

INDEX CALCULATION POLICY

September 30, 2019

**Nomura Securities Co., Ltd.
Global Research Division,
Financial Engineering & Technology Research Center
Index Operations Dept.**

INTRODUCTION

Nomura Securities Co., Ltd. (NSC) recognizes that when there is a material change in methodology for the index calculation or a cessation of index, which after all is a core piece of financial infrastructure, there can also be a large impact on financial markets. The Index Operations Dept. (IOD: administrator of NSC's indices) has set out procedures and processes governing situations in which it is deemed necessary and appropriate to make a material change to methodology for index, implement a cessation of index, or take any other such action. In addition, Index Governance Board (IGB) oversees IOD. Please see the "Index Governance Framework" on the website, as for the division of the roles played by IOD and IGB.

The index rule books take precedence if there is any inconsistency between the index rule books and this policy.

CALCULATION OF INDICES

For the index methodology, please see the index rule books for each index on the website.

<http://qr.nomura.co.jp/jp/index.html> (Japanese)

<http://qr.nomuraholdings.com/en/index.html> (English)

<Nomura Japan Fixed Income Index Series>

- NOMURA-BPI
- NOMURA-BPI/Extended
- NOMURA-BPI/Ladder
- NOMURA J-TIPS Index

<Russell/Nomura Japan Equity Index Series>

- Russell/Nomura Japan Index

<Nomura Thematic Equity Index Series>

- Russell/Nomura Fundamental Prime Index
- Nomura Japan Equity High Dividend 70
- Nomura Japan Equity High Dividend 70, Net Total Return US Dollar Hedged Index
- Nomura Japan Equity High Dividend 70, Total Dividend Weighted
- Nomura JP Consecutively incr. Dividend Stock
- Nomura Enterprise Value Allocation Index
- Nomura Japan Equity TOP400 Ex-Financials Index
- Nomura AI Companies 70
- Nomura Robot Companies 70

- Nomura Japan Equity Beta Select Indices
- Nomura Agribusiness Index
- Nomura High-yield J-REIT Index • Nomura Japan Equity Growth Potential Index
- Nomura Shareholder Yield 70

<Nomura Customized Index Series>

Nomura Customized Index Series information is available only to those clients who are authorized based on contractual agreements and those information are presented via the most suitable media based on the contract with the clients.

INPUT DATA

Input data used for index calculation are as follows.

Equity

Input data	Vendor	Source	Details
Nomura composite share price	Nomura Research Institute, Ltd.	Japan Exchange Group (the First Section of the Tokyo Stock Exchange, the Second Section of the Tokyo Stock Exchange, Mothers, JASDAQ, TOKYO PRO Market), Nagoya Stock Exchange, Sapporo Securities Exchange, and Fukuoka Stock Exchange	<p>The Nomura composite share price is the share price on the stock exchange selected for each stock on the basis of trading frequency and volume over the preceding 60 business days. As a general rule, the exchange is selected on a daily basis. The share price is selected according to the following order of precedence:</p> <p>Contract price on selected exchange (see note) > standard price on selected exchange > Nomura composite share price on previous business day</p> <p>Note: priority is given to the special quotation price or continuous confirmed quotation price on selected exchange if these are available.</p>
Number of shares outstanding for index calculation purposes	Nomura Research Institute, Ltd.	Japan Exchange Group (The First Section of the Tokyo Stock Exchange, The Second Section of the Tokyo Stock Exchange, Mothers, JASDAQ, TOKYO PRO Market), Nagoya Stock Exchange, Sapporo Securities Exchange, and Fukuoka Stock Exchange	Changes in the number of shares are reflected pursuant to the index rules according to the timing of changes in the capital structure of a component stock based on reports on corporate action of listed companies.
Exchange Rate (Bank of Japan)	Nomura Research Institute, Ltd.	Bank of Japan	Closing price for spot rate of the foreign exchange rate (telegraphic transfer middle rate as of 5pm (JST)) published by the Bank of Japan.

Input data	Vendor	Source	Details
Exchange Rate (WM/Reuters)	Nomura Research Institute, Ltd.	Refinitiv Benchmark Services Limited	Closing price for spot rate and one month forward rate of the foreign exchange rate (telegraphic transfer middle rates as of 4pm (GMT)) published by Refinitiv Benchmark Services Limited. In case where the exchange rate is not available, the previous date value is used for the calculation.
Actual dividend	Nomura Research Institute, Ltd.	Companies' filings	-
Dividend forecasts published by the companies	Nomura Research Institute, Ltd.	Companies' filings	-
Dividend forecasts by Toyo Keizai Inc.,	Nomura Research Institute, Ltd.	Toyo Keizai Inc.,	In case where dividend forecasts published by the companies are not available, Toyo Keizai's dividend forecasts is used.
Tax rate imposed on dividend income	-	National Tax Agency	Tax rate used for the calculation is determined by Nomura Securities Co., Ltd. based on the source information. Reviews are conducted quarterly.
Change in capital structure	Nomura Research Institute, Ltd.	Japan Exchange Group (The First Section of the Tokyo Stock Exchange, The Second Section of the Tokyo Stock Exchange, Mothers, JASDAQ, TOKYO PRO Market), Nagoya Stock Exchange, Sapporo Securities Exchange, and Fukuoka Stock Exchange	Changes in capital structure is reflected pursuant to the index rules according to the timing of changes in the capital structure of a component stock based on reports on corporate action of listed companies.

Fixed Income

Input data	Vendor	Source	Details
Instrument characteristics	Nomura Research Institute, Ltd.	Ministry of Finance, Issuers, Financial Services Agency(FSA), Japan Securities Dealers Association (JSDA), and Japan Securities Depository Center, Inc. (JASDEC)	Instrument characteristics (e.g. outstanding amount, interest payment date, maturity date and coupon rate) are used for judgements related to portfolio inclusion and calculation of index values.
Factors and loan information of the JHF RMBS	Nomura Research Institute, Ltd.	Japan Housing Finance Agency (JHF)	Updated factors and loan information corresponding to the RMBS that the JHF publishes are used for the calculation of the monthly partial redemption amount.
JS Price	Nomura Research Institute, Ltd.	Nikkei Inc., Nikkei Financial Technology Research Institute, Inc., Nomura Research Institute, Ltd., and Nomura Securities Co., Ltd.	JS Price represents Japanese bond fair values and is established and managed by NSC and three external third-parties, Nikkei Inc., Nikkei Financial Technology Research Institute, Inc., and Nomura Research Institute, Ltd.. JS Price is determined based on prices from NSC's Global Markets Division, validated under the methodology and process established by the four parties.
Nomura Price	Nomura Research Institute, Ltd.	Global Markets Division of Nomura Securities Co., Ltd.	The Nomura price is a substitute price for bonds that are not priced based on JS Price. Nomura Price is provided by NSC dealers on the front office trading desk in the Global Markets Division as an end-of-day bond price.
Tokyo Repo Rate	Nomura Research Institute, Ltd.	Japan Securities Dealers Association	The Tokyo Repo Rate is used as a risk-free rate to calculate traded-day (T+0) price of NOMURA J-TIPS Index from the settlement price.
Consumer Price Index (CPI)	Nomura Research Institute, Ltd.	Ministry of Internal Affairs and Communications	The CPI is used to calculate the inflation-adjusted (nominal) price for the NOMURA J-TIPS Index. The inflation-adjusted price is used for calculating the value of total investment return index.

ROLES REGARDING COLLECTION OF INPUT DATA, CALCULATION, AND DISTRIBUTION

- The NSC's indices (with the exception of "Nomura Japan Equity High Dividend 70, Net Total Return US Dollar Hedged Index") are calculated using the system owned by Nomura Research Institute, Ltd. (NRI).
- NSC outsources the calculation of "Nomura Japan Equity High Dividend 70, Net Total Return US Dollar Hedged Index" to ICE Data Indices.
- Russell/Nomura Japan Equity Index Series and Nomura Japan Fixed Income Index Series are distributed via the system owned by NRI.
- Nomura Thematic Equity Index Series are distributed by NSC.
- For roles relating to collection of inputs, please see tables in "INPUT DATA" above.

PROCESS – RESPONSES TO ERROR OR DISASTER

- NSC reserves the right to delay or suspend the publication of an index, if any of the following occurs;
 - System trouble at NSC or third-parties outsourced for the NSC's index calculation
 - System trouble at data sources whose data are used for the index calculation
 - War, natural disasters, or other force majeure events
 - Other unavoidable circumstances
- In cases where the index publication is delayed or suspended, NSC announces on the website, except in cases where an unpredictable event keeps NSC from being able to disclose the information on the website.
- Recalculations may be necessary when there are delays or suspensions of indices; please see "PROCESS – RECALCULATION" below for details.

PROCESS - RECALCULATION

- NSC reserves the right to recalculate or amend the index values, if any of the following occurs;
 - An index calculation has been conducted improperly
 - Any other circumstances in which NSC determines that an index recalculation is necessary
- In terms of the data for recalculation, NSC uses the most suitable figures depending on a particular situation.
- NSC recalculates or amends the index values in cooperation with the third-parties in accordance with the contingency plan based on the agreement. In the circumstances in

which NSC determines that an index calculation is conducted improperly (such as errors) or due to other reasons, the Head of IOD approves recalculations or amendments, and IOD reports to IGB. In the absence of Head of IOD, an appropriate person in charge approves them.

- Index values after recalculation are required to be double-checked.
- Recalculation announcements are to be posted on the website.

PROCESS - CHANGES TO METHODOLOGY

- NSC reserves the right to change its calculation methodologies, if any of the following occurs;
 - A change to calculation methodology is determined to be necessary as a result of periodic review.
 - Structural changes in the market make a change to methodology necessary (such as regulation revision).
 - A user request or complaint makes a change to methodology necessary.
 - Any other circumstances in which NSC determines that a change to methodology is necessary.
- NSC examines changes to methodology in consultation with internal and external stakeholders (e.g. business partner) and the third-parties outsourced for the index calculation.
- NSC defines changes to methodology that have significant impacts on index users such as significant changes of principles of index construction, design, or calculation as “material changes”.
- NSC determines whether or not a change to methodology corresponds to a material change. If it is determined a material change, NSC shall implement the procedures mentioned below.
- NSC solicits public comments on the website. For details, please see “PROCESS - CONSULTATION” below.
- Changes to methodology require the approval by Head of IOD and IGB.
- NSC announces Change to methodology on the website at least 30 days prior to the day of implementation of the change to methodology, including the details and circumstances of the change.
- In order to mitigate any market impact, as a general, the announcement is published on the website at around 16:00(JST), except in case of unforeseen circumstances or when information cannot be confirmed.

PROCESS - CESSATION

- NSC reserves the rights to implement the cessation of index if any of the followings occurs;
 - Cessation is determined to be necessary as a result of a periodic review.
 - When demand for an index decreases significantly such as the absence of users referencing the index.
 - When an index no longer provides an intended value due to the redemption of a financial product referencing the index or other reasons.
 - When the calculation of index becomes difficult due to the number of securities in the index constituent decreased significantly.
 - Any other circumstances where NSC determines that a cessation is necessary.
- NSC examines the possibility of cessation with internal and external stakeholders (e.g. business partner) and third-parties outsourced for the index calculation.
- NSC consults with index users in order to investigate the impact of the cessation and in order to seek a suitable alternative index. Where there are many index users and NSC can't directly consult with all index users, NSC solicits public comments for the cessation. For details, please see "PROCESS – CONSULTATION" below.
- NSC determines the cessation with the result of investigation through the process mentioned above.
- The cessation requires the approval by the Head of IOD and IGB.
- NSC announces the cessation on the website at least 30 days prior to the day of the cessation.
- In order to mitigate any market impact, as a general, the announcement is published on the website at around 16:00(JST), except in case of unforeseen circumstances or when information cannot be confirmed.
- When the cessation has significant impacts on index users, NSC seeks to inform an alternative index to the relevant users as the most appropriate index in respect to the objective, strategy, and universe, provided that NSC produces such an alternative index or that one is already in existence by other index providers.

PROCESS - CONSULTATION

- NSC solicits public comments on the website before any of the following is implemented;
 - A material change to methodology
 - A cessation of index, provided that NSC can't directly consult with all index users.
- Before NSC enters into public comment procedure, the Head of IOD and IGB approves the implementation and the details.
- NSC announces solicitation of public comments on the website and collects opinions to the subject through the public comment period.
- In general, the public comment period is set as 30 days or longer. If the period is less than 30 days, the reason needs to be published on the website.
- NSC makes stakeholders' summary comments and NSC's summary response accessible on the website around 30 days after the expiry of the public comment period except where confidentiality has been requested.

NOTE

- NSC conducts reviews at least annually with regard to the policy, the calculation methodologies, and other matters in order to assess whether a material change to the calculation methodologies is required or whether the value measured by the NSC's Indices has diminished or is not functioning due to structural changes in the markets. IOD reports the results of reviews to IGB.
- NSC should encourage users and stakeholders who have financial instruments that reference a benchmark to take steps to make sure to;
 - have a fallback option in case of material change to, or cessation of the referenced NSC's indices, and
 - be aware of the possibility that various factors, including external factors beyond the control of NSC, might necessitate material change to NSC's indices.
- NSC retains records with respect to policy actions and evidence for five years.
- NSC establishes systems for dealing with enquiries and/or complaints related to index calculation policies. For details, please see "COMPLAINTS HANDLING POLICY" on the website.

REVISION HISTORY

Revision date	Details
March 29, 2019	First edition
September 30, 2019	Change overall
	Add item for "PROCESS - CONSULTATION"
	Change the company name from "Financial Technology Research Institute Inc." to "Nikkei Financial Technology Research Institute, Inc."