

# Nomura Interest Rate Volatility Risk Premium Select Indices

18 April 2024

For further information, including the risks in relation to the Indices, please see the Index summary disclosure document for these Indices, which is to be read in conjunction with this Index Rulebook (together, the “**Index Description**”).

Index Determination	
Index Sponsor	Nomura International plc (“NIP”), who is responsible for the administration of each Index and each Sub-Index.
Summary Description	Each Interest Rate Volatility Risk Premium (“iVRP”) Select Index contains individual iVRP sub-indices.
Index <sup>i</sup>	Each index of the Nomura Interest Rate Volatility Risk Premium Select Indices, which is built using the methodology described in this rulebook, where “i” denotes an Index as defined in Index Specifications Table.
Level of Index <sub>t</sub> <sup>i</sup>	In respect of an Index <sup>i</sup> Business Day t, the calculated level of the index in respect of that day, denoted Index <sub>t</sub> <sup>i</sup> .
Index <sub>t</sub> <sup>i</sup>	<p>For any Index<sup>i</sup> Business Day t, Index<sub>t</sub><sup>i</sup> shall be equal to:</p> $\text{Index}_t^i = \text{Index}_{t-1}^i + \sum_j \text{Index}_{t-1,\text{reset}}^{i,j} \times \text{Position}_{t-1}^{i,j} \times \text{Sub-Index Return}_t^{i,j}$ <p>Where</p> <p>t-1 denotes the Index<sup>i</sup> Business Day immediately preceding Index<sup>i</sup> Business Day t</p> <p>Position<sub>t-1</sub><sup>i,j</sup> denotes position for Sub-Index<sup>j</sup> as defined below</p> <p>Σ<sub>j</sub> means with respect to each Index<sup>i</sup>, the summation taken over all Sub-Index<sup>j</sup> as defined in the Index Specifications Table.</p> <p>Index<sub>t</sub><sup>i</sup> = 100 on Index Start Date, where each Index Start Date is as defined in the Index Specifications Table</p> <p>Please refer to the sections titled “Backtest Assumptions” below for certain assumptions made during the historical backtest period.</p>
Index <sub>t,Reset</sub> <sup>i,j</sup>	<p>With respect to any Index<sup>i</sup> Business Day t</p> <p>For i = 1 to 3</p> <p>If Index<sup>i</sup> Business Day t is an Index<sup>i,j</sup> Reset Date,</p> $\text{Index}_t^{i,j} \text{ as of the Index}^i \text{ Business Day immediately preceding Index Business Day } t$ <p>Otherwise</p> $\text{Index}_{t,\text{reset}}^{i,j} = \text{Index}_{t-1,\text{reset}}^{i,j}$ <p>For i = 4 to 6</p> $\text{Index}_{t,\text{reset}}^{i,j} = 100$ <p>t-1 denotes the Index<sup>i</sup> Business Day immediately preceding Index<sup>i</sup> Business Day t</p>
Position <sub>t</sub> <sup>i,j</sup>	<p>For any Index<sup>i</sup> Business Day t,</p> <p>[Formula to measure Position]</p>
Weight <sub>t</sub> <sup>i,j</sup>	<p>For any Sub-Index<sup>j</sup> and any Index<sup>i</sup> Business Day t which is an Index<sup>i</sup> Signal Generation Day,</p> <p>[Formula to measure Weight]</p>
Rank <sub>t</sub> <sup>Ccy,Expiry,Tenor</sup>	With respect to each Index <sup>i</sup> Signal Generation Day t, Rank <sub>t</sub> <sup>Ccy,Expiry,Tenor</sup> is the ranking of Signal <sub>t</sub> <sup>Ccy,Expiry,Tenor</sup> in descending order for each Benchmark Point as defined in the Benchmark Point Specifications Table

<b>Signal<sub>t</sub><sup>Ccy,Expiry,Tenor</sup></b>	For any Index <sup>i</sup> Business Day t which is an Index <sup>i</sup> Signal Generation Day: [Formula to measure Signal]
<b>Forward Swap Rate<sub>t</sub><sup>Ccy,Expiry,Tenor</sup></b>	For any day t that is a Swaption Selling Day <sup>Ccy</sup> , the mid-market forward rate for the forward swap as published on the Forward Swap Rate Price Source at Forward Swap Rate Field.  For the avoidance of doubt, Forward Swap Rate <sub>t</sub> <sup>Ccy,Expiry,Tenor</sup> = 0.02 for a forward swap rate of 2.
<b>Index<sup>i</sup> Signal Generation Day</b>	The first Index <sup>i</sup> Business Day of each calendar month.
<b>Index<sup>i,j</sup> Reset Dates</b>	With respect to each Index <sup>i</sup> the first Index <sup>i</sup> Business Day of each Sub-Index <sup>j</sup> Reset Months.
<b>Index<sup>i</sup> Business Day</b>	For i = 1, 2, 4 and 5 Each Sub-Index <sup>j</sup> Business Day for all Sub-Index <sup>j</sup> with respect to Index <sup>i</sup> as defined in Index Specifications Table.  For i = 3 and 6 Each London Business Day.
<b>Index<sup>i</sup> Trading Business Day</b>	Each Sub-Index <sup>j</sup> Business Day for all Sub-Index <sup>j</sup> with respect to Index <sup>i</sup> as defined in Index Specifications Table.
<b>Index Currency</b>	With respect to each Index <sup>i</sup> , as defined in the Index Specifications Table
<b>Sub-Index Return<sub>t</sub><sup>i,j</sup></b>	For any day t that <b>is</b> a Sub-Index <sup>j</sup> Business Day $\text{Sub-Index Return}_{t,i,j} = \left( \frac{\text{Sub-Index}_{t,i,j} - \text{Sub-Index}_{t-1,i,j}}{\text{Sub-Index}_{t-1,i,j,\text{reset}}} \right) \times \frac{\text{FX}_{t,i,j}^{i,j}}{\text{FX}_{t-1,i,j,\text{reset}}^{i,j}}$  Where t-1 denotes the Sub-Index <sup>j</sup> Business Day immediately preceding Sub-Index <sup>j</sup> Business Day t.  For any day t that <b>is not</b> a Sub-Index <sup>j</sup> Business Day $\text{Sub-Index Return}_{t,i,j} = 0$
<b>Sub-Index<sub>t</sub><sup>i</sup></b>	For any Sub-Index <sup>j</sup> Business Day t, the level of Sub-Index <sup>j</sup> for Sub-Index <sup>j</sup> Business Day t as determined by the Index Sponsor.
<b>Sub-Index<sub>t,reset</sub><sup>i</sup></b>	For any Sub-Index <sup>j</sup> Business Day t, If Sub-Index <sup>j</sup> Business Day t is a Sub-Index <sup>j</sup> Reset Date, Sub-Index <sub>t,reset</sub> <sup>i</sup> as of the Sub-Index <sup>j</sup> Business Day immediately preceding Sub-Index Business Day t Otherwise $\text{Sub-Index}_{t,reset}^{i,j} = \text{Sub-Index}_{t-1,reset}^{i,j}$  Where t-1 denotes the Sub-Index <sup>j</sup> Business Day immediately preceding Sub-Index <sup>j</sup> Business Day t
<b>Sub-Index<sup>j</sup> Reset Dates</b>	With respect to each Sub-Index <sup>j</sup> , the first Sub-Index <sup>j</sup> Business Day of each Sub-Index <sup>j</sup> Reset Months.
<b>Sub-Index<sup>j</sup> Business Day</b>	Defined as Index Business Day <sub>k,i,p</sub> by the Index Sponsor in accordance with the methodology of Sub-Index <sup>j</sup>
<b>Swaption Selling Day<sup>Ccy</sup></b>	For Ccy = USD <i>Prior to the BD Modification Date:</i>  Each day that is a London Business Day and New York Business Day  <i>From and including the BD Modification Date:</i>  Each day that is a London Business Day, New York Business Day and a CME Business Day  For Ccy = EUR <i>Prior to the BD Modification Date:</i>



	Each day that is a London Business Day and TARGET Business Day  <i>From and including the BD Modification Date:</i> Each day that is a London Business Day, TARGET Business Day and EUREX Business Day
<b>BD Modification Date</b>	20-Sep-2019
<b>London Business Day</b>	A day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in London, and from and including 20 September 2019, a day that does not fall on the 24 December or 31 December.
<b>New York Business Day</b>	Each 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 New York
<b>Target Business Day</b>	Each 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 TARGET
<b>CME Business Day</b>	A day on which the Chicago Mercantile Exchange (Globex) is scheduled to be open (or would have been but for the occurrence of a market disruption event) for trading in USD interest rate futures contracts, and a day that does <u>not</u> fall on the 24-December or 31-December
<b>Eurex Business Day</b>	A day on which Eurex is scheduled to be open (or would have been but for the occurrence of a market disruption event) for trading in EUR interest rate futures contracts, and a day that does <u>not</u> fall on the 24-December or 31-December
<b>Sub-Index<sup>j</sup> Currency</b>	Defined as Currency “k” by the Index Sponsor in accordance with the methodology of Sub-Index <sup>j</sup>
<b>Sub-Index<sup>j</sup> Tenor</b>	Defined as Tenor “i” by the Index Sponsor in accordance with the methodology of Sub-Index <sup>j</sup>
<b>Sub-Index<sup>j</sup> Parity</b>	Defined as Parity “p” by the Index Sponsor in accordance with the methodology of Sub-Index <sup>j</sup>
<b>Sub-Index<sup>j</sup> Reset Months</b>	With respect to Sub-Index <sup>j</sup> Parity, defined as the Parity “Month” by the Index Sponsor in accordance with the methodology of Sub-Index <sup>j</sup>
<b>Sub-Index<sup>j</sup> Start Date</b>	Defined as Index <sub>k,i,p</sub> Base Date by the Index Sponsor in accordance with the methodology of Sub-Index <sup>j</sup> .
<b>Sub-Index<sup>j</sup></b>	Each Nomura Interest Rate Volatility Risk Premium Sub-Index, where “j” as specified in the Sub-Indices Specifications Table.
<b><math>FX_t^{i,j}</math></b>	With respect to each Sub-Index <sup>j</sup> Business Day t,  If Sub-Index <sup>j</sup> Currency is different from the Index <sup>j</sup> Currency, the exchange spot rate (quoted as the number of Index <sup>j</sup> Currency per 1 unit of Sub-Index <sup>j</sup> Currency) as published on FX Reuters Screen <sup>i</sup> at FX Time <sup>i</sup> .  Otherwise  $FX_t^{i,j} = 1$
<b><math>FX_{t,reset}^{i,j}</math></b>	For any Sub-Index <sup>j</sup> Business Day t,  If Sub-Index <sup>j</sup> Business Day t is a Sub-Index <sup>j</sup> Reset Date,  $FX_t^{i,j} \text{ as of the Sub-Indexj Business Day}$  Otherwise  $FX_{t,reset}^{i,j} = FX_{t-1,reset}^{i,j}$  Where  t-1 denotes the Sub-Index <sup>j</sup> Business Day immediately preceding Sub-Index <sup>j</sup> Business Day t
<b>Rounded Index Level</b>	Rounded Index Level means the Index Level (Index <sub>t</sub> <sup>i</sup> ) rounded to the three decimal places.

<b>Index Disruption Provisions</b>	
<b>Index Disruption Event</b>	Means, on any day, the existence or occurrence of any of the following events:

- (i) in relation to a Sub-Index and its components, any “Index Disruption Event” and any of the events or circumstances specified in the section “Index Modification”, each as specified in the Sub-Index Methodology, as may be amended and updated from time to time by the Index Sponsor, occurs or exists (including, without limitation, any index adjustment, index modification or index disruption); and/or
- (ii) material modification to a Sub-Index by the Index Sponsor or an announcement by the Index Sponsor that it will make a material modification to a Sub-Index (including a change to the formula for, or the method of calculating a Sub-Index); and/or
- (iii) a failure by the Sub-Index Price Source to publish a level for a Sub-Index on any Index Business Day;
- (iv) on any relevant date on which an Index determination is scheduled to occur, the Index Sponsor fails to calculate and announce a Sub-Index; and/or
- (v) a FX Disruption Event occurs or exists, and/or
- (vi) in relation to any Index Component, the occurrence or existence of an Illiquidity Event, Index Component Disruption, Intervening Circumstances and/or an Index Frustration.

#### **Consequences of Index Disruption**

If, in the determination of the Index Sponsor, an Index Disruption has occurred or is occurring in respect of a Sub-Index or an Index, then the Index Sponsor may take one or more of the following actions in its discretion, with a view to preserving the objective of that Sub-Index or 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):

- (i) delay any rebalancing and/or instruct the Calculation Agent to delay any calculation of the Index (an “Index Determination Date”) until the relevant Index Disruption no longer exists, provided that, if such Index Disruption is continuing on the 10th Index Business Day following an Index Determination Date (the “Delayed Index Determination Date”) then the Index Sponsor will determine the level of the relevant Sub-Index (including any affected Sub-Index component) and/or other Index Component (as applicable) in respect of such Index Determination Date as of the related Delayed Index Determination Date in accordance with (ii) below; and/or
- (ii) determine the level of the affected Sub-Index and/or other Index Component for such day in accordance with the formula for, and method of, calculating such Sub-Index or Index Component, taking into account the relevant Index Disruption, latest available quotation of the Sub-Index and its Sub-Index components and/or other Index Component as well as any other information the Index Sponsor deems relevant, in its discretion; having regard to the standard of input data quality for the relevant Sub-Index or Index as determined by the Index Sponsor during the design of the Sub-Index, as set out in Appendix 2, Section 6 of the Control Framework Summary (“Data Sufficiency and Hierarchy of Input Data”), and then instruct the Calculation Agent to calculate the Index using such Sub-Index and/or Index Component level as determined by the Index Sponsor; and/or
- (iii) not calculate and publish the Index level for such day [and resume calculations on the next Index Business Day where the Index Disruption no longer exists provided that, if such Index Disruption Event is continuing on the 10 Index Business Days following the original Index Business Day (such 10th Index Business Day being the “Cut-off Day and such event being a “Continued Disruption Event”), then, as of the Cut-off Date, a Modification Event shall occur with respect to the relevant Index Component]; and/or
- (iv) delay the Index Level publication; and/or
- (v) make any adjustments to the Index Methodology which it deems necessary to account for the relevant Index Disruption Event.

#### **FX Disruption Event**

Means, in respect of a Sub-Index Currency (which is not equal to the Index Currency) and the Index Currency, the Index Sponsor determines in its sole discretion that one or more of the following events (each an “FX Disruption Event”) has occurred:

1. FX Price Source Failure
2. FX Price Materiality



	<p>3. failure to convert such Sub-Index Currency into the Index Currency through customary legal channels or failure to transfer either currency from or within the relevant jurisdiction;</p> <p>4. failure to convert such Sub-Index Currency into the Index Currency at a rate at least as favourable as the rate for domestic institutions located in the relevant jurisdiction;</p> <p>5. failure to deliver such Sub-Index Currency or Index Currency from accounts inside the relevant jurisdiction to accounts outside the jurisdiction; or</p> <p>6. failure to transfer such Sub-Index Currency or Index Currency between accounts inside the relevant jurisdiction or to a party that is a non-resident of such jurisdiction;</p> <p>7. a material change by the FX Price Source in the content, composition, constitution of, or in the formula for or method of calculating (a "FX Material Change") the FX spot rate to convert such Sub-Index Currency into the Index Currency (including where any such FX Material Change is due to an amendment or other modification to the rules and/or regulations of the FX Price Source);</p> <p>8. an FX Rate Regime Change with regards to currencies for which the Sub-Index is not equal to the Index Currency;</p>
<b>FX Price Materiality</b>	If, on any day, the level published on any FX Price Source in relation to any price, level, rate or other variable necessary to determine an Index is, in the sole determination of the Index Sponsor, significantly different to the level of such variable prevailing in the market.
<b>FX Rate Regime Change</b>	Means, with respect to a given currency, a change by the relevant monetary authority over the rate at which such currency trades against other currencies, including but not limited to, the imposition or removal of an exchange rate peg.
<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.
<b>Illiquidity Event</b>	Means the occurrence of any event or circumstance which generally prevents, disrupts or impairs the ability of market participants in general to enter into transactions or obtain market values of the type which would be required to replicate the Index or Index Component in a commercially reasonable manner (including, without limitation, a significant widening in the bid/offer and/or a significant reduction in liquidity of an Index Component).
<b>Intervening Circumstances</b>	<p>Means the occurrence of a systems failure, natural or man-made disaster, act of God, armed conflict, act of terrorism, riot or labour disruption or any similar intervening circumstance beyond the Index Sponsor's and/or Index Calculation Agent's reasonable control, in respect of an Index Component, and which in the determination of the Index Sponsor prevents, disrupts or impairs</p> <ol style="list-style-type: none"> <li>the ability of the Index or Sub-Index (as applicable) to achieve its economic objective; and/or</li> <li>the prompt or accurate determination of the level of the Index or Sub-Index (as applicable); and/or</li> <li>the ability of the Index Sponsor or Index Calculation Agent to perform its role in respect of the Index or Sub-Index (as applicable).</li> </ol>
<b>Index Frustration</b>	Means any event or circumstance that, in the opinion of the Index Sponsor, prevents, disrupts or impairs the ability of an Index or Sub-Index (as applicable) to achieve its economic objective or the prompt or accurate determination of the level of such Index and/or Sub-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 and/or Sub-Index were to be determined, it could not be relied upon to represent the market or economic reality that the Index and/or Sub-Index is intended to measure.
<b>Index Correction</b>	<p>If, due to the occurrence of an error (i) in relation to the calculation or publication of the level of an Index, or (ii) in the method for determining an Index, the Index Sponsor has determined on any day (a "Correction Determination Date") that an adjustment to the Index is necessary in order to correct such error (an "Index Correction"), then the Index Sponsor will make such corresponding adjustments to the Index as it deems necessary, if any, in order to reflect the Index Correction (in each case in accordance with the principles and methodology of the Index).</p> <p>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 changes to the Index methodology.</p>
<b>Consequences of Sub-Index Correction</b>	If in a relation to a Sub-Index, at any time the Index Sponsor of that Sub-Index corrects the level or value of a Sub-Index subsequent to publication, the Index Sponsor will make all calculations and determinations in respect of the Index by reference to such corrected level of the Sub-Index.
<b>Index Modification</b>	Upon the occurrence of a (i) Sub-Index Modification Event, (ii) Continued Disruption Event, (iii) Input Data Decline Event or (iv) Extraordinary Event, the Index Sponsor may, to account for any effects such event has on the Index, make such adjustment(s) to the Index as it deems appropriate such as, but not limited to:



	<p>1. removing or replacing an affected Index Component and/or its Price Source with an alternative currency, rate, variable or other component (a "Replacement Component") 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 Index's standard of input data quality, 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</p> <p>2. making any other adjustments to the Index methodology which it deems appropriate to preserve the objective of the Index, taking into account the relevant Index Modification Event.</p> <p>The Index Sponsor may refrain from rebalancing the Index and further instruct the Index Calculation Agent to refrain from calculating the Index until the Modification Event ceases to exist.</p> <p>For the purpose of the removal or replacement of an affected Index Component and/or its Price Source, the Index Sponsor may make any other adjustments to the Index Methodology to account for the price or value of the affected Index Component at the time of its removal and any related charges, fees, taxes or costs to the Index Sponsor for implementing the Replacement Component.</p> <p>The Index Sponsor may modify the Index in accordance with Appendix 2, Section 15 of the Control Framework Summary ("Changes to Methodology").</p> <p>If the Index Sponsor determines that no such adjustment(s) would preserve the objective of the Index and/or such adjustment(s) are not economically, operationally, legally or otherwise feasible (after using commercially reasonable efforts) ("Index Modification Failure") it may cancel the Index in accordance with the Index Cancellation provisions herein.</p>
<b>Sub-Index Modification Event</b>	Means an "Index Modification Event" in respect of the relevant Sub-Index as specified in the disruption section in the relevant Index Description of such Sub-Index (as maybe amended and updated from time to time by the Index Sponsor of such Sub-Index).
<b>Input Data Decline Event</b>	<p>Means if the Index Sponsor determines that the input data and/or Price Source in relation to an Index Component and/or Sub-Index Component used to calculate an Index or Sub-Index</p> <p>1) is no longer available (whether due to a permanent discontinuation of trading, disappearance or otherwise); and/or</p> <p>2) is repeatedly different to a significant extent from the level of such data prevailing in the market; and/or</p> <p>3) has been the subject of a FX Material Change in a manner which has or will have a material adverse effect on the Index achieving its stated objective; and/or</p> <p>4) is no longer sufficient to represent accurately and reliably the market and economic reality that the Index or Sub-Index (as applicable) is intended to measure, or is otherwise not appropriate; and/or</p> <p>5) no longer meets the standard of input data quality for the Index or Sub-Index (as applicable) as determined by the Index Sponsor during the design of the Index/ Sub-Index, as set out in Appendix 2, Section 6 of the Control Framework Summary ("Data Sufficiency and Hierarchy of Input Data").</p>
<b>Extraordinary Event</b>	Means any of Change in Law, and/or Increased Cost of Index Implementation.
<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 Section 871(m) of the U.S. Internal Revenue Code of 1986 Code treats U.S. or any other 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 over 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) the cost of trading in an Index Component for the Index Sponsor or its affiliates has materially increased (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on its tax position).
<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 (as applicable), or (ii) realise, recover or remit the proceeds of any transaction(s) or asset(s).
<b>Consequences of a Sub-Index Cancellation</b>	<p>If upon the occurrence of a Sub-Index Cancellation there is a Successor Sub-Index then such Successor Sub-Index shall be deemed to be the relevant Sub-Index and the Index Sponsor may make such adjustment(s) to the Index Methodology as it determines appropriate, to account for any effects of the replacement of the Sub-Index with the Successor Sub-Index.</p> <p>If a Sub-Index Cancellation occurs for a period of fifteen (15) Index Business Days measured from the first day of such Sub-Index Cancellation and as at the end of such period of time there is no Successor Sub-Index ("Sub-Index Replacement Failure"), then the Index Sponsor may</p> <p>(i) remove the cancelled Sub-Index and make such adjustment(s) to the Index Methodology that it determines appropriate to account for the effects of such removal, or</p>



	(ii) cancel the Index in accordance with the Index Cancellation provisions below.
<b>Sub-Index Cancellation</b>	<p>Means, that a Sub-Index is permanently cancelled or the Index Sponsor announces (including through an agent, if applicable) its intention to permanently cancel a Sub-Index or its intention to cease to calculate and announce a level for a Sub-Index.</p> <p>Note: the Index Sponsor may permanently cancel and discontinue calculating and publishing a Sub-Index at any time in accordance with the Sub-Index Methodology.</p>
<b>Index Cancellation</b>	<p>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"), including without limitations upon the occurrence of:</p> <p>(a) Sub-Index Replacement Failure; and/or</p> <p>(b) an Index Modification Failure.</p>
<b>Successor Sub-Index</b>	<p>Means a successor or replacement index using, in the determination of the Index Sponsor, the same or a substantially similar formula for and method of calculation as used in the calculation of the relevant Sub-Index or, if non, a replacement with the same or similar investment objective as the Sub-Index and that is acceptable to the Index Sponsor.</p>
<b>Definitions</b>	<p><b>Index Component</b> means, each Sub-Index and its Sub-Index Components, each Sub-Index Currency, Index Currency and the forex spot conversation rate for the relevant Sub-Index Currency, as well as any other index, futures contract, currency, rate, 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 such Index.</p> <p><b>Sub-Index Price Source</b> means, in respect of a Sub-Index, the relevant Bloomberg page as specified in Table-1 under the column headed "Sub-Index Price Source" in the row corresponding to such Sub-Index or 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 in its sole discretion and acting in a commercially reasonable manner.</p> <p><b>Sub-Index Component</b> means, in respect of a Sub-Index, each underlying component index, futures contract, currency, rate, variable or other component necessary in order to determine a level of the such Sub-Index, in each case, in line with the then existing methodology of the Sub-Index.</p> <p><b>FX Price Source</b> means with respect to a Sub-Index Currency and Index Currency, the FX fixing as described in <math>FX_t^{i,j}</math> as defined above. References to FX 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 the spot conversion of Sub-Index Currency and Index Currency may be disseminated, as determined by the Index Sponsor in its sole discretion and acting in a commercially reasonable manner.</p> <p><b>Index Currency</b> means, with respect to an Index, Index Currency, as defined in the Index Specifications Table.</p> <p><b>Sub-Index Currency</b> means, <b>Sub-Index<sup>i</sup> Currency</b> as defined above.</p>
<b>Index Disclaimer</b>	<p>No legal relationship (whether in contract, tort or otherwise) exists between any investor in a product linked to the Index (an "Index Linked Product Investor") and the Index Sponsor. The Index Sponsor does not owe any duties (whether in contract, tort or otherwise) to any Index Linked Product Investor. No claims, actions or legal proceedings may therefore be brought against the Index Sponsor in any manner whatsoever by an Index Linked Product Investor or any other person.</p> <p>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.</p> <p>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.</p> <p>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</p>

affiliates as to the accuracy, completeness and timeliness of information concerning an Index, or as to the continuance of calculation or publication of an Index.

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## Appendix

### Index Specifications Table

i	Index <sup>i</sup>	Index Currency	Bloomberg Ticker	FX Reuters Screen	FX Time	Index Start Date	Index Live Date	Sub Index <sup>j</sup>
1	Nomura Interest Rate Volatility Risk Premium USD Select Index	USD	NMIVRUS Index	n/a	n/a	Start Date	Live Date	j=1 to 12
2	Nomura Interest Rate Volatility Risk Premium EUR Select Index	EUR	NMIVRES Index	Price Source	Snap Time	Start Date	Live Date	j=13 to 24
3	Nomura Interest Rate Volatility Risk Premium Western Select Index	USD	NMIVRPWS Index	Price Source	Snap Time	Start Date	Live Date	j=1 to 24
4	Nomura Interest Rate Volatility Risk Premium USD Select Non-Compounded Index	USD	NMIVRUSN Index	n/a	n/a	Start Date	Live Date	j=1 to 12
5	Nomura Interest Rate Volatility Risk Premium EUR Select Non-Compounded Index	EUR	NMIVRESN Index	Price Source	Snap Time	Start Date	Live Date	j=13 to 24
6	Nomura Interest Rate Volatility Risk Premium Western Select Non-Compounded Index	USD	NMIVRWSN Index	Price Source	Snap Time	Start Date	Live Date	j=1 to 24

### Sub-Indices Specifications Table

j	Sub-Index Name	Sub-Index Expiry
1	Nomura Interest Rate Volatility Risk Premium USD 1M10Y Odd Index	1 month
2	Nomura Interest Rate Volatility Risk Premium USD 1M10Y Even Index	1 month
3	Nomura Interest Rate Volatility Risk Premium USD 1M30Y Odd Index	1 month
4	Nomura Interest Rate Volatility Risk Premium USD 1M30Y Even Index	1 month
5	Nomura Interest Rate Volatility Risk Premium USD 3M10Y Index 1	3 month
6	Nomura Interest Rate Volatility Risk Premium USD 3M10Y Index 2	3 month
7	Nomura Interest Rate Volatility Risk Premium USD 3M10Y Index 3	3 month
8	Nomura Interest Rate Volatility Risk Premium USD 3M10Y Index 4	3 month
9	Nomura Interest Rate Volatility Risk Premium USD 3M30Y Index 1	3 month
10	Nomura Interest Rate Volatility Risk Premium USD 3M30Y Index 2	3 month
11	Nomura Interest Rate Volatility Risk Premium USD 3M30Y Index 3	3 month
12	Nomura Interest Rate Volatility Risk Premium USD 3M30Y Index 4	3 month
13	Nomura Interest Rate Volatility Risk Premium EUR 1M10Y Odd Index	1 month
14	Nomura Interest Rate Volatility Risk Premium EUR 1M10Y Even Index	1 month
15	Nomura Interest Rate Volatility Risk Premium EUR 1M30Y Odd Index	1 month
16	Nomura Interest Rate Volatility Risk Premium EUR 1M30Y Even Index	1 month
17	Nomura Interest Rate Volatility Risk Premium EUR 3M10Y Index 1	3 month
18	Nomura Interest Rate Volatility Risk Premium EUR 3M10Y Index 2	3 month
19	Nomura Interest Rate Volatility Risk Premium EUR 3M10Y Index 3	3 month
20	Nomura Interest Rate Volatility Risk Premium EUR 3M10Y Index 4	3 month
21	Nomura Interest Rate Volatility Risk Premium EUR 3M30Y Index 1	3 month
22	Nomura Interest Rate Volatility Risk Premium EUR 3M30Y Index 2	3 month
23	Nomura Interest Rate Volatility Risk Premium EUR 3M30Y Index 3	3 month
24	Nomura Interest Rate Volatility Risk Premium EUR 3M30Y Index 4	3 month





## Backtest Assumptions

### $Index_{t,reset}^{ij}$

With respect to each Index Business Day  $t$  from but excluding the Index Start Date for Index <sup>$i$</sup>  to and excluding the earliest Index <sup>$ij$</sup>  Reset Date,  $Index_{t,reset}^{ij}$  equals the level of  $Index_{Start\ Date}^{ij}$ .

### $FX_t^{ij}$

Prior to 4-Dec-2014, Bloomberg is used as the foreign exchange price source instead of Reuters.

Prior to 1-Feb-2019, Bloomberg is used as the foreign exchange price source instead of Reuters.

For each Index <sup>$i$</sup>  prior to 16-May-2017, no historical disruption events for  $FX_t^{ij}$  were considered in the index calculation.



## 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 UK BMR <sup>1</sup> and the IOSCO Principles and any related measures and applicable FCA rules (each as amended or replaced from time to time) <sup>2</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 Reports and Revision</b>	The Index Sponsor has adopted procedures for analysis and remediation of Index errors, and for 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 both single prices or levels and an average or other formula of 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

<sup>1</sup> UK BMR means the United Kingdom Benchmark Regulation which comprises Regulation (EU) 2016/1011 (“**EU BMR**”) as amended by Regulation (EU) 2019/2089 as regards EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks insofar as they are applicable in the United Kingdom by virtue of the European Union (Withdrawal) Act 2018 and other United Kingdom legislation which implements and amends retained European Union law in the United Kingdom including, but without limitation, the Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019, SI 2019/657.

<sup>2</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 EU BMR and will be updated in due course to reflect the requirements of UK BMR, as well as related measures and applicable FCA rules.

	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>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”).



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