

(Reference Translation)

Tokyo Stock Exchange Index Guidebook

(Tokyo Stock Exchange Mothers Core Index)

June 30, 2020
Tokyo Stock Exchange, Inc.

Published June 30, 2020

DISCLAIMER: This translation may be used for reference purposes only. This English version is not an official translation of the original Japanese document. In cases where any differences occur between the English version and the original Japanese version, the Japanese version shall prevail. This translation is liability for damage or loss caused by any error, inaccuracy, misunderstanding, or changes with regard to this translation.

Contents

Record of Changes.....	3
Introduction.....	4
I. Tokyo Stock Exchange Mothers Core Index Overview	4
II. Index Calculation	4
1. Outline	4
2. Calculation Method	5
3. Stock Price Used for Calculation.....	5
4. Addition or Removal of Constituents	5
III. Adjustments Accompanying Corporate Action, etc.....	6
1. Events that Require Adjustment.....	6
2. Divisor Adjustment Method.....	7
IV. Miscellaneous.....	9
1. Publication/Dissemination of Index Data	9
2. Licensing	10
3. Contact	10

Record of Changes

DATE	Changes
2018/7/23	* First Edition
2019/8/30	* Modified an error
2020/3/31	* Modification of the “IV. Miscellaneous”
2020/6/30	Revision to bring forward the date for minor adjustments related to ex-dividend

Introduction

- Tokyo Stock Exchange, Inc. (TSE) calculates Tokyo Stock Exchange Mothers Core Index, as a general rule, 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 impossible to calculate the index using 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, reproductions, and reprints of this document in whole or in part are prohibited in any form without the prior approval of TSE. This document is prepared solely for the understanding of calculated and published by TSE and is not to be construed as a solicitation for trading any securities or related financial instruments, etc. TSE shall accept no liability or responsibility for any loss or damage arising from errors, delays, or termination of the calculation or publication of Tokyo Stock Exchange Mothers Core Index, changes to its calculation or publication method, the use of Tokyo Stock Exchange Mothers Core Index or all or any part of this document, or other similar events.
- TSE calculates both price return and total return versions of Tokyo Stock Exchange Mothers Core Index.

I. Tokyo Stock Exchange Mothers Core Index Overview

- Tokyo Stock Exchange Mothers Core Index is composed of issues selected by TSE from the constituents of TSE Mothers Index based on market capitalization criteria (free-float basis) and in consideration of factors such as liquidity, profits, and dividends. Information regarding profits and dividends will be taken from Securities Reports. The index is composed of 15 issues with December 30, 2010 as the base date used for selection. (There are times when the index may have fewer than 15 constituent issues due to delisting, etc.)
- The base date is October 7, 2011.
- The base value is 1,000 points.

II. Index Calculation

1. Outline

Tokyo Stock Exchange Mothers Core Index is calculated using adjusted stock price average. The index is denominated in points and is calculated to the second decimal place (values beyond the second decimal are rounded).

2. Calculation Method

$$\text{Index Value} = \frac{\sum (\text{Stock Price} \times \text{No. Of Index Listed Shares} \times \text{Coefficient}_t)}{\text{Divisor}} \times \text{Base Value}$$

$$\text{Coefficient}_t = \frac{\text{Adjusted Share Units}}{\text{No. Of Index Listed Shares}} \times 100,000$$

- The Adjusted Share Units are used in stock price adjustment and will, as a general rule, use trading units. They may be altered, however, in cases of stock-split or reverse stock-split, and values shall differ from trading units.

3. Stock Price Used for Calculation

- The stock prices used for calculating Tokyo Stock Exchange Mothers Core Index 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) 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 Price before the previous trading day.)

4. Addition or Removal of Constituents

- The addition or removal of constituents is, as a general rule, limited to the following cases and periodic review of constituents will not be conducted.

(1) Removal of Constituents

- When a constituent is to be transferred to the 1st or 2nd Section, or JASDAQ, such issue shall be included in calculations from the date of such transfer until the business day preceding the final business day of October during the following year and shall be removed on the final business day of October during such year.
- When a constituent will be delisted, such issue shall be removed on the delisting date. However, when a constituent is delisted due to stock transfer and the newly created company is newly listed, the newly created company shall be included in index calculations.
- When a constituent is designated as Security to Be Delisted, such issue will be removed after four business days following the day of such designation.

(2) Addition of Constituents

a. Outline

- If the number of constituents drops below 15 due to market section-transfer, delisting, etc., constituents shall be added on the final business day of October until the number of constituents reaches 15 based on the criteria for adding constituents in consideration of factors such as free-float market capitalization, liquidity, operating income, and dividends.
- Issues to be added shall be published on the fifth business day of October.
- The base date for additional issues shall be the last business day of August..

b. Criteria for Adding Constituents

The selection process shall be conducted as follows.

1 Eligible Issues

Issues selected as constituents of TSE Mothers Index as of the base date, excluding issues to be designated as Securities to be Delisted, delisted, and transferred to another market section (only from Mothers)

2 Selection Based on Free-float Market Capitalization

TSE ranks the issues in descending order of Free-float Market Capitalization on the base date and selects the issues that satisfy the following criteria.

- There was a surplus in operating income for the most recent fiscal year;
- It was a dividend payer in the most recent fiscal year (excluding issues expected to be non-dividend-payers for the next fiscal year); and,
- It does not have extremely low liquidity.

* Considering the level of free-float market capitalization and trading value, issues may be added even if there was a deficit in operating income or it was a non-dividend payer.

III. Adjustments Accompanying Corporate Action, etc.

- The divisor at the start of calculation shall be the total of the stock price of each constituent on the base date multiplied by the adjusted share units.

1. Events that Require Adjustment

Event Requiring Adjustment	Adjustment Date *2	Adjustment
Stock Split, Reverse Split, Gratis Allotment of Shares	Ex-Rights Date	Adjusted Share Unit

Event Requiring Adjustment	Adjustment Date *2	Adjustment
Stock Split, Reverse Split, Gratis Allotment of Shares	Ex-Rights Date	Adjusted Share Unit
Capital Increase with Paid-in Allotment	Ex-Rights Date	Divisor
Rights Offering (limited to case where the allotted subscription warrant securities are listed) *1	Ex-Rights Date	Divisor
Delisting with Designation as Securities to be Delisted	4 Business Days after Designation	Divisor
Delisting without Designation as Securities to be Delisted	Delisting Date	Divisor
Removal of Issue other than Delisting	Final Business Day of October	Divisor
Addition of Issue	Final Business Day of October	Divisor

*1: The number of shares for rights offering used for calculating the index will correspond to the number of shares to be allocated to shareholders. Cases where the allotted subscription warrant securities are not listed are treated as "Exercise of subscription warrants".

*2: Adjustments 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) Data Source

- Information on the reason for adjustments made to the divisor, details on the adjustment, the adjustment date, and other data is taken from the "Sho-ho" (TSE Notice) published daily by TSE based on reports and other information provided by listed companies.
- If a listed company 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. Divisor Adjustment Method

(1) Price Return Index

Adjustment Method

New Divisor

= Old Divisor \times (Σ (Previous Business Day's Constituent Stock Price \times Adjusted Share Unit) \pm Adjusted Amount / Σ (Previous Business Day's Constituent Stock Price \times Adjusted Share Unit

* Adjusted Amount = Increase (Decrease) in Adjusted Share Unit \times Stock Price used for Adjustment

(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 divisor 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 the divisor is adjusted as below. 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 divisor adjustment method is basically as described in the previous section, excepting an adjustment made to reflect dividends as follows:

New Divisor

= Old Divisor \times (Σ (Previous Business Day's Constituent Stock Price \times Adjusted Share Unit)
– Total Dividends \pm Adjusted Amount) / Σ (Previous Business Day's Constituent Stock Price \times Adjusted Share Unit

- * Dividends per Constituent = Adjusted Share Unit on Business Day Before Ex-Dividend Date × Estimated Dividend Per Share
- * Total Dividends = Sum of Dividends for All Constituents
- * Adjustment Amount = Increase (Decrease) in Adjusted Share Unit × 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 divisor 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).

New Divisor

$$= \text{Old Divisor} \times \frac{\sum(\text{Previous Business Day's Constituent Stock Price} \times \text{Adjusted Share Unit}) - \text{Total Dividend Adjustment} \pm \text{Adjusted Amount}}{\sum(\text{Previous Business Day's Constituent Stock Price} \times \text{Adjusted Share Unit})}$$

- * Adjusted Dividend per Constituent = Adjusted Share Unit on Business Day Before Ex-Dividend Date × (Dividend Announced in Earnings Report, etc. - Estimated Dividend Per Share)
- * Total Adjusted Dividends = Sum of Adjusted Dividends for All Constituents
- * Adjusted Amount = Increase (Decrease) in Adjusted Share Unit × Stock Price Used for Adjustment

IV. Miscellaneous

1. Publication/Dissemination of Index Data

(1) Index Values

- The Price Return Index values are disseminated in real-time (15-second intervals) through the Market Information System to securities companies, news media outlets,

and other institutions nationwide.

- The Total Return Index is calculated daily at market close.

(2) Index Data

- Index data relating to Tokyo Stock Exchange Mothers Core Index (divisor, etc.) is provided for a fee through the Index Data Service.

2. Licensing

TSE reserves all calculation, publication, and other rights pertaining to Tokyo Stock Exchange Mothers Core Index. As such, commercial use of Tokyo Stock Exchange Mothers Core Index 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

Information Services

Tokyo Stock Exchange, Inc.

email: index@jpx.co.jp