

(Reference Translation)

Tokyo Stock Exchange  
Index Guidebook  
**(Tokyo Stock Exchange REIT Core Index)**

December 25, 2020 Version  
Tokyo Stock Exchange, Inc.

December 25, 2020 Version

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## Record of Changes

DATE	Changes
2018/3/2	• The first edition
2018/7/23	• Addition of a description about disclaimers
2020/3/31	• Revised the date for adjusting base market value following the shortening of stock settlement cycle to T+2
2020/6/30	• Revision to bring forward the date for minor adjustments related to ex-dividend
2020/12/25	• Clarification of the stock price used for calculation, etc.

## **Introduction**

- Tokyo Stock Exchange, Inc. (TSE) calculates and publishes the Tokyo Stock Exchange REIT Core Index (TSE REIT Core Index) in accordance with the methods described in this document. If an event not specified in this document occurs, or if TSE determines that it is difficult to use the methods described in this document, TSE may use an alternative method of index calculation as it deems appropriate.
- Copyright of this document is owned by TSE, and any copies, reprints, and reproductions of this document in whole or in part are prohibited without the prior approval of TSE. This document is prepared solely for the understanding of indices calculated and published by TSE and is not to be construed as a solicitation for trading any securities or related financial instruments. Information expressed in this document is subject to change without notice; and, in those cases, TSE undertakes no obligation to update any recipients of this document. TSE shall accept no liability or responsibility for any loss or damage arising from errors, delays, or termination of the calculation or publication of TSE REIT Core Index, changes to its calculation or publication method, the use of TSE REIT Core Index or all or any part of this document or other similar events.
- TSE calculates both price and total return versions of TSE REIT Core Index.

## **I. Outline of the Index**

- TSE REIT Core Index is selected from among constituents of TSE REIT Index based on the level of the free-float market capitalization and trading value as of the base date (trading value is from auction trading on TSE. The same shall apply hereinafter).
- Constituents and their weights are reviewed on the last business day of June. (annual rebalance)
- Constituent weights are reviewed on the last business day of December. (semi-annual rebalance)
- Base date for index calculation is February 23, 2018. Base value is 1,000.

## **II. Index Calculation**

### **1. Outline**

- TSE REIT Core Index is calculated by equal weighting. The index is denominated in points and is calculated to the second decimal place. (Values beyond the second decimal are rounded.)

## 2. Formula

$$\text{Index} = \frac{\text{CMMV}}{\text{BMV}} \times \text{Base Point}$$

CMMV = Current Modified Market Value

BMV = Base Market Value

\* Modified Market Value =

$\Sigma$  (Adjustment Factor for Each Constituent  $\times$  10,000  $\times$  Stock Price for Each Constituent)

## 3. Stock Price Used for Calculation

- The stock prices used for calculating and adjusting base market values for TSE REIT Core Index are prices from auction trading on TSE and are determined by the following order of priority:

(1) Special Quote or Sequential Trade Quote, (2) Contract Price, (3) Base Price for Index Calculation when neither (1) or (2) are available (determined in the following order: (1) Theoretical Ex-rights Price, (2) Most Recent Special Quote or Sequential Trade Quote on or before the previous trading day, (3) Most Recent Contract Price before the previous trading day)

## 4. Adjustment Factor

- The adjustment factors used for calculating an equal weight index are set between 0.00001 and 99999.99999 as follows:

### a. Annual Rebalance

- The adjustment factor for each constituent is calculated by using the last stock price used for calculation as of the last business day of May as follows:
- Adjustment Factor for Each Constituent = Fixed Value (\*)  $\div$  Last Stock Price Used for Calculation

\* The fixed value is 10 to the power of X (10<sup>X</sup>). TSE will determine the appropriate integer value for X based on the stock price level of the constituents.

### b. Semi-annual Rebalance

- The adjustment factor is calculated by using the last stock price used for calculation as of the last business day of November, as follows:
  - Adjustment Factor for Each Constituent = Fixed Value (\*) ÷ Last Stock Price Used for Calculation
- \* The fixed value is 10 to the power of X (10<sup>x</sup>). TSE will determine the appropriate integer value for X based on the stock price level of the constituents.

### **c. Other**

#### **i. Stock Split**

In the event that a stock split is conducted, the adjustment factor will be changed on the ex-rights date, which is set as the index adjustment date, as follows:

New Adjustment Factor = Adjustment Factor × Split Ratio

#### **ii. Rights Offering**

In the event that a public offering through gratis allotment of subscription warrants is conducted, the adjustment factor will be changed on the ex-rights date, which is set as the index adjustment date, as follows:

New Adjustment Factor = Adjustment Factor × (1 + Allotment Ratio)

#### **iii. Reverse Split**

In the event that a reverse split is conducted, the adjustment factor will be changed on the ex-rights date, which is set as the index adjustment date, as follows:

New Adjustment Factor = Adjustment Factor ÷ Reverse Split Ratio

#### **iv. Merger/Acquisition**

In a merger of REITs, the adjustment factor of the surviving REIT changes only in the event that the surviving REIT is a constituent of TSE REIT Core Index when any of the dissolving REIT(s) is a constituent of TSE REIT Core Index.

## **5. Constituent Selection**

### **(1) Annual Rebalance**

#### **a. Outline**

- In the annual rebalance to be conducted every June, constituents of TSE REIT Core Index shall be reviewed (inclusions and removals) by selecting from constituents of TSE REIT Index based on b. "Selection Criteria" as of the base date.
- The base date for rebalancing shall be the final business day of April. The list of inclusions/removals is published on the fifth business day of June, and index calculation applying such constituent change will begin on the last business day of June.

## **b. Selection Criteria**

The selection process will be conducted as follows:

- i. **Eligible Issues**  
Issues selected as constituents of TSE REIT Index as of the base date.  
However, issues designated as Securities to be Delisted are excluded from consideration.
- ii. **Liquidity Screening**  
Concerning trading value in the most recent year prior to the base date (for issues listed for less than one year, the trading value for the period from the listing date to the base date), issues in the top 97% by number of issues will be considered.
- iii. **Selection based on Free-float Market Capitalization**
  - Eligible issues that are currently constituents and are within the top 90% of the cumulative market capitalization of eligible issues will continue to be included as constituents.
  - Eligible issues that are not currently constituents and are within the top 70% of the cumulative market capitalization of eligible issues will be newly included as constituents.

For the initial selection of index constituents in June 2017, the constituents will be eligible issues that are within the top 80% of the cumulative market capitalization of eligible issues.

### **(2) Removal of Constituents in addition to the Annual Rebalance**

- Any constituent that is delisted or designated as Securities to be Delisted will be removed from TSE REIT Core Index.

### **(3) Inclusion of Constituents in addition to the Annual Rebalance**

- In the event that a constituent of TSE REIT Core Index is delisted due to a merger by creation of a new REIT and, moreover, the newly formed REIT is listed on the TSE without delay, if the delisted REIT was a constituent of TSE REIT Core Index, then TSE will add the new REIT to the index.
- In the event that a constituent of TSE REIT Core Index is delisted due to an absorption-type merger, and the surviving REIT is not a constituent of TSE REIT Core Index, then TSE will add the surviving REIT to the index.

### III. Adjustments to Base Market Value

Whenever the market value of the index changes due to an increase or decrease in constituent issues, capital raising, or similar events other than market fluctuations, the base market value for TSE REIT Core Index are adjusted as follows to maintain continuity.

#### 1. Events that Require Adjustment

##### (1) Inclusion or Removal of Constituents

	Event Requiring Adjustment	Adjustment Date *4	Stock Price Used for Adjustment
Inclusion	New listing of a newly formed REIT resulting from a merger that results in a TSE REIT Core Index constituent being delisted and the new REIT being included in TSE REIT Core Index	New listing date *1	Base price
	In the event a constituent of TSE REIT Core Index is delisted due to an absorption-type merger, in which stocks of the surviving REIT is not a constituent of TSE REIT Core Index	Delisting Date	Stock price on the business day before the delisting date
	Annual Rebalance	Last business day of June	Stock price on the business day before the adjustment date
Removal	Delisting	New listing of a newly formed REIT resulting from a merger that results in a TSE REIT Core Index constituent being delisted and the new REIT being included in TSE REIT Core Index	Stock price on the business day before the delisting date (*3)
		Delisting other than those stated above	Delisting Date
	Designation as Securities to be Delisted	Four business days after such a designation *4	Stock price on the business day before the adjustment date
	Annual Rebalance	Last business day of June	Stock price on the

	Event Requiring Adjustment	Adjustment Date *4	Stock Price Used for Adjustment
			business day before the adjustment date

\*1: Next business day when the new listing date falls on a holiday.

\*2: The stock price at the end of trading on the business day before the delisting date is used to calculate the index for the period from the delisting date to the removal date.

\*3: Next business day when the designation date falls on a holiday.

\*4: Adjustments to the base market value are made after the end of trading on the business day before the adjustment date (i.e., before the market opens on the adjustment date). The same shall apply hereinafter.

## (2) Corporate Action

Event Requiring Adjustment	Adjustment Date	Stock Price Used for Adjustment
Rights Offering	Ex-rights date	Payment price per share
Change of Adjustment Factor	Change date	Stock price on the business day before the adjustment date

\*Base market value (BMV) is not adjusted in the case of a stock split or reverse stock split as the decrease or increase in Adjustment Factor corresponds to the change in the number of listed shares, and the modified market capitalization remains unchanged.

## (3) Data Source

- Information on the reason for base market value adjustments, details on the adjustment, the adjustment date and other data is available through the “Sho-ho” (TSE Notice) published daily by TSE based on reports, etc. made by REIT. (Please refer to the “TSE Index Guidebook (TSE REIT Index, TSE REIT Property Sector Index Series)” for information on calculating FFW.)
- If a REIT revises the contents of a previously published report that resulted in an index adjustment, retroactive index adjustments will NOT be made based on the revised contents.

## 2. Adjustment Method

### (1) Indices that do not reflect dividends (i.e. price indices)

- Base market value will be adjusted according to the formula below in order to maintain the continuity of the index:

$$\frac{\text{Previous Business Day MMV}}{\text{Pre - Adjustment BMV}} = \frac{(\text{Previous Business Day MMV} \pm \text{Adjustment Amount})}{\text{New BMV (After Adjustment)}}$$

\*Adjustment Amount = Increase (Decrease) in Adjustment Factor Used for Index Calculation  $\times$  10,000  $\times$  Stock Price Used for Adjustment

Therefore,

$$\text{New BMV} = \frac{\text{Old BMV} \times (\text{Previous Business Day MMV} \pm \text{Adjustment Amount})}{\text{Previous Business Day MMV}}$$

MMV = Modified Market Value

BMV = Base Market Value

### (2) Total Return Index

- Dividends used in calculating the Total Return Index are gross (i.e. before tax).
- Since the dividend amount for the current period is not fixed as of the ex-dividend date, adjustments made to reflect dividends in the base market value are made in two stages: 1) adjustment using estimated dividends and 2) minor adjustments made to reflect differences in estimated dividend and dividend amount announced in the earnings report, etc.

#### a. Adjustments Using Estimated Dividends

- The total dividend amount for all constituents is calculated on ex-dividend dates using estimated dividends, and base market value is adjusted as above. In principle, the estimated dividend amount used is as follows:
  1. Dividend amount for the current period as announced in timely disclosure documents, if available
  2. Dividend amount for the previous period if the dividend for the current period is not fixed (e.g. the dividend is not announced in disclosure documents as (1) above,

or the amount is not determined, etc.)

- The base market value adjustment method is basically as described in the previous section, except an adjustment is made to reflect dividends as follows:

$$\text{New BMV} = \frac{\text{Old BMV} \times (\text{Previous Business Day MMV} - \text{Total Dividends} \pm \text{Adjustment Amount})}{\text{Previous Business Day MMV}}$$

MMV = Modified Market Value

BMV = Base Market Value

\* Dividends Per Constituent = Adjustment Factor for Index Calculation on Business Day Before Ex-Dividend Date  $\times$  10,000  $\times$  Estimated Dividend Per Share

\* Total Dividends = Sum of Dividends for All Constituents

\* Adjustment Amount = Increase (Decrease) in Adjustment Factor Used for Index Calculation  $\times$  10,000  $\times$  Stock Price Used for Adjustment

**b. Minor Adjustment Made to Reflect Difference Between Estimated Dividend and Dividend Announced in the Earnings Report, etc.**

- Minor adjustments are made with respect to those constituents for which the estimated dividend used on the ex-dividend date and the dividend announced in the earnings report or the notice of dividends of surplus (hereinafter the “earnings report, etc.”) are different. Specifically, the total dividend adjustment amount is calculated and the base market value adjustments are made on the last business day of the month in which the dividend is announced in the earnings report, etc. (hereinafter the “publication date”; if the publication date is one business day before the last business day of the month or the last business day of the month, adjustments will be as a general rule, made on the last business day of the next month).

$$\text{New BMV} = \frac{\text{Old BMV} \times (\text{Previous Business Day MMV} - \text{Total Dividend Adjustment} \pm \text{Adjustment Amount})}{\text{Previous Business Day MMV}}$$

MMV = Modified Market Value

BMV = Base Market Value

- \* Adjusted Dividend Per Constituent = Adjustment Factor for Index Calculation on Business Day Before Ex-Dividend Date  $\times$  10,000  $\times$  (Dividend Announced in Earnings Report, etc. - Estimated Dividend Per Share)
- \* Total Adjusted Dividends = Sum of Adjusted Dividends for All Constituents
- \* Adjustment Amount = Increase (Decrease) in Adjustment Factor for Index Calculation  $\times$  10,000  $\times$  Stock Price Used for Adjustment

#### **IV. Other**

##### **1. Publication/Dissemination of Index Data**

###### **(1) Index Values**

- Price return index value and total return index value of TSE REIT Core Index are calculated daily at market close.
- The retroactive calculation of the index value is not fully based on the rule in "TSE REIT Core Index Guidebook" completely.

###### **(2) Index Data**

- Index data relating to TSE REIT Core Index (base market value, Adjustment Factor for each constituent, etc.) is provided for a fee through the Index Data Service.

##### **2. Licensing**

- TSE reserves all calculation, publication, and other rights pertaining to TSE REIT Core Index. As such, commercial use of such indices in the composition and/or sale of financial products such as funds or linked bonds (including using the index as the basis for options, swaps, warrants, or other OTC derivatives) or provision of index data requires a license from TSE.

##### **3. Contact**

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