S&P Dow Jones Indices

A Division of S&P Global

Index Administration Services Restatement Policy

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Introduction

IHS Markit Benchmark Administration Limited (IMBA UK or the Administrator) is the appointed Administrator of the IHS Markit Index Administration Service (IAS). The Administrator is committed to conducting its business with integrity and to providing index information of the highest quality to its customers and index stakeholders. However, the Administrator recognizes that, in some situations, inaccuracies can arise that may warrant a restatement of one or more indices. Such inaccuracies may be caused by a range of events including:

- Incorrect input data (e.g., prices, rates, index levels which are incorrect or have been updated) or incorrect ancillary data (e.g., incorrect, missed or late corporate actions, errors in the index calendar data);
- 2. **Incorrect application of the index methodology** (e.g., error in the implementation and/ or application of the index methodology); or
- 3. **Incorrect index composition** (e.g., index constituents which are incorrectly added to or removed from an index, or incorrect index constituent weights).

The Administrator has implemented a wide range of automated checks to capture and validate exceptions which could indicate an error or data problem. These include checks on large constituent-level price movements and large index-level movements. Additional comparative and consistency checks are also in place. All exceptions or warning alerts are reviewed and analysed by the Administrator. In the event that the alert is caused by a data or process error, and is identified before publication, index analysts will correct the error before official publication.

Index Restatement Policy

In the instance an inaccuracy is not identified and resolved before index calculation and publication, or if input data received is revised retrospectively, the Administrator will review the impact on any affected index.

The below processes will be followed unless the IAS Index Administration Committee (IAC) determines otherwise.

1. Inaccuracies caused by incorrect input data or ancillary data

- a. Under the following circumstances, the Administrator will, as standard, recalculate and restate index level(s):
 - The inaccuracy is identified within three index business days after publication of the index level(s); and
 - The composition and weightings of the affected index (or any downstream dependent index) have not been impacted by the incorrect data and would not be impacted by the restatement of the index level(s).
- b. Should any such restatement also impact the index level publication precision (as defined in the respective index manual), the Administrator will also announce such restatement on ihsmarkit.com.
- c. If the two above conditions at paragraph 1.a. are not met, no restatement is issued until the IAC has given due consideration to the issue (see section 4 below).

2. Inaccuracies caused by incorrect application of the index methodology

- a. Inaccuracies caused by the incorrect application of the index methodology will follow the steps outline above in section 1.
- b. If the conditions at paragraph 1.a. are not met, no restatement is issued until the IAC has given due consideration to the issue (see section 4 below)
- c. Additionally, the IAC will consider steps to correct the application of the methodology (by correcting internal calculation systems and, where applicable, the index manual) and whether to do so on a go-forward basis only.
- d. Any methodology change will be consulted on where appropriate and announced with reasonable notice wherever practicable as per the IMBA UK Changes and Cessations Policy found <u>here</u>.

3. Incorrect index composition or weightings and consequential index level inaccuracies

a. All errors in composition and/or weightings are escalated to the IAC. The IAC will decide whether an index composition or weighting error should warrant a restatement or be corrected at the next rebalance.

In the event that an index composition error has been identified prior to the rebalance of the index, the Administrator will rectify the index composition and update any relevant preview information published in advance of such rebalance.

4. Consideration by the IAC

a. The IAC will make restatement decisions in a timely fashion. In determining whether an index should be restated, the IAC will take multiple factors into consideration as set out below. Not all factors need to be present, and some may be more determinative than

others depending on the circumstances of the given inaccuracy. The factors considered by the IAC include, but are not limited to, the following:

- Whether the stated index objective is breached;
- The materiality of the deviation between published and updated index levels;
- Whether the index composition or weightings have been affected, and the rebalancing schedule of the impacted index;
- The number of indices, sub-indices and dependent indices affected (e.g., is the index used as indicator):
- Whether the inaccuracy carries over day on day;
- Whether the index is a benchmark (i.e. it is linked to financial instruments/ contracts or fund AUM);
- Dates of the restatement period. In particular:
 - Whether the restatement affects month-end index levels
 - How recent the restatement period is
 - The length of the period to be restated (incl. convergence/divergence of incorrect and correct time series);
- Relative and absolute importance of an erroneous input data point;
- · Impact of not restating; and
- Whether the underlying cause should be treated as a market disruption event.

The IAC will also ensure the Board of the Administrator is made aware of any restatements or underlying issues of which they would reasonably expect to be informed.

Governance and Regulatory Compliance

Index Oversight

IHS Markit Benchmark Administration Limited (IMBA UK) is the Administrator of the IAS Market Index Administration Service (IAS). More information about IMBA UK's governance and compliance approach can be found here. This document covers the following topics:

- Governance arrangements, including external committees
- Input data integrity
- · Conflicts of interest management
- Market disruption and Force Majeure
- Methodology changes and cessations
- Complaints
- Errors and restatements
- Reporting of infringements and misconduct
- Methodology reviews
- Business continuity

More details about IMBA UK can be found on the Administrator's website: <u>Benchmark Administration by IMBA UK | IHS Markit.</u>

Document Management

Policy Name: IAS Restatement Policy

Policy Owner: IAC

Applies to: IAS Benchmark Families
Approved by: IAC, IMBA UK Board

Date of last review: 15 June 2021

Further Information

Formal Complaints

Formal complaints should be e-mailed to <code>spdji_compliance@spglobal.com</code>.

Please note: spdji_compliance@spglobal.com should only be used to log formal complaints.

For general index inquiries, please contact indices @ihsmarkit.com.

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Disclaimer

Performance Disclosure/Back-Tested Data

Where applicable, S&P Dow Jones Indices and its index-related affiliates ("S&P DJI") 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. S&P DJI 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. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

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. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. 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 S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level 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 back-tested 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, S&P DJI may employ a process of using "Backward Data Assumption" (or pulling back) of ESG data for the calculation of back-tested 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. S&P DJI 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. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US \$10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US \$1,650), the net return would be 8.35% (or US \$8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US \$5,375, and a cumulative net return of 27.2% (or US \$27,200).

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