

(Reference Translation)

Free Float Weight Calculation Methodology

April 4, 2022
Tokyo Stock Exchange, Inc.

Published June 30, 2021

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 subject to change without notice. Tokyo Stock Exchange, Inc., Japan Exchange Group, Inc., Osaka Exchange, Inc., Japan Exchange Regulation and/or their affiliates shall individually or jointly accept no responsibility or liability for damage or loss caused by any error, inaccuracy, misunderstanding, or changes with regard to this translation.

Copyright © 2006- by Tokyo Stock Exchange, Inc. All rights reserved

Record of Changes

DATE	Changes
2022/4/4	<ul style="list-style-type: none"><li data-bbox="383 421 1292 548">- Added information on the change of free float weight calculation methodology and the transition plan for the methodology change in line with the restructuring on April 4, 2022.<li data-bbox="383 560 1292 642">- Clarified parts of (5) Estimation of non-free-float shares. These changes will become effective on June 30, 2021.

(1) Outline

Free-Float Weight (FFW) is the percentage of listed shares deemed to be available for trading in the market. TSE calculates a FFW for each listed company and uses this value in index calculation. The FFW of Company A may be different from that of Company B.

A FFW is calculated by first estimating the number of non-free-float shares (listed shares deemed not to be available for trading in the market) using published materials such as securities reports, etc. (including data prepared by TOYO KEIZAI INC. based on annual securities reports. The same applies hereinafter.) Next, the non-FFW (Non-free-float shares / total listed shares) is calculated, then the FFW is obtained by subtracting the non-free-float factor from 1 ($1 - \text{Non-FFW}$). FFW is expressed as a figure in the range of 0.00000 to 1.00000 in increments of 0.00001.

FFW is reviewed once a year in order to reflect the latest share ownership distribution. The timing of the FFW review varies depending on when earnings are announced. In addition to the periodic review, extraordinary reviews are conducted at TSE's discretion if FFW changes significantly due to events such as third-party allotment.

(2) Periodic Review

The announcement date and effective date of the periodic FFW review varies according to when listed companies announce earnings as below:

Settlement Term	Announcement Date	Effective Date*
January – March	Fifth business day of October	Last business day of October
April – June	Fifth business day of January	Last business day of January
July – September	Fifth business day of April	Last business day of April
October – December	Fifth business day of July	Last business day of July

* Adjustments will be made before markets open.

At the periodic review, FFW is rounded up to the nearest 0.05 as below after subtracting the non-FFW from 1 ($1 - \text{Non-FFW}$). However, companies with low liquidity described in (4) below will be multiplied by a fixed liquidity factor of 0.75 to derive the actual FFW used for calculation.

FFW for periodic review

1 – Non FFW	≤ 0.05	≤ 0.10	≤ 0.15	≤ 0.20	≤ 0.25	≤ 0.30	≤ 0.35	≤ 0.40	≤ 0.45
FFW	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45

≤ 0.50	≤ 0.55	≤ 0.60	≤ 0.65	≤ 0.70	≤ 0.75	≤ 0.80	≤ 0.85	≤ 0.90	≤ 0.95	≤ 1.00
0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00

(3) Extraordinary Review

TSE may review FFW in the following cases where it deems that the existing FFW is expected to be significantly affected.

Third-party allotment, conversion of preferred shares or exercise of subscription warrants, demerger, merger/stock swap, take-over bid (TOB) and other events deemed applicable by TSE.

(4) Adjustment for companies with low liquidity in comparison to market capitalization

With this principle in mind, a fixed liquidity factor (0.75) is applied to the FFW derived from securities reports and other public documents for TOPIX constituents with low liquidity based on past trading compared to market capitalization, and this is reflected in the FFW used to calculate TOPIX, etc. Refer to the Index Guidebook for each index for whether the factor applies.

The companies to which the liquidity factor is applied are reviewed every April and the base date for the review is the last day of February. A list of the companies to which the liquidity factor is applied is published on the fifth business day of April and the liquidity factor is applied to the relevant constituents beginning on the last business day of April. For companies newly included in TOPIX between March 1 and the end of February of the following year due to a new listing or market transfer, etc., the liquidity factor will be applied until the next periodic review in April. However, in the case of a new listing due to a stock transfer etc., if a liquidity factor is applied to the prior company (the substantial surviving company if there are two or more companies involved), a liquidity factor will also be applied to the newly listed company.

For example, a company newly listed in February 2009 and included in TOPIX at the end of March 2009 will have the fixed liquidity factor (0.75) applied to the FFW obtained based on

securities reports and other publicly available documents until April 2010. At the next periodic review in April 2010, the company will be reviewed for liquidity factor application along with all other constituents.

(5) Estimation of non-free-float shares

a. Information sources

Published materials such as securities reports, etc..

b. Estimation of non-free-float shares

TSE considers the following to be non-free-float shares:

Shares held by the top 10 major shareholders, treasury and other similar stock (including “Cross-Shareholdings” (shares with limited voting rights as specified in Article 308 (1) of the Companies Act)), shares held by board members and other representatives, shares held by other listed companies for investment purposes other than pure investment (hereinafter “Specified Equity Securities”), and other shares deemed by TSE to be unavailable for trading in the market.

- TSE may treat shares held by the top 10 major shareholders as free-float shares as set out in the below table (the list is not exclusive).
- Securities deemed to be held ("minashi-hoyū-kabushiki", i.e. those where the holder has voting rights without ownership rights) will not be included in the estimation of non-free-float shares.

Examples of free-float shares:

Condition	Major shareholder
Shares considered as free-float as a general rule	Securities finance companies, securities depositories, nominees for depository receipts
Shares likely to be deemed as free-float: Cases where any of the following conditions are met and TSE deems it appropriate to consider* such shares as free-float.	Trust banks, master trusts, global custodians, insurance companies, securities companies, etc.

<ul style="list-style-type: none"> - There are descriptions in the Securities Report on the type of trust, the purpose of purchase of shares, etc. - It is clear that shares are held by several beneficiaries and managed centrally - It is clear that shares are held for margin transactions 	
--	--

* There are cases where the need to restrain extreme movements in FFW may be taken into account.

(6) Other

a. Transition to the new FFW in line with the restructuring on April 4, 2022

The schedule for transition to FFW based on the new calculation methodology (Specified Equity Securities will be newly designated as non-free-float shares when calculating the FFW) is as below.

Transition stage	Announcement date	Implementation date*
1 st	April 7, 2022	April 28, 2022
2 nd	Same as above	May 31, 2022
3 rd	Same as above	June 30, 2022

* Adjustments will be made before markets open.

In addition, the transition will be carried out as follows.

- For stocks whose free-float weight based on the current calculation methodology minus the free-float weight based on the new calculation methodology exceeds 0.1, the upper limit of the fluctuation during the transition period will be set to 0.1.
- The same upper limit will be applied to post-transition periodic reviews of the free-float weight, which will be carried out according to the fiscal year end of each company after July 2022.

b. Exemption of liability

In the case of any error in index calculation, a computer malfunction, natural disasters or any other unavoidable circumstances, TSE may postpone or cancel the calculation of the indices. TSE shall not, under any circumstances, guarantee the accuracy of the indices and calculation based on this document. Should any error occur in index calculation and calculation based on this document, TSE shall not be liable for any damages incurred by any person or organization.

(7) Contact

Tokyo Stock Exchange, Inc. Information Services, Index Group

Email: index@jpx.co.jp