

# **INDEX CALCULATION POLICY**

**February 1, 2023**

## **INTRODUCTION**

Nomura Fiduciary Research & Consulting Co., Ltd. (NFRC) recognizes that when there is a material change in methodology for an index calculation or a cessation of an index, which after all is a core piece of financial infrastructure, there can also be a large impact on financial markets. The Index Services Department (ISD: administrator of NFRC'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 an index, implement a cessation of an index, or take any other such action. In addition, NFRC established an oversight and governance structure concerning the indices managed by ISD. Please see the "Index Governance Framework" on our website for information on the division of the roles played by ISD and governance bodies in NFRC.

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

## **CALCULATION OF INDICES**

For index methodologies, please see the index rule books for each index on our 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
- Russell/Nomura Japan Index in foreign currencies on WM/Refinitiv exchange rate

### <Nomura Thematic Equity Index Series>

- 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 Japan Consecutively Increased Dividend Stock Index
- Nomura Enterprise Value Allocation 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 this information is presented via the most suitable media based on each client contract.

## FACTORS IN THE INDEX CALCULATION

Factors used for the index calculation are classified as "Input data" or "Other factors".

"Input data" means the data in respect of the value of one or more underlying assets or prices in index determination. Input data changes are taken into account by the methodology every time the value of the index is to be updated, as they reflect the changes in the underlying economic reality measured by the index. "Other factors" does not measure the underlying market or economic reality that the index intends to measure, but is the data that improve the reliability and representativeness of the index. Changing values of other factors are not taken into account in every computation of the index, but only in instances pre-determined by the methodology.

### <Input data>

#### **Equity**

Factors	Vendor	Source	Details
Nomura composite share price	Nomura Research Institute, Ltd.	Tokyo Stock Exchange (Prime Market, Standard Market, Growth Market, TOKYO PRO Market), Nagoya Stock Exchange, Sapporo Securities Exchange, and Fukuoka Stock Exchange	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:  Contract price on selected exchange (see note) > standard price on selected exchange > Nomura composite share price on previous business day  Note: priority is given to the special quotation price or continuous confirmed quotation price on selected exchange if these are available.
Exchange Rate (Bank of Japan)	Nomura Research Institute, Ltd.	Bank of Japan	Spot rate of the foreign exchange rate as of 5pm JST (the middle rate of the bid and offer rate).
Exchange Rate (WM/Refinitiv)	ICE Data Indices	Refinitiv Benchmark Services Limited	Spot rate and one month forward rate of the foreign exchange rate as of 4pm GMT (the middle rate of the bid and offer rate). Note: Used for "Nomura Japan Equity High Dividend 70, Net Total Return US Dollar Hedged Index"

Factors	Vendor	Source	Details
Exchange Rate (WM/Refinitiv)	Frank Russell Company	Refinitiv Benchmark Services Limited	Spot rate and one month forward rate/non-deliverable forward rate (NDF) of the foreign exchange rate as of 4pm GMT (the middle rate of the bid and offer rate). Note: Used for "Russell/Nomura Japan Index in foreign currencies on WM/Reuters exchange rate"

### **Fixed Income**

Factors	Vendor	Source	Details
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 Nomura Securities Co., Ltd.(NSC), Nikkei Inc., Nikkei Financial Technology Research Institute, Inc., and Nomura Research Institute, Ltd.
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 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.

<Other factors>

**Equity**

Factors	Vendor	Source	Details
Number of shares outstanding for index calculation purposes	Nomura Research Institute, Ltd.	Tokyo Stock Exchange (Prime Market, Standard Market, Growth Market, 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.
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 are used.
Tax rate imposed on dividend income	-	National Tax Agency	Tax rate used for the calculation is determined by NFRC based on the source information. Reviews are conducted quarterly.

Factors	Vendor	Source	Details
Change in capital structure	Nomura Research Institute, Ltd.	Tokyo Stock Exchange (Prime Market, Standard Market, Growth Market, 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**

Factors	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.
Pool factor and loan information of the JHF RMBS	Nomura Research Institute, Ltd.	Japan Housing Finance Agency (JHF)	Updated pool factor and loan information corresponding to the RMBS that the JHF publishes are used for the calculation of the monthly partial redemption amount.
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 RELATING TO COLLECTION OF FACTORS IN THE INDEX CALCULATION, CALCULATION, AND DISTRIBUTION**

Nomura Japan Fixed Income Index Series:

- The indices are calculated and distributed by Nomura Research Institute, Ltd. (NRI).

Russell/Nomura Japan Equity Index Series:

- The indices (excluding “Indices in foreign currencies on WM/Refinitiv exchange rate” and “Dividend tax adjusted indices”) are calculated and distributed by NRI.
- The indices in foreign currencies on WM/Refinitiv exchange rate are calculated and distributed by or on behalf of Frank Russell Company or its affiliate, agent, or partner.
- The dividend tax adjusted indices in JPY and USD based on the Bank of Japan’s exchange rate (“Dividend tax adjusted indices”) are calculated by NRI and distributed by NFRC.

Nomura Thematic Equity Index Series:

- The indices (excluding “Nomura Japan Equity High Dividend 70, Net Total Return US Dollar Hedged Index”) are calculated by NRI.
- NFRC outsources the calculation of “Nomura Japan Equity High Dividend 70, Net Total Return US Dollar Hedged Index” to ICE Data Indices.
- The indices are distributed by NFRC.

Nomura Customized Index Series:

- In the index rule book, NFRC stipulates the name and roles of third parties who participate in the index calculation and distribution.

Please refer to the table above for a collection of each factor in the index calculation.



## **PROCESS – RESPONSES TO ERROR OR DISASTER**

- NFRC reserves the right to delay or suspend the publication of an index, if any of the following occurs:
  - System trouble at NFRC or third parties outsourced for the NFRC’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, NFRC announces such on its website, except in cases where an unpredictable event keeps NFRC from being able to disclose the information on its website.
- Recalculations may be necessary when there are delays or suspensions of indices; please see “PROCESS – RECALCULATION” below for details.

## **PROCESS – RECALCULATION**

- NFRC 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 NFRC determines that an index recalculation is necessary
- In terms of the data for recalculation, NFRC uses the most suitable figures depending on each situation.
- NFRC recalculates or amends the index values in cooperation with the third parties in accordance with the contingency plan based on the agreement. In cases where the NFRC determines that an index calculation has been conducted improperly (such as errors) or due to other reasons, the Head of ISD approves recalculations or amendments, and ISD reports to the Director in charge of ISD. In the absence of the Head of ISD, an appropriate person in charge may undertake approvals.
- Index values after recalculation are required to be double-checked.
- Recalculation announcements are to be posted on the website.

## **PROCESS - CHANGES TO METHODOLOGY**

- NFRC 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 NFRC determines that a change to methodology is necessary
- NFRC examines changes to methodology in consultation with internal and external stakeholders (e.g., business partners) and the third parties outsourced for index calculation.
- NFRC 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”.
- NFRC determines whether or not a change to methodology corresponds to a material change. If it is determined a material change, NFRC shall implement the procedures mentioned below.
- NFRC solicits public comments on its website. For details, please see “PROCESS - CONSULTATION” below.
- Changes to methodology require approval by the Head of ISD and the Strategic Solutions Committee which is one of the governance bodies in NFRC.
- NFRC announces any change to methodology on its 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 rule, the announcement is published on the website at around 16:00 JST, except in cases of unforeseen circumstances or when information cannot be confirmed.

## **PROCESS – CESSATION**

- NFRC reserves the rights to implement the cessation of an index if any of the following occurs:
  - Cessation is determined to be necessary as a result of a periodic review
  - When demand for an index decreases significantly (e.g., an absence of users referencing the index)
  - When an index no longer provides intended value due to the redemption of a financial product referencing the index or other reasons
  - When the calculation of an index becomes difficult due to the number of securities in the index decreasing significantly
  - Any other circumstance where NFRC determines that a cessation is necessary
- NFRC examines the possibility of cessation with internal and external stakeholders (e.g., business partners) and third parties outsourced for the index calculation.
- NFRC asks index users for feedback on the impact of the cessation and/or a suitable alternative index selected by NFRC. Where there are many index users and NFRC cannot directly consult with all index users, NFRC solicits public comments. For details, please see “PROCESS – CONSULTATION” below.
- NFRC seeks to notify relevant users of appropriate alternative indices (in terms of objectives, strategy, and universe) in cases where the NFRC will produce such an alternative index or where one is already in existence (administered by NFRC or other index providers).
- Based on an investigation undertaken via the process described above, NFRC shall determine the cessation of the disputed index and suggest an alternate index which is deemed as a good substitute, with the sufficient period of time for its transition.
- The cessation requires approval by the Head of ISD and the Strategic Solutions Committee.
- NFRC announces the cessation on its website at least 30 days prior to the day of cessation.
- In order to mitigate any market impact, as a general rule, the announcement is published on the website at around 16:00 (JST), except in cases of unforeseen circumstances or when information cannot be confirmed.

## **PROCESS – CONSULTATION**

- NFRC solicits public comments on its website before any of the following is implemented:
  - A material change to methodology
  - A cessation of index, provided that NFRC cannot directly consult with all index users.
- Before NFRC enters into public comment procedure, the Head of ISD and the Strategic Solutions Committee must approve the implementation and details.
- NFRC announces solicitation of public comments on its website and collects opinions on 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 clearly stated on the website.
- NFRC makes stakeholders' summary comments and NFRC's summary response accessible on the website within 30 days after the expiry of the public comment period except where confidentiality has been requested.

## **NOTE**

- NFRC 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 NFRC's indices has diminished or is not functioning due to structural changes in the markets. ISD reports the results of reviews to the Director in charge of ISD.
- NFRC 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 NFRC's indices; and
  - be aware of the possibility that various elements, including external elements beyond the control of NFRC, might necessitate material changes to NFRC's indices.
- NFRC retains records with respect to policy actions and evidence for five years.
- NFRC 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	Revisions to overall text
	Add item for "PROCESS - CONSULTATION"
	Change the company name from "Financial Technology Research Institute Inc." to "Nikkei Financial Technology Research Institute, Inc."
March 30, 2020	Partial revision of "ROLES REGARDING COLLECTION OF INPUT DATA, CALCULATION, AND DISTRIBUTION" and "CESSATION"
October 16, 2020	Change the name from "INPUT DATA" to "FACTORS IN THE INDEX CALUCULATION"
	Change overall of "FACTORS IN THE INDEX CALUCULATION"
	Partial revision of "PROCESS – CONSULTATION"
February 1, 2023	Revisions to overall text due to the business succession.