Date are set out in the Index Specifications Table in the Appendix below.
<b>Index<sup>j,k,i</sup></b>	Each index of the Nomura Commodity Futures Indices suite, which each is built using the methodology described in this Rulebook, denominated in USD
<b>Level of Index<sup>j,k,i</sup><sub>t</sub></b>	In respect of an Index Business Day t, the calculated level of the Index that invests in Commodity j using contract roll methodology k and contract number i in respect of that day, denoted Index <sup>j,k,i</sup> <sub>t</sub> .
<b>Index<sup>j,k,i</sup><sub>t</sub></b>	<p>For any Index Business Day t, Index<sup>j,k,i</sup><sub>t</sub> shall be equal to:</p> $\text{Index}_t^{j,k,i} = \text{Index}_{t-1}^{j,k,i} + \text{Index}_{t,\text{reset}}^{j,k,i} \times \text{Return}_t^{j,k,i}$ <p>Where</p> <p>t-1 denotes the Index Business Day immediately preceding Index Business Day t,</p> <p>Index<sup>j,k,i</sup><sub>t</sub> for Index<sup>j,k,i</sup> Start Date = 100, and</p> <p>Index<sup>j</sup> Start Date is defined in “Backtest Assumptions” in the Appendix.</p>
<b>Index<sup>j,k,i</sup><sub>t,reset</sub></b>	<p>With respect to any Index Business Day t where a Index<sup>j,k,i</sup> Limit Event did not occur on Index Business Day t-1 for Index<sup>j,k,i</sup></p> <p style="text-align: center;">The Level of Index<sup>j,k,i</sup><sub>t</sub> on a day that is one Index Business Day prior to the immediately preceding Scheduled Roll Date.</p> <p>With respect to any other Index Business Day t</p> $\text{Index}_{t,\text{reset}}^{j,k,i} = \text{Index}_{t-1,\text{reset}}^{j,k,i}$ <p>Where</p> <p>t-1 denotes the Index Business Day immediately preceding Index Business Day t.</p>
<b>Return<sup>j,k,i</sup><sub>t</sub></b>	<p>With respect to each Index Business Day t within a Roll Period<sup>j,k,i</sup></p> $\text{Return}_t^{j,k,i} = \left( \text{Roll Weight}_{t-1}^{j,k,i} \times \frac{\text{Future}_{t,t}^{j,k,i,\text{current}} - \text{Future}_{t,t-1}^{j,k,i,\text{current}}}{\text{Future}_{t,\text{reset}}^{j,k,i,\text{current}}} \right) + \left( [1 - \text{Roll Weight}_{t-1}^{j,k,i}] \times \frac{\text{Future}_{t,t}^{j,k,i,\text{previous}} - \text{Future}_{t,t-1}^{j,k,i,\text{previous}}}{\text{Future}_{t,\text{reset}}^{j,k,i,\text{previous}}} \right)$ <p>With respect to any other Index Business Day t</p> $\text{Return}_t^{j,k,i} = \frac{\text{Future}_{t,t}^{j,k,i,\text{current}} - \text{Future}_{t,t-1}^{j,k,i,\text{current}}}{\text{Future}_{t,\text{reset}}^{j,k,i,\text{current}}}$ <p>Where</p> <p>t-1 denotes the Index Business Day immediately preceding Index Business Day t.</p>
Index Components	
<b>Future<sup>j,k,i,n</sup><sub>t,s</sub></b>	For any Index Business Day t, the settlement price of the Underlying Future <sup>j,k,i,n</sup> for day s as published on

	Future <sup>j</sup> Price Source, as defined in the Future Specifications Table in Appendix [A].
<b>Future<sub>t,reset</sub><sup>j,k,i,n</sup></b>	<p>With respect to any Index Business Day t where a Index<sup>j,k,i</sup> Limit Event did not occur on Index Business Day t-1 for Index<sup>j,k,i</sup></p> <p style="padding-left: 40px;">The settlement price of the Underlying Future<sub>t</sub><sup>j,k,i,n</sup> as published on Future<sup>j</sup> Price Source, as defined in the Future Specifications Table, on a day that is one Index Business Day prior to the immediately preceding Scheduled Roll Date.</p> <p>With respect to any other Index Business Day t</p> $\text{Future}_{t,\text{reset}}^{j,k,i,n} = \text{Future}_{t-1,\text{reset}}^{j,k,i,n}$ <p>Where</p> <p>t-1 denotes the Index Business Day immediately preceding Index Business Day t.</p>
<b>Underlying Future<sub>t</sub><sup>j,k,i,n</sup></b>	Underlying Future <sub>t</sub> <sup>j,k,i,Current</sup> and Underlying Future <sub>t</sub> <sup>j,k,i,Previous</sup> as defined in the Future Roll Specifications Table
<b>Scheduled Roll Date</b>	The fifth Index Business Day of each calendar month.
<b>Index<sup>j,k,i</sup> Limit Event</b>	Means if the relevant Exchange establishes limits on the range within which the price of an Index Component of Index <sup>j,k,i</sup> may fluctuate, and the Specified Price of that Index Component on such relevant day is at the upper or lower limit of such range.
<b>Future Roll Date<sup>j,k,i</sup></b>	With respect to each Index <sup>j,k,i</sup> , the Scheduled Roll Date, <b>provided</b> that if the Scheduled Roll Date is affected by an Index <sup>j,k,i</sup> Limit Event, Future Roll Date <sup>j,k,i</sup> shall be the immediately following Index Business Day on which the Index Limit Event no longer exists. If such Index Limit Event is continuing on the [Number] Index Business Day following the Scheduled Roll Date, then the consequences of an Index Disruption Event shall apply.
<b>Roll Period<sup>j,k,i</sup></b>	From and including one Future Roll Date <sup>j,k,i</sup> , to but excluding a day that is five Index Business Days immediately following such Future Roll Date <sup>j,k,i</sup> ; <b>provided</b> that if any such day is affected by an Index <sup>j,k,i</sup> Limit Event, the Roll Period <sup>j,k,i</sup> will be extended by the number of days that were affected by an Index <sup>j,k,i</sup> Limit Event, subject to the occurrence of a Trading Disruption Event
<b>Roll Weight<sub>t</sub><sup>j,k,i</sup></b>	With respect to each Index Business Day t within a Roll Period <sup>j,k,i</sup> [formula to Measure Roll Weight]
<b>Roll Day<sub>t</sub><sup>j,k,i</sup></b>	<p>The number of Index Business Days where an Index<sup>j,k,i</sup> Limit Event did not occur, from and including the first Index Business Day t of the relevant Roll Period<sup>j,k,i</sup> to and including Index Business Day t.</p> <p>For the avoidance of doubt, Roll Day<sub>t</sub><sup>j,k,i</sup> = 1 for the first Index Business Day of the relevant Roll Period .</p>

General Definitions	
<b>Index Business Day</b>	With respect to each Underlying Future <sub>t</sub> <sup>j,k,i,current</sup> defined in the Future Specifications Table. Any day that is a Future <sup>j</sup> Business Day for all j
<b>Index Trading Business Day</b>	Each Index Business Day
<b>Future<sup>j</sup> Business Day</b>	With respect to each Underlying Future <sub>t</sub> <sup>j,k,i,current</sup> defined in the Future Roll Specifications Table, any day that is a London Business Day on which the Exchange is scheduled to be open (or, but for the occurrence of a market disruption event, would have been) for trading of Future <sup>j</sup> during its respective regular trading sessions.
<b>London Business Day</b>	Any day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealings in foreign exchange and foreign currency deposits) in London, England.
<b>Index Publication</b>	With respect to each Index Business Day, the Rounded Index Level will be published to the Index Price Source specified in the Index Specifications Table.
<b>Rounded Index Level</b>	Rounded Index Level means the Index Level (Index <sub>t</sub> <sup>j,k,i</sup> ) rounded to the number decimal places specified in the Index Specifications Table.

## Future Roll Specifications Table

	Month (Month number "m"):	Jan (1)	Feb (2)	Mar (3)	Apr (4)	May (5)	Jun (6)	Jul (7)	Aug (8)	Sep (9)	Oct (10)	Nov (11)	Dec (12)
j	Commodity												
1	WTI Crude	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
2	Brent Crude	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
3	Heating Oil	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
4	Gasoline RBOB	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
5	Gas Oil	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
6	Natural Gas	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
7	Gold	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
8	Silver	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
9	Copper	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
10	Aluminium	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
11	Zinc	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
12	Nickel	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
13	Lead	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
14	Corn	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
15	Soybean	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
16	Soy Meal	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
17	Soybean Oil	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
18	Wheat	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
19	Kansas Wheat	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
20	Sugar	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
21	Coffee	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
22	Cocoa	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
23	Cotton	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
24	Live Cattle	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
25	Lean Hogs	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract

### Underlying Future<sub>t</sub><sup>j,k,i,current</sup>

For each Commodity j, roll methodology k (one of "N" or "F", denoting the order of expiry and forward) and contract number i (1, ..., 12), on day t:

#### For First to expiry (k="N" and i=1)

With respect to month m where day t falls under, the "current" future contract (Underlying Future<sub>t</sub><sup>j,k,i,current</sup>) with expiry month before / on or after the Future Roll Date<sub>t</sub><sup>j,k,i</sup> as shown in the table below.

#### For further expiry indices (k="N" and i>1)

With respect to month m where day t falls under, the future contract expiry month before / on or after the Future Roll Date<sub>t</sub><sup>j,k,i</sup> is observed for the (i-1)<sup>th</sup> months following month m where the future expiry months differ for "before" and "on or after the Future Roll Date<sub>t</sub><sup>j,k,i</sup>".

For Forward Indices (k="F")

With respect to month m where day t falls under, future contract expiry month before / on or after the Future Roll Date<sup>i,k,i</sup> is observed for i months following month m

For the avoidance of doubt, if only one future contract is shown for a calendar month, the "current" future contract is the same before / on or after the Future Roll Date<sup>i,k,i</sup> for such month.

**Underlying Future<sub>t</sub><sup>i,k,i,previous</sup>**

With respect to an Index Business Day t that **is** the Future Roll Date<sup>j,k,j</sup>,

The "previous" future contract (Underlying Future<sub>t</sub><sup>i,k,i,previous</sup>) is equal to the "current" future contract, on the immediately preceding Index Business Day,

With respect to an Index Business Day t that **is not** the Future Roll Date<sup>j,k,j</sup>,

The "previous" future contract (Underlying Future<sub>t</sub><sup>i,k,i,previous</sup>) is equal to the "current" future contract on a day that is one Index Business Day prior to the immediately preceding Future Roll Date<sup>j,k,i</sup>.

## Disruption Events / Fallbacks

### Index Adjustment

If, due to the occurrence of an error (i) in relation to the calculation or publication of the level of the Index, or (ii) in the method for determining the Index, the Index Sponsor has determined on any day (an “**Adjustment Determination Date**”) that an adjustment to the Index is necessary in order to correct such error (an “**Index Adjustment**”), then the Index Sponsor will make such corresponding adjustments to the Index as it deems necessary, if any, in order to reflect the Index Adjustment (in each case in accordance with the principles and methodology of the Index).

The Index Sponsor may correct errors in accordance with Appendix 2, Section 13 of the Control Framework Summary (“Correction of Errors”) and Appendix 2, Section 15 (“Changes to Methodology”) where remediation requires change to the Index methodology.

### Disruption Cut-off Date

Means the [Number] Index Business Day from and including the original day.

### Index Disruption Event

If, on any day an Index Disruption Event has occurred or exists in respect of any Index Component utilised to calculate the level of the Index on any day, then, the Index Sponsor may take one or more of the following actions in its discretion, with a view to preserving the objective of the Index (regardless of whether or not a level of the affected Sub-Index has been published by the Index Sponsor in respect of such day):

- (a) delay any rebalancing and/or calculation of such Index Component (an “**Index Determination Date**”) until the relevant Index Disruption Event no longer exists, provided that, if such Index Disruption Event is continuing on the [Number] Index Business Day following any such Index Determination Date (the “**Delayed Index Determination Date**”), then the Index Sponsor will determine the level of the relevant [Commodity Instrument / Index Component] in respect of such Index Determination Date as of the related Delayed Index Determination Date in accordance with (b) below; and/or
- (b) determine the level of the affected Index Component for such day in its sole discretion and acting in a commercially reasonable manner taking into account the relevant Index Disruption Event, latest available quotations and any other information the Index Sponsor deems relevant in its discretion, having regard to the standard of input data quality for the Index as determined by the Index Sponsor during the design of the Index, as set out in Appendix 2, Section 6 (“Data Sufficiency and Hierarchy of Input Data”) of the Control Framework Summary); and/or
- (c) not calculate and publish the Index level for such day or delay the publication; and/or
- (d) make any adjustments to the Index methodology to account for the relevant Index Disruption Event as it deems necessary.

“**Index Disruption Event**” means the occurrence or existence of a Price Source Disruption, Trading Disruption, Intervening Circumstances or an Index Frustration Event

“**Price Source Disruption**” means, the failure of the Price Source to announce or publish the Specified Price or, as applicable, any relevant price, level, rate or other data necessary for the determination of any Index Component.

“**Trading Disruption**” means in respect of any Index Business Day the occurrence or existence of any of the following events:

- (i) all trading in an Index Component is suspended for the entire relevant day or any of the Index Components are no longer available for trading;
- (ii) an Index<sup>i,k,i</sup> Limit Event has occurred in respect of an Index Component and is continuing until the Disruption Cut-Off Date;
- (iii) all trading in the Index Component is suspended subsequent to the opening of trading on the relevant day, and trading does not recommence at least ten (10) minutes prior to, and continue until, the regularly scheduled close of trading in such Index Component on such day; or
- (iv) any other material suspension of, or a material limitation imposed on, trading in an Index Component, determined by the Index Sponsor, in its sole discretion.

“**Intervening Circumstances**” exist or occur where the Index Sponsor determines that a systems failure, natural or man-made disaster, act of God, armed conflict, act of terrorism, riot or labour disruption or any similar intervening circumstances beyond its reasonable control exists, has occurred or is occurring in respect of an Index Component or the Index, and which prevents, disrupts, or impairs the ability of the Index to achieve its economic objective, the prompt or accurate determination of the level of the Index, and/or the ability of the Index Sponsor or Index calculation agent to perform its role in respect of the Index.

“**Index Frustration Event**” means any event or circumstance other than a Price Source Disruption, Trading Disruption or Intervening Circumstances that, in the opinion of the Index Sponsor, prevents, disrupts or

	<p>impairs the ability of the Index to achieve its economic objective or the prompt or accurate determination of the level of the Index, or any other event or circumstance which causes the Index Sponsor to reasonably conclude that as a consequence of such event or circumstance, if the level of the Index were to be determined, it should not be relied upon to represent the market or economic reality that the Index is intended to measure.</p>
<p><b>Index Modification</b></p>	<p>Upon the occurrence of an Index Modification Event, the Index Sponsor may:</p> <ul style="list-style-type: none"> <li>(i) remove or replace such affected Index Component with an alternative futures or options contract, currency, rate, variable or other component (a “<b>Replacement Index Component</b>”) which, in its sole determination, is consistent with the objective of the Index; and where possible, is of the same or equivalent standard of quality as any input data and/or price source used prior to the occurrence of the Index Modification Event, having regard to the standard of input data quality for the Index as determined by the Index Sponsor during the design of the Index, as set out in Appendix 2, Section 6 of the Control Framework Summary (“Data Sufficiency and Hierarchy of Input Data”); and/or</li> <li>(ii) make such other adjustments as it deems appropriate to preserve the objective of the Index, taking into account the relevant Index Modification Event.</li> </ul> <p>The Index Sponsor may refrain from publishing the Index until the Index Modification Event ceases to exist.</p> <p>For the purpose of the removal or replacement of any affected Index Component, the Index Sponsor shall make any other adjustments to the Index as appropriate to account for the price or value of the affected Index Component at the time of its removal and any related charges, fees or taxes as well as the cost to the Index Sponsor for implementing any Replacement Index Component.</p> <p>The Index Sponsor may modify the Index in accordance Appendix 2, Section 15 of the Control Framework Summary (“Changes to Methodology”).</p>
<p><b>Index Modification Event</b></p>	<p>“<b>Index Modification Event</b>” means the existence or occurrence of an (i) Additional Trading Disruption Event (ii) Material Change in Content, (iii) Material Change in Formula, (iv) Input Data Decline Event (v), or (vi) Extraordinary Event.</p> <p><b>Additional Trading Disruption Event</b> means with respect to an Index Component, the occurrence of any of the following that the Index Sponsor (in its sole and absolute discretion) considers material:</p> <ul style="list-style-type: none"> <li>(a) an Index Component is no longer available (whether due to a permanent discontinuation of trading, cancellation, disappearance or otherwise);</li> <li>(b) the occurrence or existence of a lack of, or a material decline in, the liquidity in the market for trading in any Index Component;</li> <li>(c) any event or any condition (including without limitation any event or condition that occurs as a result of the enactment, promulgation, execution, ratification, interpretation or application of, or any change in or amendment to, any law, rule or regulation by an applicable governmental authority) that results in an illiquid market for trading in any Index Component.</li> </ul> <p>“<b>Material Change in Content</b>” means the occurrence of a material change in the content, composition or constitution of the commodity of the relevant Index Component.</p> <p>“<b>Material Change in Formula</b>” means the occurrence of a material change in the formula for or method of calculating the relevant Specified Price.</p> <p>“<b>Input Data Decline Event</b>” means if the Index Sponsor determines that the input data and/or price source in relation to an Index Component used to calculate the Index is no longer sufficient to represent accurately and reliably the market and economic reality that the Index is intended to measure, or is otherwise not appropriate or no longer meets the standard of input data quality for the Index as determined by the Index Sponsor during the design of the Index, as set out in Appendix 2, Section 6 of the Control Framework Summary (“Data Sufficiency and Hierarchy of Input Data”).</p>
<p><b>Extraordinary Events</b></p>	<p><b>Extraordinary Event</b> means in respect of any Index Component means any of Change in Law, Index Component Disruption and/or Increased Cost of Index Implementation.</p> <p><b>Change in Law</b> means that, on or after the Index Live Date (i) due to the adoption of or any change in any applicable law or regulation (including, without limitation, any tax law), or (ii) due to the promulgation of or any change in the interpretation by any court, tribunal or regulatory authority with competent jurisdiction of any applicable law or regulation (including any action taken by a taxing authority), the Index Sponsor determines in good faith that (x) it has become illegal to hold, acquire or dispose of an Index Component, or (y) there is a materially increased cost of trading in an Index Component for the Index Sponsor or its affiliates (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on its tax position).</p> <p><b>Index Component Disruption</b> means that the Index Sponsor or any of its affiliates or agents is unable, or it is impractical, after using commercially reasonable efforts, to (i) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) it deems necessary to implement the Index, or (ii) realise, recover or remit the proceeds of any such transaction(s) or asset(s), including, without limitation, where such inability or impracticability has arisen by reason of any restriction on making new or additional investments in any Index Component.</p>

	<b>Increased Cost of Index Implementation</b> means that the Index Sponsor or any of its affiliates would incur a materially increased (as compared with circumstances existing on the Index Live Date) amount of tax, duty, expense or fee to (i) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) it deems necessary to implement the Index, or (ii) realise, recover or remit the proceeds of any transaction(s) or asset(s).
<b>Index Cancellation</b>	The Index Sponsor may permanently cancel and discontinue calculating and publishing the Index, in accordance with Appendix 2, Section 17 of the Control Framework Summary (“Termination of Indices and Transitional Arrangements”).
<b>Definitions</b>	<p><b>Index Component</b> means, in respect of the Index, each Underlying Futures contract that the Index is invested in at the time and any variable or other component necessary in order to determine a level of the Index, in each case, in line with the then existing methodology of the Index.</p> <p><b>Exchange</b> means in respect of an Index Component as of the Index Start Date the exchange as listed in the Future Specifications Table and otherwise each exchange or principal trading market if any on which such Index Component is principally traded or quoted, as determined by the Index Sponsor and any successor to such exchange or quotation system or any substitute exchange or quotation system to which trading in the Index Component has temporarily relocated (provided that the Index Sponsor has determined that there is comparable liquidity relative to such Index Component on such temporary substitute exchange or quotation system as on the original Exchange).</p> <p>“<b>Price Source</b>” means with respect to an Index Component, as applicable, (i) the Future Price Source as specified in the Future Specification Table and any other publication, page (or any other origin of reference, including an exchange) containing (or reporting) the Specified Price (or prices or levels from which the Specified Price is calculated) for such Index Component and (ii) any other publication, page (or any other origin of reference, including an exchange) containing (or reporting) the prices, levels, rates or other data utilised by the Index Sponsor for such Index Component. References to Price Source shall be construed as referring also to any successor publication, page or source on which the relevant prices, levels, rates or other data for an Index Component may be disseminated, as determined by the Index Sponsor at its sole discretion and acting in a commercially reasonable manner.</p> <p>“<b>Specified Price</b>” means, the settlement price for the relevant Commodity (or such other specified price as determined by the Index Sponsor in line with the then existing methodology of the Index and/or its sub-Index as applicable).</p>

#### ADDITIONAL INFORMATION IN RESPECT OF THE INDEX METHODOLOGY

<b>Governance Policy and Control Framework</b>	The Index Sponsor has established a governance framework (the “ <b>Governance Policy and Control Framework</b> ”) to ensure compliance with the IOSCO Principles for Financial Benchmarks (FR07/13, July 2013) (as amended or replaced from time to time) <sup>1</sup> . The Governance Policy and Control Framework governs (amongst other things) the development, determination and operation of indices administered by the Index Sponsor. A summary of the Governance Policy and Control Framework (the “ <b>Control Framework Summary</b> ”) is published on: <a href="http://www.nomuranow.com/portal/site/nnextranet/en/global-markets/structured-derivatives/quant-investment-strategies.shtml">www.nomuranow.com/portal/site/nnextranet/en/global-markets/structured-derivatives/quant-investment-strategies.shtml</a> . Please refer to the summary of the Governance Policy and Control Framework in respect of the following information applying to the Index methodology:
<b>Criteria for Index Development and Input Data and Source Selection</b>	The criteria and procedures used to develop this Index, and for selecting the sources of data inputs used in the Index, are set out in Appendix 2, Section 3 of the Control Framework Summary (“Index Design and Creation of New Indices”) and Appendix 2, Section 6 (“Data Sufficiency and Hierarchy of Data Inputs”).
<b>Exercise of Expert Judgment and discretion</b>	The Index Sponsor has adopted guidelines and procedures designed to promote consistency in the exercise of Expert Judgment and discretion for Index determinations. Further details are contained in Appendix 2, Section 14 of the Control Framework Summary (“Expert Judgment and Discretion”).
<b>Input Data Type Priority</b>	The Index Sponsor applied the hierarchy for data inputs as set out in Appendix 2, Section 6 of the Control Framework Summary (“Data Sufficiency and Hierarchy of Data Inputs”) when considering the data inputs used to construct the Index.
<b>Index Error</b>	The Index Sponsor has adopted procedures for analysis and remediation of Index errors, and for

<sup>1</sup><https://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf>. The Governance Policy and Control Framework will be periodically reviewed and has been updated to reflect the requirements of the Regulation on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014 (Regulation (EU) 2016/1011) (the “**Benchmark Regulation**”), as well as related level 2 measures and applicable FCA rules.

<b>Reports and Revision</b>	potential restatement of a published Index level. Further details are contained in Appendix 2, Section 13 of the Control Framework Summary (“Correction of Errors”) and Appendix 2, Section 15 (“Changes to Methodology”) where remediation requires change to the Index Methodology.
<b>Quantity and Quality of Input Data</b>	<p>The Index is constructed by the Index Sponsor using single prices or levels prescribed by the Index Methodology. The Index Sponsor therefore considers that the requirement to determine the thresholds of the quantity of data inputs, necessary to determine the Index accurately and reliably, has been met.</p> <p>The Index Sponsor determines the standards of quality of the data inputs used in this Index at the design stage of the Index in accordance with Appendix 2, Section 6 of the Control Framework Summary (“Data Sufficiency and Hierarchy of Data Inputs”). These standards are reflected in the Index Methodology, as described in this Rulebook. The Index Sponsor will review these standards and the data inputs on a periodic basis in accordance with Appendix 2, Section 16 of the Control Framework Summary (“Periodic Review of Indices”) and in the full policies and procedures available on the Index Sponsor’s public website, to ensure that the data inputs used continue to be of sufficient quality to determine the Index accurately and reliably, and will accordingly determine whether an Index Modification Event has occurred.</p>
<b>Internal Reviews of the Index</b>	<p>The Index Sponsor is required to conduct internal reviews of the Index on a periodic basis. Further details regarding the frequency of those reviews, the procedures to be followed, and the bodies or functions within the Index Sponsor’s organisational structure involved in such reviews, are contained in Appendix 2, Section 16 of the Control Framework Summary (“Periodic Review of Indices”) and in the full policies and procedures available on the Index Sponsor’s public website.</p> <p>Reviews will further be conducted where the Index Sponsor considers it desirable or necessary to do so, including in response to specific events or otherwise. Specific events may include (without limitation) any index errors, index disruptions, or other index life-cycle events; changes in market circumstances; changes in the applicable legal or regulatory environment; any challenges or complaints or other feedback from stakeholders, and/or any material audit findings. Further information regarding the procedures to be followed in response to certain specific events, and the bodies or functions within the Index Sponsor’s organisational structure involved in such reviews, can be found in Appendix 2, Sections 13 (“Correction of Errors”), 14 (“Expert Judgment and Discretion”), 15 (“Changes to Methodology”), 19 (“Complaints Handling Policy”), 21 (“Audits”), and any other sections of the Control Framework Summary which may be relevant from time to time.</p>
<b>Index Approval</b>	The criteria and procedures used to approve the Index, and the bodies or functions within the Index Sponsor’s organisational structure involved in such approval, are set out in Appendix 3 of the Control Framework Summary (“Main Features of Index Committee Constitution and Terms of Reference”) and Appendix 2, Section 3 (“Index Design and Creation of New Indices”).
<b>Investor Consultation upon Index termination and material changes to the Index methodology</b>	The Index Sponsor is required to consult investors of index linked products when proposing material changes to the Index methodology and termination of the Index. Further details on the circumstances and procedures under which consultation takes place are contained in Appendix 2, Section 15 of the Control Framework Summary (“Changes to Methodology”), Appendix 2, Section 17 (“Termination of Indices and Transitional Arrangements”) and in the full policies and procedures available on the Index Sponsor’s public website.
<b>Active Market of the Index</b>	As of the date of this Index Description, the Index Sponsor considers the underlying market of the Index to be active, in accordance with in Appendix 2, Sections 3 (“Index Design and Creation of New Indices and Methodologies”) of the Control Framework Summary.
<b>Outsourcing of Index Determination</b>	The Index Sponsor has outsourced certain IT, Quants, Middle Office and Structuring functions to Nomura Structured Finance Services (India) Private Limited subject to a corporate service agreement between the entities. Further details are contained in Appendix 2, Section 1 of the Control Framework Summary (“Oversight of Third Parties”).



**Index Sponsor  
Disclaimer**

The Index Sponsor and its affiliates make no representation whatsoever, whether express or implied, either as to the results to be obtained from the use of an Index and/or the levels at which the relevant Index stands at a particular time on any particular date or otherwise. The Index Sponsor and its affiliates shall not be liable (whether in contract, tort or otherwise) to any person for any error in such Index.

The Index Sponsor and its affiliates make no representation whatsoever, whether express or implied, as to the advisability of purchasing or assuming any risk in connection with entering into any transactions or products which are linked to or deriving a value from an Index.

Neither the Index Sponsor nor its affiliates shall have any liability for any act or failure to act by the Index Sponsor in connection with the calculation, adjustment or maintenance of an Index. Although the Index Sponsor will obtain information concerning an Index from publicly available sources it believes reliable, such information may not have been independently verified. Accordingly, no representation, warranty or undertaking (express or implied) is made and no responsibility is accepted by the Index Sponsor or its affiliates as to the accuracy, completeness and timeliness of information concerning an Index or any other information provided by any person in connection with the information described herein, or as to the continuance of calculation or publication of an Index.

Nothing in this disclaimer shall exclude or limit liability to the extent such exclusion or limitation is not permitted by law or regulation to which the Index Sponsor is subject.

## Appendix

**Future Specifications Table**

j	Commodity	Exchange	Underlying Future <sup>1</sup> Price Source (Bloomberg page)
1	WTI Crude Oil	NYMEX	CL## Comdty
2	Brent Crude Oil	ICE	CO## Comdty
3	Heating Oil	NYMEX	HO## Comdty
4	Gasoline	NYMEX	XB## Comdty
5	Gas Oil	ICE	QS## Comdty
6	Natural Gas	NYMEX	NG## Comdty
7	Gold	COMEX	GC## Comdty
8	Silver	COMEX	SI## Comdty
9	Copper	LME	LP## Comdty
10	Aluminium	LME	LA## Comdty
11	Zinc	LME	LX## Comdty
12	Nickel	LME	LN## Comdty
13	Lead	LME	LL## Comdty
14	Corn	CBOT	C ## Comdty
15	Soybean	CBOT	S ## Comdty
16	Soy Meal	CBOT	SM## Comdty
17	Soybean Oil	CBOT	BO## Comdty
18	Wheat	CBOT	W ## Comdty
19	Kansas Wheat	CBOT	KW## Comdty
20	Sugar	NYBOT	SB## Comdty
21	Coffee	NYBOT	KC## Comdty
22	Cocoa	NYBOT	CC## Comdty
23	Cotton	NYBOT	CT## Comdty
24	Live Cattle	CME	LC## Comdty
25	Lean Hogs	CME	LH## Comdty

**Index Specifications Table**

j	Index Name (i <sup>th</sup> to Expire Indices / i <sup>th</sup> Forward Indices)	Index Price Source (Bloomberg page) for i <sup>th</sup> to Expire Indices (k = "N") *	Index Price Source (Bloomberg page) for i <sup>th</sup> Forward Indices (k = "F") *	Rounding
1	Nomura WTI Crude Oil i <sup>th</sup> to Expire Futures Index / Nomura WTI Crude Oil i-month Forward Index	NMCOCL# Index	NMCOCLF# Index	3 d.p.
2	Nomura Brent Crude Oil i <sup>th</sup> to Expire Futures Index / Nomura Brent Crude Oil i-month Forward Index	NMCOCO# Index	NMCOCOF# Index	3 d.p.
3	Nomura Heating Oil i <sup>th</sup> to Expire Futures Index / Nomura Heating Oil i-month Forward Index	NMCOHO# Index	NMCOHOF# Index	3 d.p.
4	Nomura Gasoline i <sup>th</sup> to Expire Futures Index / Nomura Gasoline i-month Forward Index	NMCOXB# Index	NMCOXBF# Index	3 d.p.
5	Nomura Gas Oil i <sup>th</sup> to Expire Futures Index / Nomura Gas Oil i-month Forward Index	NMCOQS# Index	NMCOQSF# Index	3 d.p.
6	Nomura Natural Gas i <sup>th</sup> to Expire Futures Index / Nomura Natural Gas i-month Forward Index	NMCONG# Index	NMCONGF# Index	4 d.p.
7	Nomura Gold i <sup>th</sup> to Expire Futures Index / Nomura Gold i-month Forward Index	NMCOGC# Index	NMCOGCF# Index	3 d.p.
8	Nomura Silver i <sup>th</sup> to Expire Futures Index / Nomura Silver i-month Forward Index	NMCOSI# Index	NMCOSIF# Index	3 d.p.
9	Nomura Copper i <sup>th</sup> to Expire Futures Index / Nomura Copper i-month Forward Index	NMCOLP# Index	NMCOLPF# Index	3 d.p.
10	Nomura Aluminium i <sup>th</sup> to Expire Futures Index / Nomura Aluminium i-month Forward Index	NMCOLA# Index	NMCOLAF# Index	3 d.p.
11	Nomura Zinc i <sup>th</sup> to Expire Futures Index / Nomura Zinc i-month Forward Index	NMCOLX# Index	NMCOLXF# Index	3 d.p.
12	Nomura Nickel i <sup>th</sup> to Expire Futures Index / Nomura Nickel i-month Forward Index	NMCOLN# Index	NMCOLNF# Index	3 d.p.
13	Nomura Lead i <sup>th</sup> to Expire Futures Index / Nomura Lead i-month Forward Index	NMCOLL# Index	NMCOLLF# Index	3 d.p.
14	Nomura Corn i <sup>th</sup> to Expire Futures Index / Nomura Corn i-month Forward Index	NMCOC# Index	NMCOCF# Index	3 d.p.
15	Nomura Soybean i <sup>th</sup> to Expire Futures Index / Nomura Soybean i-month Forward Index	NMCOS# Index	NMCOSF# Index	3 d.p.
16	Nomura Soy Meal i <sup>th</sup> to Expire Futures Index / Nomura Soy Meal i-month Forward Index	NMCOSM# Index	NMCOSMF# Index	3 d.p.
17	Nomura Soybean Oil i <sup>th</sup> to Expire Futures Index / Nomura Soybean Oil i-month Forward Index	NMCOBO# Index	NMCOBOF# Index	3 d.p.
18	Nomura Wheat i <sup>th</sup> to Expire Futures Index / Nomura Wheat i-month Forward Index	NMCOW# Index	NMCOWF# Index	3 d.p.
19	Nomura Kansas Wheat i <sup>th</sup> to Expire Futures Index / Nomura Kansas Wheat i-month Forward Index	NMCOKW# Index	NMCOKWF# Index	3 d.p.
20	Nomura Sugar i <sup>th</sup> to Expire Futures Index / Nomura Sugar i-month Forward Index	NMCOSB# Index	NMCOSBF# Index	3 d.p.
21	Nomura Coffee i <sup>th</sup> to Expire Futures Index / Nomura Coffee i-month Forward Index	NMCOKC# Index	NMCOKCF# Index	3 d.p.
22	Nomura Cocoa i <sup>th</sup> to Expire Futures Index / Nomura Cocoa i-month Forward Index	NMCOC# Index	NMCOCF# Index	3 d.p.
23	Nomura Cotton i <sup>th</sup> to Expire Futures Index / Nomura Cotton i-month Forward Index	NMCOCT# Index	NMCOCTF# Index	3 d.p.
24	Nomura Live Cattle i <sup>th</sup> to Expire Futures Index / Nomura Live Cattle i-month Forward Index	NMCOLC# Index	NMCOLCF# Index	3 d.p.
25	Nomura Lean Hogs i <sup>th</sup> to Expire Futures Index / Nomura Lean Hogs i-month Forward Index	NMCOLH# Index	NMCOLHF# Index	3 d.p.

\* # is equal to i for i less than 10, and "A" for i=10, "B" for i = 11, "C" for i = 12, etc.

**Index Live Date**

With respect to Index<sup>j,k,i</sup>, where k = "N" and i = 1, 2 and 3", 3 September 2019.

## Basket Assumptions

### Limit Events

For each Index<sup>j,k,i</sup> prior to 30 August 2019, no historical Index<sup>j,k,i</sup> Limit Event were considered in the index calculation.

### Future<sup>j</sup> Business Day

Prior to the Index Live Date, London Business Day is excluded from the definition of Future<sup>j</sup> Business Day

### Index Start Dates

j	Commodity	Index Start Date		
		(k = "N", i = 1)	(k = "N", i = 2)	(k = "N", i = 3)
1	WTI Crude Oil	8 July 1983	8 July 1983	8 July 1983
2	Brent Crude Oil	9 January 1989	6 October 1989	6 October 1989
3	Heating Oil	7 November 1979	7 November 1979	7 November 1979
4	Gasoline	9 January 2006	9 January 2006	9 January 2006
5	Gas Oil	7 March 1984	7 March 1984	7 March 1984
6	Natural Gas	7 June 1990	7 June 1990	7 June 1990
7	Gold	7 March 1975	7 March 1975	7 March 1975
8	Silver	9 September 1963	9 September 1963	9 September 1963
9	Copper	8 September 1997	8 September 1997	8 September 1997
10	Aluminium	8 September 1997	8 September 1997	8 September 1997
11	Zinc	8 September 1997	8 September 1997	8 September 1997
12	Nickel	8 September 1997	8 September 1997	8 September 1997
13	Lead	8 January 1998	8 January 1998	8 January 1998
14	Corn	7 March 1969	7 March 1969	7 March 1969
15	Soybean	8 January 1969	8 January 1969	8 January 1969
16	Soy Meal	6 March 1970	6 March 1970	6 March 1970
17	Soybean Oil	6 March 1970	6 March 1970	6 March 1970
18	Wheat	7 March 1969	7 March 1969	7 March 1969
19	Kansas Wheat	6 March 1970	6 March 1970	6 March 1970
20	Sugar	7 March 1973	7 March 1973	7 March 1973
21	Coffee	7 December 1973	7 December 1973	7 December 1973
22	Cocoa	7 December 1972	7 December 1972	7 December 1972
23	Cotton	7 December 1972	7 December 1972	7 December 1972
24	Live Cattle	5 June 1970	5 June 1970	5 June 1970
25	Lean Hogs	7 April 1970	7 April 1970	7 April 1970

## Disclaimer

This material has been prepared by the Index Sponsor, NIP (“Nipic”), which is authorised by the Prudential Regulation Authority (PRA), regulated by the Financial Conduct Authority (FCA) and the PRA in the UK, and is a member of the London Stock Exchange.

This material is made available to you by Nipic and/or its affiliates (collectively, “Nomura Group”), as the case may be. This is not investment research as defined by the US rules and regulations, FCA nor is it research under the applicable rules in Hong Kong. It does not constitute a personal recommendation, as defined by the FCA, or take into account the particular investment objectives, financial situations, or needs of individual investors. It is intended only for investors who are “eligible market counterparties” or “professional clients” as defined by the FCA, and may not, therefore, be redistributed to other classes of investors. This material does not fall within the definition of an analyst report as defined by the Japan Securities Dealer’s Association. It is intended for professional and institutional investors only.

This material is: (i) for your private information only, and we are not soliciting any action based upon it; (ii) not to be construed as an offer to sell or a solicitation of an offer to buy any security in any jurisdiction where such offer or solicitation would be illegal; and (iii) is based upon information that we consider reliable, and it should not be relied upon as such. While all reasonable care has been taken to ensure that the information contained herein is not untrue or misleading at the time of publication, no representation, warranty or undertaking, expressed or implied, is made and no responsibility or liability is accepted by the Nomura Group and/or its directors, officers and employees as to the accuracy, completeness, merchantability or fitness for a particular purpose of the information contained herein or any other information provided by any other person in connection with the information described herein or their distribution or for the results obtained from the use of this information.

Nomura Group and/or its directors, officers and employees do not accept any liability whatsoever for any loss or damage (including, without limitation, direct, indirect or consequential loss or loss of profits or loss of opportunity) suffered by you or any third party in connection with the use of this material or its content. It is not intended for investors who are unfamiliar with the relevant markets or who are unwilling or unable to bear the risks associated with the investment. You should refrain from entering into any transaction unless you fully understand all the risks involved and you have independently determined that the investment is suitable for you. We are not your designated investment adviser.

In reaching a determination as to the appropriateness of any proposed transaction linked to the Index, clients should undertake a thorough independent review of the legal, regulatory, credit, tax, accounting and economic consequences of such action. The Nomura Group may from time to time perform investment banking or other services (including acting as advisor, manager or lender) for, or solicit investment banking or other business from, companies mentioned herein. Further, the Nomura Group, and/or its officers, directors and employees, including persons, without limitation, involved in the preparation or issuance of this material may, from time to time, have long or short positions in, and buy or sell, the securities, or in options, futures or other derivatives based thereon, of companies mentioned herein, or related securities or in options, futures or other derivative Index Components based thereon. In addition, the Nomura Group may act as a market maker and principal, willing to buy and sell certain of the securities or in options, futures or other derivatives of companies mentioned herein. Further, the Nomura Group may buy and sell certain securities or in options, futures or other derivatives of companies mentioned herein, as agent for its clients.

Nomura manages conflicts identified through the following: their Chinese wall, confidentiality and independence policies, maintenance of a Stop List and a Watch List, personal account dealing rules, policies and procedures for managing conflicts of interest arising from the allocation and pricing of securities and impartial investment research and disclosure to clients via client documentation. Disclosure information is available at <http://www.nomura.com/research/>. No part of this material may be (i) copied, photocopied, or duplicated in any form, by any means, or (ii) redistributed without our prior express consent. If this publication has been distributed by electronic transmission, such as e-mail, then such transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this publication, which may arise as a result of electronic transmission. If verification is required, please request a hard-copy version

Nomura International (Hong Kong) Limited (“NIHK”), is regulated by the Securities and Futures Commission under Hong Kong laws which differ from Australian laws. Neither Nipic nor NIHK hold an Australian financial services license as both are exempt from the requirements to hold this license in respect of the financial services either provides.

If distributed into the US, the following section will also apply to US clients:

Nomura Securities International, Inc. (“NSI”) is regulated by the Securities and Futures Commission and a member of SIPC. NSI does not provide legal, accounting or tax advice. In compliance with Internal Revenue Service Circular 230, we hereby notify you that any discussion of tax matters set forth herein was written in connection with the promotion or marketing of the matters described herein and was not intended or written to be used, and cannot be used by any person, for the purposes of avoiding tax-related penalties under federal, state or local tax law. Each person should seek legal, accounting and tax advice based on its particular circumstances from independent advisors.