Nomura Interest Rate Swaps Momentum+ Index (Duration 1 & 5)

Index Rulebook

Strictly Private and Confidential

27 July 2021

This document is only for informational purposes and is a description of the Index, and may not be incorporated into any contract or agreement. This document does not constitute an offer to sell, or the solicitation of an offer to purchase, any securities. The information contained herein is believed by Nomura to be accurate in all respects, but Nomura makes no representation or warranty, expressed or implied, as to its accuracy or completeness. Where there are any discrepancies between the information contained herein and the actual specification or calculation methodology of the Index, the actual specification or calculation methodology within the model of the Index.

Summary Description	Each Index was created by Nomura International plc, which is the Index Sponsor and Index calculation agent. The Indices are published on Bloomberg under the ticker symbol "NMRSMPIU Index" (Nomura Interest Rate Swaps Momentum+ Index – Duration 1 in USD) and "NMRSMPVU Index" (Nomura Interest Rate Swaps Momentum+ Index – Duration 5 in USD). Prior to the Live Date, the Index Sponsor reconstructed each Index using backtested data from the Start Date. As of the Start Date, the Index Level was 100. The level of the Index is denominated in US Dollars.
	Please refer to Appendix A and B for backtesting assumptions.
	The Live Date of NMRSMPIU Index is 26 April 2018.
	The Live Date of NMRSMPVU Index is 26 April 2018.
	For further information please see the Index summary disclosures document for this Index, which is to be read in conjunction with this Index Rulebook (together, the "Index Description").

Index Determinat	ion						
Index	The Nomura Interest Rate Swaps Momentum+ Index - Duration 1 in USD and the Nomura Interest Rate Swaps Momentum+ Index - Duration 5 in USD, each an "Index" built using the methodology described in this Rulebook, denominated in the currency "CCY" and with each Index Component targeting a Duration level of "Duration Target" as defined in the Appendix A						
Index Sponsor	Nomura International plc ("NIP"), who is responsible for the administration of each Index.						
Start Date	05 February 1990						
Index Level	In respect of an Index Business Day t, the calculated level of the Index in respect of that day, denoted Index(t) and published on the relevant Bloomberg page or any successor thereto. Please refer to Appendix A for a list of the relevant Bloomberg pages for each Index The Index Level on the Start Date shall be equal to 100. For any Index Business Day t where t > Start Date Index(t)=Index(t-1)× $\left[1+\left(\sum_{t-1 < t \\ For any London Business Day I}\left\{\sum_{k=1}^{4} Country Ret^{k}(l)\right\}\right) \times \frac{FX_{CCY/USD}(t-1)}{FX_{CCY/USD}(t)}\right]$ Where: k=1,2,3,4 respectively for USD,EUR,GBP and JPY if t is not a Tokyo Business Day then : Country Ret ⁴ (t)=0						
Country Ret ^k	For any London and Local ^k Business Day t: Country Ret ^k (t)= $\left[\left\{\sum_{i} Ins Ret_{i}^{k}(t)\right\} \times Weight^{k} \times Duration Target -TC^{k}(t-1)\right] \times \frac{FX^{k}(t)}{FX^{k}(t-1)}$ Where: i refers to all Tenor for Currency=k defined in Appendix B						

Ins Ret ^k	For any London and Local ^k Business Day t: Ins $Ret_i^k(t) = (Rec Ind_i^k(t) - Rec Ind_i^k(t-1)) \times Effective Signal_i^k(t-1)$
Weight ^ĸ	Means the weight for each currency k: [Description of Weight levels used]
FX ^k	For any London and Local ^k Business Day t, FX ^k refers to the foreign exchange Spot Rate (quoted as the number of USD per 1 unit of foreign currency k) as published by the relevant price source as set out in Appendix A. For the avoidance of doubt if k=1 then FX ^k (t)=1 for any London and Local ^k Business Day t. Please refer to Appendix A for data source and backtesting assumptions.
Duration Target	"Duration Target" as defined in the Appendix A

Index Components	5						
Rec Ind ^k	For any London and Local ^k Business Day t:						
	Rec Ind ^k (t) refers to the level of the Nomura Interest Rate Receiver Swap Index with Underlying Swap Tenor equal to tenor i and Underlying Swap Currency equal to currency k ("Receiver Swap Index (i,k)"), as defined in the "Nomura Interest Rate Receiver Swap Indices" description document.						
	For the avoidance of doubt:						
	For k=1,2,3,4 currency k means respectively USD,EUR,GBP,JPY						
	i refers to all Tenor for Currency=k defined in Appendix B						
Nomura Interest Rate Receiver Swap Indices	The Nomura Interest Rate Receiver Swap Indices suite is a family of indices (each an "Index") that track performance of rolling a 1 month forward receiver swap of a certain tenor ("The Underlying Swap Tenor") in certain currency ("The Underlying Swap Currency") utilising the Yield Curve. Each Receiver Swap Index w						
("Receiver Swap Indices")	created by Nomura International plc, which is the Index Sponsor and Index calculation agent.						
Yield Curve	Yield Curve means, in respect of each Index and the related Swap Receiver Indices and an Index Business Day, the relevant Yield Curve (as defined in the NIP Indices Yield Curve Process document dated July 2017 (as amended and/or supplemented from time to time and published on the Nomura QIS Website) in respect of such Index and Index Business Day.						
	The Yield Curve is built using the interest rate curve determined and used by Nomura International plc in the ordinary course of its business as a dealer/market maker and for the purposes of its own audited books and records and certain other data, for more information please see the NIP Indices Yield Curve Process.						
FX _{CCY/USD}	For any Index Business Day t, FX _{CCY/USD} refers to the foreign exchange Spot Rate (quoted as the number of USD per 1 unit of foreign currency CCY) as published by the relevant price source as set out in Appendix A.						
	For the avoidance of doubt if CCY=USD then $FX_{CCY/USD}(t)=1$ for any Index Business Day t.						
	Please refer to Appendix A for data source and backtesting assumptions.						
ССҮ	Means the currency in which the Index is denominated						

Signal								
Signal ^k	The signal algorithm aims to detect trends in the the returns of the relevant Receiver Swap Indices by comparing the moving averages of such Receiver Swap Indices returns over a short-term ("ST"), medium-term ("MT") and long-term ("LT") time window. Volatility bands computed on the daily returns of the Receiver Swap Indices are added to these moving averages, seeking to make the signal more stable.							
	Signal ^k can take 3 positions: Long (1), Neutral (0) and Short (-1)							
	For any London and Local ^k Business Day t, Signal ^k _i (t) is defined as follow:							
	[Formulas to measure Signal]							
Effective Signal ^k	For any London and Local ^k Business Day t, Effective Signal ^k _i (t) is defined as follow: [Formulas to measure Effective Signal]							
Windows length	Each below window length is expressed as a number of London and Local ^k Business Days:							
n	Window Length							
	ST Length							
	MT Length							
	LT Length							
ST LB / UB	For any London and Local ^k Business Day t :							
MT LB /UB	ST LB _i ^k (t)=ST MA _i ^k (t) - ST $\sigma_i^k(t)$							
LT LB / UB	ST UB _i ^k (t)=ST MA _i ^k (t) + ST $\sigma_i^k(t)$							
	Similarly MT LB/UB and LT LB/UB follow the same definition substituting ST with respectively MT and LT							
МА	For any London and Local ^k Business Day t : [Formula to measure ST LB / UB]							
	Where d refers to each London and Local ^k Business Day from and including day t-(n-1) to and including day t							
	n refers to the window length for each moving average							
	ST MA is computed using the above formula with n=ST and similarly for MT and LT MA.							
σ	For any London and Local ^k Business Day t :							
	[Formulas to measure σ] And where d refers to each London and Local ^k Business Day from and including day t-(n-1) to and including day							
	t							
	n refers to the window length for each moving average: ST σ is computed using the above formula with n=ST and similarly for MT and LT σ .							
Daily Change Cap	See Appendix A							

Charges	Charges					
TC ^k	For any London and Local ^k Business Day t: TC ^k (t)=Outright TC ^k (t)+Switch TC ^k (t)+Roll TC ^k (t)					
Outright TC ^k	For any London and Local ^k Business Day t:					

	Outright TC ^k (t)=Abs $\left(\sum Delta Change_i^k(t)\right) \times Outright Bid/Mid^k$								
	i refers to all Tenor for Currency=k defined in Appendix B								
Delta Change ^k	For any London and Local ^k Business Day t:								
	If t is not a Roll Date for Receiver Swap Index (i,k)								
	$Delta Change_{i}^{k}(t) = Final Signal_{i}^{k}(t) \times PV01_{FWD_{i}}^{k}(t) - Final Signal_{i}^{k}(t-1) \times PV01_{FWD_{i}}^{k}(t)$								
	If t is a Roll Date for Receiver Swap Index (i,k) then:								
	$Delta Change_{i}^{k}(t) = Final Signal_{i}^{k}(t) \times PV01_{FWD_{i}}^{k}(t) - Final Signal_{i}^{k}(t-1) \times PV01_{Spot_{i}}^{k}(t)$								
	Where $PV01_{FWD_i}^k$ and $PV01_{Spot_i}^k$ correspond to $PV01_{FWD}$ and $PV01_{Spot}$ for Receiver Swap Index (i,k) as defined in the "Nomura Interest Rate Receiver Swap Indices" description document								
Final Signal ^k	For any London and Local ^k Business Day t:								
	[Formula to measure Final Signal]								
Switch TC ^k	For any London and Local ^k Business Day t:								
	Switch TC ^k (t)= Switch Delta ^k (t)× Outright Bid/Mid ^k ×1.5								
	With;								
	Switch Delta ^k (t)=Min \sum_{i} Max(Delta Change ^k _i (t),0), \sum_{i} -Min(Delta Change ^k _i (t),0)								
	i refers to all Tenor for Currency=k defined in Appendix B								
Roll TC ^k	For any London and Local ^k Business Day t:								
	Roll TC ^k (t)= \sum_{i} Roll Delta ^k _i (t)×Roll Charge ^k _i								
	i refers to all Tenor for Currency=k defined in Appendix B								
	With:								
	If t is a Roll Date for Receiver Swap Index (i,k) AND Sign(Effective Signal ^k _i (t))=Sign(Effective Signal ^k _i (t-1)) Then:								
	$\text{Roll Delta}_{i}^{k}(t) = \text{Min}\left[\text{Abs}\left(\text{Final Signal}_{i}^{k}(t) \times \text{PV01}_{\text{FWD}_{i}}^{k}(t)\right), \text{Abs}\left(\text{Final Signal}_{i}^{k}(t-1) \times \text{PV01}_{\text{Spot}_{i}}^{k}(t)\right)\right]$								
	Else								
	Roll Delta ^k (t)=0								

Index Charges							
Outright Bid/Mid	All belo	w nun	nber are quoted in ba	isis points			
And Roll Charge			i	1y	2у	5у	10y
		k	Outright Bid/Mid ^k		Roll Ch	arge ^k	
		1	Outright Bid/Mid	Roll Charge	Roll Charg e	Roll Char ge	Roll Charg e
		2	Outright Bid/Mid	Roll Charge	Roll Charg e	Roll Char ge	Roll Charg e
		3	Outright Bid/Mid	Roll Charge	Roll Charg e	Roll Char ge	Roll Charg e

		4	Outright Bid/Mid	Roll Charge	Roll Charg e	Roll Char ge	Roll Charg e
	Ē						

General Definition	IS							
Index Business Day	Any Local ¹ , Local ² and Local ³ Business Day.							
Index Trading Business Day	Any Local ¹ , Local ² , Local ³ and Local ⁴ Business Day.							
Local ^k Business Day	Prior to the BD Modification Date Means the local calendar for currency k: For k=1 Local ^k =New York Business Day For k=2 Local ^k =TARGET Business Day For k=3 Local ^k =London Business Day For k=3 Local ^k =Tokyo Business Day For k=4 Local ^k =any day which is a New York Business Day and a CME Business Day, excluding 24-December and 31-December; for k=2 Local ^k = any day which is a TARGET Business Day, a Eurex Business Day and an ICE Futures Europe (EU) Business Day, excluding 24-December and 31-December; for k=3 Local ^k = any day which is a London Business Day and an ICE Futures Europe (UK) Business Day, excluding 24-December; and for k=4 Local ^k = any day which is a Tokyo Business Day, a Tokyo Financial Exchange Business Day and an Osaka Exchange Business Day, excluding 24-December;							
London Business Day	A day (other than a Saturday or Sunday) on which commercial banks are open for general business in London							
ICE Futures Europe (UK) Business Day	A day on which ICE Futures Europe is scheduled to be open (or would have been but for the occurrence of a market disruption event) for trading in British interest rate futures contracts.							
New York Business Day	A day (other than a Saturday or Sunday) on which commercial banks are open for general business in New York							
CME Business Day	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 American interest rate futures contracts.							
Target Business Day	Means any day on which TARGET2 (the Trans-European Automated Real-time Gross settlement Express Transfer system) is open							
Eurex Business Day	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 European interest rate futures contracts.							
ICE Futures Europe (EU) Business Day	A day on which ICE Futures Europe is scheduled to be open (or would have been but for the occurrence of a market disruption event) for trading in European interest rate futures contracts.							
Tokyo Business Day	A day (other than a Saturday or Sunday) on which commercial banks are open for general business in Tokyo							

Tokyo Financial Exchange Business Day	A day on which Tokyo Financial Exchange is scheduled to be open (or would have been but for the occurrence of a market disruption event) for trading in Japanese interest rate futures contracts.
Osaka Exchange Business Day	A day on which Osaka Exchange is scheduled to be open (or would have been but for the occurrence of a market disruption event) for trading in Japanese interest rate futures contracts.
BD Modification Date	20 November 2019

Disruptions Event	s / 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.							
	Summary ("Correction of Errors") and Appendix 2, Section 15 ("Changes to Methodology") where remediation requires change to the Index methodology.							
Index Disruption	If, on any day an Index Disruption Event has occurred or is occurring, including 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 5th 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 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 of the Control Framework Summary ("Data Sufficiency and Hierarchy of Input Data"), 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	The determination by the Index Sponsor in its sole discretion that one or more of the following events (eachan "Index Disruption Event") has occurred:							
	 a. the material suspension of, a material limitation imposed on, or the cessation of the trading in any Index Component; 							
	b. the failure of any Price Source to announce or publish any relevant price, level, rate or other data necessary for the determination of any Index Component;							
	 the level published on any Price Source in relation to any price, level, rate or other data necessary to determine any Index Component is significantly different to the level of such data prevailing in the market; 							
	 a material change by the Price Source in the content, composition, constitution of, or in the formula for or method of calculating (a "Material Change") any Index Component (including where any such Material Change is due to an amendment or other modification to the rules and/or regulations of the Price Source); 							

	e.	the failure of any Price Source to open for trading during a scheduled trading session, or the early closure thereof (without 48 hours prior notice to the market); or
	f.	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 implement the Index in a commercially reasonable manner (including, without limitation, a significant widening in the bid/offer and/or a significant reduction in liquidity in an Index Component);
	g.	in respect of an Index Component or the Index, 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 the Index Sponsor's reasonable control 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; or
	h.	any other event or circumstance that, in the opinion of the Index Sponsor, prevents, disrupts or 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.
Index Modification	Upon the occurrence	e of an Index Modification Event, the Index Sponsor may
	i. remove currenc sole de or equiv of the h determi	or replace such affected Index Component with an alternative futures or options contract, y, rate, variable or other component (a " Replacement Index Component ") which, in it its termination, is consistent with the objective of the Index and, where possible, is of the same valent standard of quality as any input data and/or price source used prior to the occurrence index Modification Event, having regard to the standard of input data quality for the Index as ined by the Index Sponsor during the design of the Index, as set out in Appendix 2, Section Control Framework Summary ("Data Sufficiency and Hierarchy of Input Data"); and/or
	objectiv	such other adjustments to the Index methodology as it deems appropriate preserve the re of the Index, taking into account the relevant Index Modification Event (including without on replacing certain Price Sources used for determining the Yield Curve).
	The Index Spon	sor may refrain from publishing the Index until the Index Modification Event ceases to exist.
	make any other at the time of its	e of the removal or replacement of any affected Index Component, the Index Sponsor shall adjustments to the Index to account for the price or value of the affected Index Component removal and any related charges, fees or taxes as well as the cost to the Index Sponsor for ny Replacement Index Component.
		sor may modify the Index in accordance Appendix 2, Section 15 of the Control Framework inges to Methodology").
Index Modification	An "Index Mod	ification Event" shall be deemed to have occurred if:
Event	a.	the Index Sponsor determines, in its sole discretion, that an Index Component (i) is no longer available (whether due to a permanent discontinuation of trading, disappearance or otherwise) or (ii) has been the subject of a Material Change in a manner which has or will have a material adverse effect on the Index achieving its stated objective; or
	b.	the Index Sponsor determines, in its sole discretion, that the input data and/or price source in relation to any price, level, rate or other data necessary to determine any Index Component:
		(i) is discontinued, so as to materially affect the Index calculation or
		(ii) is repeatedly different to a significant extent from the level of such data prevailing in the market;
		(iii) is no longer sufficient to represent accurately and reliably the market and economic reality the Index is intended to measure,
		reality the index is interface to measure,
		 (iv) 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")
		(iv) 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
	C.	(iv) 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") each as determined by the Index Sponsor acting in good faith and a commercially

Extraordinary Event	Means in respect of any Index Component means any of Change in Law, Index Component Disruption and/or Increased Cost of Index Implementation.
	Change in Law 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).
	Index Component Disruption 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 (x) any restriction on making new or additional investments in any Index Component.
	Increased Cost of Index Implementation 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).
Index Cancellation	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").
Definitions	"Index Component" means, in respect of the Index, each underlying component index, futures contract, currency, rate, variable or other component necessary in order to determine a level of the Index (including the Yield Curve and any data used to determine the Yield Curve), in each case, in line with the then existing methodology of the Index.
	"Price Source" means, in respect of an Index Component, the 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 a Index Component may be disseminated, as determined by the Index Sponsor it its sole discretion and acting in a commercially reasonable manner.

Additional inform	nation in respect of the Index methodology
Governance Policy and Control Framework	The Index Sponsor has established a governance framework (the " Governance Policy and Control Framework ") to ensure compliance with UK BMR ¹ and the IOSCO Principles and any related measures and applicable FCA rules (each as amended or replaced from time to time) ² . 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 Summary") is published on: www.nomuranow.com/portal/site/nnextranet/en/global- markets/structured-derivatives/quant-investment-strategies.shtml. Please refer to the summary of the Governance Policy and Control Framework in respect of the following information applying to the Index methodology:
Criteria for Index Development and Input Data and Source Selection	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").

¹ 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.

²https://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.

Exercise of Expert Judgment and discretion	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").
Input Data Type Priority	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.
Index Error Reports and Revision	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.
Quantity and Quality of Input Data	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.
	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 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.
Internal Reviews of the Index	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.
	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.
Index Approval	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").
Investor Consultation upon Index termination and material changes to the Index methodology	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.
Active Market of the Index	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.
Outsourcing of Index Determination	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 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

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	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.

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Appendix

Data Sources &	Prior to 01	January 2014	:		
Backtest	Currency	Used from	End Date	Price Source [EOD Bloomberg]	Field
Assumption	EUR	01/11/1989	04/01/1999	DEM* CMPN Curncy	PX_LAST
		04/01/1999		EUR CMPN Curncy	PX_LAST
	GBP	16/11/1990		GBP CMPN Curncy	PX_LAST
	JPY	01/11/1989		JPY* CMPN Curncy	PX_LAST
	FX rate	e will be used ncluding 01 J Snap tin	for this day. anuary 2014:	te for any CCY is not available fro	Field
	FX rate From and in	e will be used	for this day. anuary 2014:	-	
	FX rate From and in	e will be used	for this day. anuary 2014: ne Price S	-	
	FX rate From and in Currency	e will be used ncluding 01 J Snap tin Snap Tir	for this day. anuary 2014: ne Price S	Source [Reuters] ¹	Field
	FX rate From and in Currency EUR	e will be used ncluding 01 J Snap tin	for this day. anuary 2014: ne Price S ne	Gource [Reuters] ¹ EUR=	Field BID/ASK
1	FX rate From and in Currency EUR GBP JPY This Currency is quote	e will be used ncluding 01 J Snap tin Snap Tir Snap Tir Snap Tir	for this day. anuary 2014: ne Price S ne ne	Source [Reuters] ¹ EUR= GBP= JPY*= Dollars. The inverse of this rate is then use for FX	Field BID/ASK BID/ASK BID/ASK
1	FX rate	e will be used ncluding 01 J Snap tin Snap Tir Snap Tir Snap Tir	for this day. anuary 2014: ne Price S ne ne ne reign currency per 1 unit of US being the average of the Bid ar	Source [Reuters] ¹ EUR= GBP= JPY*= Dollars. The inverse of this rate is then use for FX d Ask quotes	Field BID/ASK BID/ASK BID/ASK
	FX rate From and in Currency EUR GBP JPY This Currency is quote FX rate from Reuters To Bloom	e will be used ncluding 01 J Snap tin Snap Tir Snap Tir Snap Tir d as the number of fo icker is computed as	for this day. anuary 2014: ne Price S ne ne reign currency per 1 unit of US	Source [Reuters] ¹ EUR= GBP= JPY*= Dollars. The inverse of this rate is then use for FX d Ask quotes	Field BID/ASK BID/ASK BID/ASK * and FX _{CCY/USD} ratios computation

Appendix B					
Nomura Interest Rate Swap Receiver Indices (i,k)		Receiver Indices (i,k).			or the different Nomura Swap Receiver Indices
&	0	Tanani		Inclusion Data	Fuchacian Data
Backtest	Currency k	Tenor i	BBG ticker	Inclusion Date	Exclusion Date
Assumption	USD	1y	NMRSR01U Index	05/06/1997	n/a
	USD	2у	NMRSR02U Index	16/10/1989	n/a
	USD	5у	NMRSR05U Index	16/10/1989	n/a
	USD	10y	NMRSR10U Index	16/10/1989	n/a
	EUR	1y	NMRSR01E Index	10/09/1997	n/a
	EUR	2у	NMRSR02E Index	16/10/1990	n/a
	EUR	5у	NMRSR05E Index	16/10/1990	n/a
	EUR	10y	NMRSR10E Index	16/10/1990	n/a
	JPY	1у	NMRSR01Y Index	23/04/1996	13/08/2021

JPY	2у	NMRSR02Y Index	16/10/1990	13/08/2021
JPY	5у	NMRSR05Y Index	16/10/1990	13/08/2021
JPY	10y	NMRSR10Y Index	16/10/1990	13/08/2021
GBP	1у	NMRSR01P Index	07/01/1998	13/08/2021
GBP	2у	NMRSR02P Index	31/10/1991	13/08/2021
GBP	5у	NMRSR05P Index	31/10/1991	13/08/2021
GBP	10y	NMRSR10P Index	31/10/1991	13/08/2021
GBP	1у	NMRSR01I Index	13/08/2021	n/a
GBP	2у	NMRSR02I Index	13/08/2021	n/a
GBP	5у	NMRSR05I Index	13/08/2021	n/a
GBP	10y	NMRSR10I Index	13/08/2021	n/a
JPY	1у	NMRSR01T Index	13/08/2021	n/a
JPY	2у	NMRSR02T Index	13/08/2021	n/a
JPY	5у	NMRSR05T Index	13/08/2021	n/a
JPY	10y	NMRSR10T Index	13/08/2021	n/a

For the avoidance of doubt, duplicate values of Tenor i for a particular k are treated as separate with regards to the calculations defined above. For example Currency k=GBP and Tenor i=1y $\ensuremath{\mathsf{rest}}$

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