

Float Adjustment Methodology

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Introduction

Most of Asia Index Private Limited (AIPL)'s market capitalization-weighted indices are float-adjusted. Under float adjustment, the share counts used in calculating the indices reflect only those shares available to investors rather than a company's total outstanding shares. Float adjustment excludes shares that are held by other publicly traded companies, government agencies, or certain types of strategic shareholders.

With a float-adjusted index, the value of each constituent reflects the value estimated to be available to investors in the public markets. Reducing the relative investment index investors have in stocks with limited float should enhance the investability of the index.

Index Family

The float adjustment rules described here apply to the all BSE family of indices.

Float adjustment does not apply to non-market capitalization weighted indices such as equal weighting, factor weighting, price weighting, or other alternative weighting schemes.

Please refer to individual index methodologies for information that may not be contained in this document.

Supporting Documents

This methodology is meant to be read in conjunction with supporting documents providing greater detail with respect to the policies, procedures and calculations described herein. References throughout the methodology direct the reader to the relevant supporting document for further information on a specific topic. The list of the main supplemental documents for this methodology and the hyperlinks to those documents is as follows:

Supporting Document	URL
AIPL's Equity Index Policy Methodology	Equity Index Policy

Float Adjustment Rules

The goal of float adjustment is to adjust each company's total shares outstanding for long-term, strategic shareholders, whose holdings are not considered to be available to the market. Note that shareholders are not judged individually based on their intentions. Rather, shareholders are grouped into different types, and based on that type, are either included or excluded from float. Long-term strategic shareholders often have interests such as maintaining control rather than securing the shorter-term economic fortunes of the company. For example, holdings of stock in one corporation by another corporation are normally purchased for control, and not investment, purposes. Similarly, most government holdings are not typically investments made for only economic purposes.

AIPL gathers share ownership data for each company in the coverage universe using publicly available information. If public disclosure is inadequate or information is unavailable, AIPL may consult with company officials or additional industry sources to derive estimates of ownership information.

A company's annual report, regulatory filings, may include listings of some equity-like securities that are not included in total shares outstanding and need not be considered in calculating available float. These generally include treasury stock, stock options, equity participation units, warrants, preferred stock, convertible stock, and rights. Due to local reporting patterns in some markets, AIPL may include treasury shares in total shares outstanding but exclude them from float.

While calculating free-float market capitalization, the following categories of shareholdings will be excluded where it can be identified separately:

- Shareholding reported under promoter category
- Depository Receipts (DRs) held by promoters and promoter groups
- Associate/group companies/ cross-holdings
- Family members of promoter
- Trusts managed by promoter/ promoter group companies
- Employee Benefit Trusts/ Employee Welfare Trusts
- Directors
- Public shareholder representing (nominating) member on Board
- Public shareholder entitled to represent (nominate) member on Board
- Key Management Personnel (KMP)
- First right of refusal in favor of company/promoters in case shareholder intends to sell the stake
- Strategic investment by corporate bodies
- Direct/ indirect shareholding by Central/ State Government/ Government backed corporations,
 Governor in case of central/ state owned company (excluding insurance companies)
- Direct/ indirect shareholding by Central/ State Government/ Government backed corporations, Governor in company where government is not a promoter (excluding insurance companies)
- Foreign Direct Investment
- Private Equity Investor
- Private Equity Fund
- Foreign Venture Capital Investors
- Sovereign Wealth Funds
- Locked-in shares which would not be sold in the open market in normal course
- Investor Education and Protection Fund (IEPF)
- Persons acting in concert with promoters

Holding of equity shares by the remaining shareholders fall under the free float category.

Free-float factor is a multiple with which the total market capitalization of a company is adjusted to

arrive at the Free-float market capitalization. A Free-float factor of say 0.55 means that only 55% of the market capitalization of the company will be considered for calculation.

Following are the entities considered as non-free float and hence clubbed together and reduced from the 100% (total shareholding)

- Promoter and Promoter Group
- Public Locked-in Shares holding (as per the Share Holding Pattern (SHP)) filed by the Company under Clause 35 of the Listing Agreement
- GDR Promoter holding only
- Strategic & Others appearing under Public Categories of SHP

BSE is calculating the free float factor to two decimal places as illustrated below:

E.g: For ABC Ltd

	No. of Shares	%
Total Equity Shares	2,50,00,000	100

Category	No. of Shares	%
Promoter and Promoter Group	1,20,00,000	48.00
Promoter Depository Receipts (DR)	10,000	0.04
Public Shareholders Locked in	75,000	0.30
Strategic holding	25,000	0.10
Total		48.44

Free Float Factor in the above case is (100-48.44)/100 = 0.51

Calculation of Investable Weight Factors

For each stock an Investable Weight Factor (IWF) is calculated:

where available float shares are defined as total shares outstanding less shares held by strategic holders.

The float-adjusted index is calculated:

(2)

$$Index = \frac{\sum_{i} (P_{i}S_{i}IWF_{i})}{Divisor}$$

where P_j is the price of stock j, S_j is the total shares outstanding of stock j and IWF_j is the investable weight factor. The divisor is the index divisor.

Shares Outstanding

The precise definition of shares outstanding or the share count depends on the specific market and the laws and accounting principles that apply.

Multiple Share Classes of Stock

The treatment of multiple share classes of stock varies across AIPL depending on local market custom and conditions. In those indices which include multiple share classes of stock – a company may have more than one share class line included in the index – each class is float-adjusted individually.

Initial Public Offerings (IPOs) and Direct Listings

For traditional IPOs, the IWF is generally calculated using the total shares offered (excluding overallotment options) for that share class, divided by the total shares outstanding for the same share class post-IPO. In certain instances where information on shareholders is publicly available in the IPO prospectus and/or other official documents, AIPL may include this additional information in the IWF calculation. Share under lock-in will not be considered for calculating IWF.

Investable Weight Factor Maintenance

Rebalancing Frequency

Investable Weight Factors (IWFs) are reviewed on a quarterly basis based on the most recently available data filed with the Exchange. AIPL updated IWFs resulting from the quarterly review are applied at the open of the Monday after the third Friday of March, June, September and December. A reference date, after the market close five weeks prior to the third Friday in March, June, September, and December, is the cutoff for publicly available information used for quarterly shares outstanding and IWF changes.

Please refer to individual index methodologies for specifics on IWF rebalancing schedules.

Timing of Changes

• **Quarterly Review:** IWF changes are implemented based on the latest publicly available share and ownership information subject to the reference dates referred to above.

Adhoc Review:

IWF changes will be made if the change represents at least 5% of total current shares outstanding.

• <u>Mandatory Actions:</u> In order to minimize index turnover, any IWF changes resulting from M&A activity are implemented based on the pre-event IWFs of the securities involved.

Non-Mandatory Actions:

- For actions qualifying for accelerated implementation, IWF changes are implemented to help mimic the shares made available in the offering.
- For actions of at least INR 8,500 crores that qualify for accelerated implementation, IWF changes are implemented to reflect the shares made available in the offering plus the latest share and ownership information publicly available at the time of the announcement.

Index Data

Data Distribution

IWFs are provided with other index data as part of regular AIPL's index data distribution.

Index Governance

Index Committee

Questions of interpretation or possible exceptions to float adjustment rules are considered by the Index Committee.

The Index Committees reserve the right to make exceptions when applying the methodology if the need arises. In any scenario where the treatment differs from the general rules stated in this document or supplemental documents, clients will receive sufficient notice, whenever possible.

In addition, at least once within any 12-month period, the Index Committee reviews the methodology to ensure the data, policies, and methodology remain effective. In certain instances, AIPL may publish a consultation inviting comments from external parties.

For information on Quality Assurance and Internal Reviews of Methodology, please refer to AIPL's Equity Index Policy.

Index Policy

To the maximum extent possible, AIPL seeks to float adjust all market capitalization indices and to apply consistent and uniform rules across all its indices.

Contact Information

For questions regarding an index, please contact: BSEINDEX@bseindia.com

Appendix

Methodology Changes

Methodology changes since January 1, 2017, are as follows:

	Effective Date	Methodology	
Change	(After Close)		
IWF Review	31/May/2024	IWFs are reviewed on an Annual basis	IWFs are reviewed on a Quarterly basis
Quarterly Shares Outstanding and IWF Reference Dates	08/13/2021	A reference date, after the market close on the Tuesday prior to the second Friday in March, June, September, and December.	A reference date, after the market close five weeks prior to the third Friday in March, June, September, and December, is the cutoff for publicly available information used for quarterly shares outstanding and IWF changes.
IWFs: Timing of Changes	03/27/2020	Updates to IWFs are only made at the annual IWF review unless a change is prompted by a mandatory event such as M&A activity.	Annual Review: are implemented based on the latest publicly available share and ownership information. All IWFs of 0.96 or above are rounded to 1.00 at the annual review. Quarterly Review: IWF changes are implemented if the change is at least 5% of total shares outstanding and is related to a single corporate action, regardless if there is an associated share change. For quarterly reviews that coincide with the annual review, the annual review rules apply. Mandatory Actions: In order to minimize index turnover, any IWF changes resulting from M&A activity are implemented based on the pre-event IWFs of the securities involved. Non-Mandatory Actions: For actions qualifying for accelerated implementation, IWF changes are implemented to help mimic the shares made available in the offering. For actions of at least INR 8,500 crore that qualify for accelerated implemented to reflect the shares made available in the offering plus the latest share and ownership

	Effective Date	Methodology	
Change	(After Close)	Previous	Updated
			information publicly available at the time of the announcement.
Strategic Holders List Updated	03/29/2019	Savings & Investment Plans/401K Plans of the Company are included in the float calculation.	Savings & Investment Plans/Defined Contribution Plans of the Company are excluded from the float calculation.
Merger Related Investable Weight Factor (IWF) Change	01/19/2018	A merger related IWF change resulting in an IWF of 0.96 or greater is rounded up to 1.00 on the merger effective date.	A merger related IWF change that results in an IWF of 0.96 or greater is rounded up to 1.00 at the next annual IWF review.
Elimination of Mexico Regional Variation	09/21/2018	The S&P/BMV Indices follow the float adjustment methodology of the Bolsa Mexicana de Valores, S.A.B. de C.V. (BMV) as referenced in the S&P/BMV Indices Methodology available at www.spglobal.com/spdji/ . All other S&P- and Dow Jonesbranded indices follow AIPL' standard float adjustment methodology as detailed in this document.	
Frequency of FOL reviews	03/21/2017		Language has been added to indicate that all statutory limits on foreign ownership, referred to as foreign ownership limits (FOLs), are reviewed on a quarterly basis.

Disclaimer

Performance Disclosure/Back-Tested Data

Where applicable, Asia Index Private Limited and its index-related affiliates ("AIPL") defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. AIPL defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its data feed to external parties.

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Information presented prior to an index's launch date is hypothetical back-tested performance, not actual performance, and is based on the index methodology in effect on the launch date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

Typically, when AIPL creates back-tested index data, AIPL uses actual historical constituentlevel data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate certain ESG indices may not be available for the entire desired period of backtested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, AIPL may employ a process of using "Backward Data Assumption" (or pulling back) of ESG data for the calculation of backtested historical performance. "Backward Data Assumption" is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as "product involvement") were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on "Backward Data Assumption" please refer to the FAQ. The methodology and factsheets of any index that employs backward assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific data points and relevant time period for which backward projected data was used. Index returns shown do not represent the results of actual trading of investable assets/securities. AIPL maintains the index and calculates the index levels and performance shown or discussed but does not manage any assets.

Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index.

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