

Nomura: Index Reviews Policy

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PERIODIC REVIEW OF NOMURA INDICES

1 Introduction

To comply with Article 12(2)(3) of the Benchmark Regulation, in accordance with Appendix 2, Section 16 of the "Nomura Index Governance and Control Framework Summary and Other Documents" (which is available via https://www.nomuranow.com/portal/site/nnextranet/en/global-markets/structured-derivatives/quant-investment-strategies.shtml) (the "Governance Policy Summary"), and in connection with Principle 10 of the IOSCO Principles, this policy (the "Policy") sets out the full policies and procedures on the approach taken to the periodic reviews of an Index.

2 PERIODIC REVIEW OF INDICES

2.1 As of the date of this Policy, all Indices administered by the Index Administrator are considered to be Non-Significant Benchmarks. Structuring will monitor each Index to ensure that it does not exceed the requisite threshold triggering re-classification as a Significant Benchmark. Any such re-classification would require further additional actions to be taken by the Index Administrator, including, but not limited to, an amendment to this Policy, the Governance Policy Summary, and the Governance Policy and related policies and procedures.

2.2 Quarterly reviews

Structuring will conduct quarterly reviews of all Indices deemed material (i.e. Indices with a minimum AUM of USD 25 million, which may be altered with Index Committee approval) to highlight any market data issues, errors, challenges, structural changes in the underlying Market or Economic Reality that might requires changes to the design of Index Methodology or concerns about the underlying data used to calculate an Index (in particular, issues relating to data availability and/or integrity).

- **2.3** Structuring will further on a quarterly basis review the performance and capacity usage of all Indices deemed material (i.e. Indices with a minimum AUM of USD 25 million, which may be altered with Index Committee approval), with the aim of ensuring that these Indices continue to perform in accordance with their respective objectives.
- **2.4** The findings are to be documented in the form of a management information pack or similar documentation and be reported to the Index Committee for its quarterly review meeting.
- **2.5** This management information pack or similar documentation will include a summary of the following (amongst anything else appropriate in the circumstances):
 - (i) a review of Index performance and capacity usage of material Indices;
 - (ii) any material market and financial impact and risk posed by the Firm's (or any of its affiliates') hedging arrangements in respect of any Index that has been raised during the previous quarter;
 - (iii) exercise of discretion in accordance with Appendix 2, Section 14 (*Expert Judgment and Discretion*) of the Governance Policy Summary, including resulting from market



disruption events or equivalent events, and including the reasoning for said judgment or discretion;

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- (iv) any errors or restatements (including information on how the error was discovered and if the error was material);
- (v) any change to an Index Methodology;
- (vi) any challenges and complaints (formal or informal) related to Index performance; and
- (vii) any Input Data issues.

Where the outcome of a review requires a change to be made to an Index Methodology, the process outlined in Appendix 2, Section 15 (*Changes to Methodology*) of the Governance Policy Summary will be followed.

2.6 Semi-annual appropriateness checks

Structuring will further, on a semi-annual basis, review the appropriateness of the Input Data used in an Index. Structuring will look to identify the circumstances in which the quantity or quality of Input Data falls below the standards, as set out in Appendix 2, Section 6 (*Data Sufficiency and Hierarchy of Data Inputs*) of the Governance Policy Summary, necessary for that Methodology to determine the relevant Index accurately and reliably (this will also constitute the verification of Input Data required by the Benchmark Regulation, pursuant to Appendix 2, Section 9 (*Data Submission and Internal Controls over Data Collection*) of the Governance Policy Summary). The review will include the following checks:

(i) Whether the current Input Data used is still appropriate and suitable to achieve the objective of the Index.

For example:

- (a) if the objective is to track the returns of certain futures, are those futures as listed on the particular exchange chosen still appropriate (or would other instruments, exchanges be more appropriate)?;
- (b) *if the objective is to roll tom/next position in USD/JPY, is it still appropriate to use the particular FX fixing rates of forward FX rates being used?*

(ii) Whether the Input Data from the selected price source(s) (as per the Methodology) still reflects the market or economic reality that the Index is intended to measure, as per its objective.

For example:

- (a) does the page for "Z**Index" of a certain data vendor still provide prices for the relevant futures?;
- (b) does the page for "USDJPY Currency" of a certain data vendor still provide USDJPY spot FX rate?



(iii) Whether the price source(s) is still in operation and is expected to operate for the foreseeable future.

For example:

- (a) if there is going to be a replacement page on a certain data vendor for the same data point (which constitutes Input Data), this test should identify this change at the level of the price source and ultimately result in a change in the price source.
- (b) if there is going to be a discontinuation of an instrument, the price of which makes up the Input Data (e.g. a commodity exchange may cease listing of leaded fuel), the Methodology and/or objective of the relevant Index may need to be updated accordingly.

(iv) Whether there are disruptions and/or logistical problems in obtaining the Input Data from the current price sources.

For example:

(a) *if an economic survey provided by the relevant body cannot be captured reliably.*

The Index Administrator considers that Input Data will meet the requirements set out in the Methodology relating to the currency, tenor and unit of measurement, where these metrics are implicit in the selection of the price source at the time of the design of the Index (for example, the selection of a 10-year US Treasury Future price source from Bloomberg will ensure that the prices obtained will be quoted in USD for a 10-year US Treasury underlying rather than other bonds with different tenors quoted in non-USD currencies).

The Index Administrator does not consider it relevant to independently check whether the Input Data meets the requirements relating to types of counterparties, as no prices or values are currently sourced from bilateral transactions entered into by the Firm (instead, the Indices are calculated using specific price source pages).

All appropriate information (including issues which may necessitate changes in the design of the Index or the Methodology) will be submitted by Structuring to the Index Committee.

If the Index Committee considers that the Input Data is no longer sufficient to represent accurately and reliably the Market or Economic Reality that the Index is intended to measure, or is not otherwise appropriate, the Index Administrator will, as soon as reasonably practicable, and as may be appropriate in the circumstances, either:

- (i) change the Input Data;
- (ii) change the Methodology; or
- (iii) if the Input Data is based on Submissions/Contributors from Submitters/Contributors, change the Submitters/Contributors.



In each case, following the process outlined in Appendix 2, Section 15 (*Changes to Methodology*) of the Governance Policy Summary. If the Index Administrator is unable to make the relevant changes, the Index Committee shall determine to cease producing the Index as soon as reasonably practicable.

2.7 Annual Review

Separately, the Index Committee will also conduct an annual review of each Index administered by the Index Administrator in or around the month of March each year. This review will cover the previous 12-month period. As part of this annual review, Structuring will further identify and record the names and certain other details of each person involved in making an Index determination in the preceding 12-month period. All appropriate information (including in relation to Index performance and issues which may necessitate changes in the design of the Index or the Methodology) will be submitted by Structuring to the Index Committee. Where the outcome of a review requires a change to be made to an Index Methodology, the process outlined in Appendix 2, Section 15 (*Changes to Methodology*) of the Governance Policy Summary will be followed.



Definitions

Term	Definition
Administration	Includes all stages and processes involved in the production and dissemination of an Index, including:
	a) collecting, analysing and/or processing information or expressions of opinion for the purposes of the determination of an Index;
	b) determining an Index through the application of a formula or another method of calculating the information or expressions of opinions provided for that purpose; and
	c) dissemination to users, including any review, adjustment and modification to this process.
Administrator	 An organisation or legal person that controls the creation and operation of the Index Administration process, whether or not it owns the intellectual property relating to the Index. In particular, it has responsibility for all stages of the Index Administration process, including: (a) the calculation of the Index;
	(b) determining and applying the Index Methodology; and
	(c) disseminating the Index.
AUM	Assets under management.
Benchmark Regulation	Means 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).
Benchmark Regulation Index	Means any indices which fall into the definition of a "Benchmark" under the Benchmark Regulation. This means any index by reference to which the amount payable under a Financial Instrument or a Financial Contract, or the value of a Financial Instrument, is determined, or an index that is used to measure the performance of an Investment Fund with the purpose of tracking the return of such index or of defining the asset allocation of a portfolio or of computing the performance fees. For the purposes of this definition, an "index" means any figure:
	(a) that is published or made available to the public;
	(b) that is regularly determined:
	(i) entirely or partially by the application of a formula or any other method of calculation, or by an assessment; and
	 (ii) on the basis of the value of one or more underlying assets or prices, including estimated prices, actual or estimated interest rates, quotes and committed quotes, or other values or

Term	Definition
	surveys.
Calculation Agent Critical Benchmark	A legal entity with delegated responsibility for determining an Index through the application of a formula or other method of calculating the information or expressions of opinion provided for that purpose, in accordance with the Methodology set out by the Administrator. Means a Benchmark Regulation Index in respect of which one of the following conditions is fulfilled:
Denemiark	 (a) the Benchmark Regulation Index is used directly or indirectly within a combination of Benchmark Regulation Indices as a reference for Financial Instruments or Financial Contracts or for measuring the performance of Investment Funds, having a total value of at least EUR 500 billion on the basis of all the range of maturities or tenors of the Index, where applicable;
	(b) the Benchmark Regulation Index is based on submissions by Contributors the majority of which are located in one Member State and is recognised as being critical in that Member State in accordance with the procedure laid down in paragraphs 2, 3, 4 and 5 of Article 20 of the Benchmark Regulation;
	(c) the Benchmark Regulation Index fulfils all of the following criteria:
	(iii) it is used directly or indirectly within a combination of Benchmark Regulation Indices as a reference for Financial Instruments or Financial Contracts or for measuring the performance of Investment Funds having a total value of at least EUR 400 billion on the basis of all the range of maturities or tenors of the benchmark, where applicable, but not exceeding the value provided for in point (a);
	(iv) it has no, or very few, appropriate market-led substitutes;
	(v) in the event that the Benchmark Regulation Index ceases to be provided, or is provided on the basis of input data no longer fully representative of the underlying Market or Economic Reality or on the basis of unreliable Input Data, there would be significant and adverse impacts on market integrity, financial stability, consumers, the real economy, or the financing of households and businesses in one or more EU Member States.
Financial Contract	Means: (a) any credit agreement as defined in point (c) of Article 3 of Directive 2008/48/EC; and (b) any credit agreement as defined in point (3) of Article 4 of Directive 2014/17/EU.
Financial	Means any of the instruments listed in Section C of Annex I to Directive

Term	Definition
Instrument	2014/65/EU:
	(a) Transferable securities;
	(b) Money-market instruments;
	(c) Units in collective investment undertakings;
	(d) Options, futures, swaps, forward rate agreements and any other derivative contracts relating to securities, currencies, interest rates or yields, or other derivatives instruments, financial indices or financial measures which may be settled physically or in cash;
	(e) Options, futures, swaps, forward rate agreements and any other derivative contracts relating to commodities that must be settled in cash or may be settled in cash at the option of one of the parties (otherwise than by reason of a default or other termination event);
	 (f) Options, futures, swaps, and any other derivative contract relating to commodities that can be physically settled, provided that they are traded on a regulated market and/or an MTF;
	(g) Options, futures, swaps, forwards and any other derivative contracts relating to commodities, that can be physically settled not otherwise mentioned in C.6 and not being for commercial purposes, which have the characteristics of other derivative financial instruments, having regard to whether, <i>inter alia</i> , they are cleared and settled through recognised clearing houses or are subject to regular margin calls;
	(h) Derivative instruments for the transfer of credit risk;
	(i) Financial contracts for differences;
	(j) Options, futures, swaps, forward rate agreements and any other derivative contracts relating to climatic variables, freight rates, emission allowances or inflation rates or other official economic statistics that must be settled in cash or may be settled in cash at the option of one of the parties (otherwise than by reason of a default or other termination event), as well as any other derivative contracts relating to assets, rights, obligations, indices and measures not otherwise mentioned in this section, which have the characteristics of other derivative financial instruments, having regard to whether, <i>inter alia</i> , they are traded on a regulated market or an MTF, are cleared and settled through recognised clearing houses or are subject to regular margin calls,
	for which a request for admission to trading on a trading venue, as defined in point (24) of Article 4(1) of Directive 2014/65/EU, has been made or which is traded on a trading venue as defined in point (24) of Article 4(1) of Directive 2014/65/EU or via a systematic internaliser as defined in point (20) of Article

Term	Definition
	4(1) of that Directive.
Firm	Nomura International plc (and any successor).
Governance Policy	The Firm's Indices Governance Policy and Control Framework (as replaced, modified or supplemented from time to time).
Index	 With the exception of Legacy Indices which are excluded from this definition, Index is defined in line with the definition of "Benchmark" used in the Principles as prices, estimates, rates, indices or values that are: (a) made available to users, whether free of charge or for payment; (a) calculated periodically, entirely or partially by the application of a formula or another method of calculation to, or assessment of, the value of one or more underlying interests; (b) used for reference for purposes that include one or more of the following: (i) determining the interest payable, or other sums due, under loan agreements or under other financial contracts or instruments; (ii) determining the price at which a financial instrument may be bought or sold or traded or redeemed, or the value of a financial instrument; and/or (iii) measuring the performance of a financial instrument.
Index Administrator	The Firm in its capacity as Administrator.
Index Committee	Is the governance committee described in Appendix 3 of the Governance Policy Summary (including any successor committee).
Input Data	Means the data in respect of the value of one or more underlying assets, or prices, including estimated prices, quotes, committed quotes or other values, used by an administrator to determine an Index. Input Data may include data from Regulated Markets or Trading Venues with mandatory post-trade transparency requirements.
Investment Fund	Means an AIF as defined in point (a) of Article 4(1) of Directive 2011/61/EU, or a UCITS as defined in Article 1(2) of Directive 2009/65/EC.
IOSCO	Means the International Organisation of Securities Commissions (or any successor organisation).
IOSCO Principles	The Principles for Financial Benchmarks published by IOSCO on 17 July 2013.
Legacy Indices	Existing legacy indices, which are no longer marketed, and which fall within

Term	Definition
	the definition of an Index, but not within the definition of a Benchmark Regulation Index.
Market or Economic Reality	Refers to any physical commodity, currency or other tangible goods, intangibles (such as an equity security, bond, futures contract, swap or option, interest rates, another Index, including Indices that track the performance of a rule based trading strategy or the volatility of a Financial Instrument or another Index), any Financial Instrument on an economic interest, which is intended to be measured by an Index, and in all cases includes the market for such interest and the broader real economic activities pertaining to the relevant market.
Methodology	The written rules and procedures according to which information is collected and the Index is determined.
MTF	Means a multilateral system, operated by an investment firm or a market operator, which brings together multiple third-party buying and selling interests in financial instruments – in the system and in accordance with non-discretionary rules – in a way that results in a contract in accordance with Title II of MiFID II.
Non-Significant Benchmark	Means Benchmark Regulation Indices which are not a Critical Benchmark or a Significant Benchmark under the Benchmark Regulation.
Regulated Market or Trading Venue	Means a market or exchange that is regulated and/or supervised by a Regulatory Authority;
Regulatory Authority	Means a governmental or statutory body (not being a Self-Regulatory Organisation) with responsibility for securities and/or commodities and futures regulation.
Self-Regulatory Organisation	Means an organisation that has been given the power or responsibility to regulate itself, whose rules are subject to meaningful sanctions regarding any part of the securities market or industry. This authority may be derived from a statutory delegation of power to a non-governmental entity or through a contract between a Self-Regulatory Organisation and its members as is authorised or recognised by the governmental regulator.
Significant Benchmark	Means a Benchmark Regulation Index which does not fulfil any of the conditions for a "Critical Benchmark" and when:
	(a) it is used directly or indirectly within a combination of Benchmark Regulation Indices as a reference for Financial Instruments or Financial Contracts or for measuring the performance of Investments Funds having a total average value of at least EUR 50 billion on the basis of all the range of maturities or tenors of the Benchmark Regulation Index, where applicable, over a period of six months; or
	(b) it has no or very few appropriate market-led substitutes and, in the

Term	Definition
	event that the Benchmark Regulation Index ceases to be provided or is provided on the basis of Input Data no longer fully representative of the underlying Market or Economic Reality or unreliable Input Data, there would be a significant and adverse impact on market integrity, financial stability, consumers, the real economy or the financing of households or businesses in one or more Member States.
Structuring	The structuring team (in the UK as applicable or, in Asia/Mumbai, a combination of Structuring and Quantitative Strategies teams) which is responsible for the design, determination, and maintenance of Indices and which overall supports the Index Administration business.
Submission(s)/ Contribution(s)	(a) For the purposes of the Principles only, prices, estimates, values, rates or other information that is provided by a Submitter to an Administrator for the purposes of determining an Index. This excludes data sourced from Regulated Markets or Trading Venues with mandatory post-trade transparency requirements; and (b) for the purposes of the Benchmark Regulation and applicable to Benchmark Regulation Indices only, providing any Input Data not readily available to the Administrator, or to another person for purposes of passing to the Administrator, that is required in connection with the determination of an Index, and is provided for that purpose.
Submitter/Cont ributor	A legal person providing information to an Administrator or Calculation Agent required in connection with the determination of an Index, in particular any information provided as part of a Submission/Contribution of Input Data.