

**S&P Dow Jones
Indices**

A Division of **S&P Global**

**IHS Markit Benchmark
Administration Limited
- Governance Overview
*November 2022***

Table of Contents

1) UK Benchmark Regulation	3
2) Governance Framework	4
2.1) IMBA Internal Governance	4
2.1.1) The IMBA Board	4
2.1.2) Internal Oversight Committee	4
2.1.3) Index Administration Committees	4
2.2) External Advisory Panels	4
3) Input Data	6
4) Conflicts of Interest	7
5) Market Disruption and Force Majeure Events	8
6) Methodology Changes and Cessations	9
7) Errors and Restatements	10
8) Complaints	11
9) Reporting of Infringements or Misconduct	12
10) Methodology validation and review	13
11) Business Continuity	14
Disclaimer	15

1) UK Benchmark Regulation

The UK Benchmark Regulation (Regulation (EU) 2016/1011, as retained in UK law under the European Union (Withdrawal) Act 2018 (“UK BMR”), introduced a common framework to ensure that benchmarks are robust and reliable and to minimize conflicts of interest.

IHS Markit Benchmark Administration Limited (“IMBA”) is an administrator authorised by the Financial Conduct Authority (“FCA”) under the UK BMR. IMBA is listed as an authorised administrator on the FCA’s Benchmarks register.

IMBA administers certain of its indices as benchmarks in accordance with the UK BMR. A list of IMBA’s benchmark indices is available on our website: <https://ihsmarkit.com/products/benchmark-administration-uk.html>.

As of June 2022, IMBA forms part of S&P Dow Jones Indices (“S&P DJI”), a division of S&P Global Inc.

Any questions related to this document should be directed to: spdji_compliance@spglobal.com.

2) Governance Framework

IMBA has established an index committee structure to ensure that the provision of its benchmark indices is conducted in an orderly fashion and in compliance with its regulatory obligations.

2.1) IMBA Internal Governance

IMBA retains ultimate responsibility for the provision of its benchmark indices. IMBA has established an internal oversight function consisting of multiple committees, each responsible for specific aspects of the oversight of a benchmark, a type of benchmarks or family of benchmarks under the overall direction and coordination of the Internal Oversight Committee. This governance framework is intended to eliminate the opportunity for any person to exercise undue control or influence over the provision of a benchmark.

2.1.1) The IMBA Board

IMBA's Board of Directors ("Board") consists of individuals who have overall responsibility for IMBA. The Board has no day-to-day involvement in the operation of the benchmark indices but has the expertise and experience required to provide oversight and ensure compliance with the UK BMR. The Board operates in accordance with the Terms of Reference and Articles of Association.

2.1.2) Internal Oversight Committee

The Board is subject to oversight and challenge from the Internal Oversight Committee ("IOC"). The IOC performs the role of independent oversight function, as required under UK BMR, and is governed by the IOC Charter.

2.1.3) Index Administration Committees

IMBA's Index Administration Committees (the "IACs") serve as the index governance body and oversee the design, maintenance, and publication of IMBA's indices. IACs seek to ensure indices are maintained in accordance with their respective methodology by reviewing all methodologies to ensure they continue to achieve their stated objectives and overseeing any changes to index and/or methodology. All IAC members must meet specified core competency, tenure and experience requirements. IACs exercise informed and effective oversight over the administration for specific benchmark families, including the launch of new benchmarks indices, material changes to or cessation of existing methodologies, restatements, input data and contributors, exercise of discretion and expert judgement.

The daily calculation, operation and management of IMBA's benchmark indices is performed by the Index Management and Production Group (IMPG) and overseen by the Administration Operations Committee ("AOC"). The AOC's primary role is to safeguard the daily determination of IMBA's benchmark indices and address operational issues. The AOC retains the ability, and in certain circumstances is obliged, to escalate material issues to and seek approval from the relevant IAC.

Where an AOC is not established, senior managers from IMPG will meet when required to discuss urgent matters and will escalate to the IAC accordingly.

2.2) External Advisory Panels

To help ensure ongoing dialogue with and feedback from market participants and index users, IMBA has established external advisory panels with representation from sell-side and buy-side institutions.

External advisory panels operate to aid the development and operation of the relevant index by providing a forum to share insight and feedback from market participants. Such panels discuss a range of topics including review of potential and proposed changes to index methodologies and constituents, market developments and general risks. They also provide feedback on technical matters in respect of the operation of the IMBA's indices.

External advisory panels may also provide input into the IMBA's Annual Index Review ("AIR").

3) Input Data

Each family of benchmark indices has documented policies and procedures relating to input data. In particular, such documentation explains the pre-calculation and post-calculation checks to be performed, which are tailored to the specific characteristics of each family of benchmark indices.

Typically, data ingestion is automated. Automated systems have been implemented to identify potential input data errors. Where potential errors with input data are flagged, an exception handling process is in place to review and validate the relevant input data. Manual changes to the value or status of input data will usually require a second approval prior to the calculation of benchmark indices.

Post-calculation and pre-publication checks are generally programmed into the systems, generating warnings and error messages, which must be reviewed prior to publication of a benchmark index level. In addition, post-publication checks may be performed to ensure the benchmark index level calculated by IMBA is consistent with the level that has been displayed on the publication venues.

In respect of benchmark indices that rely upon input data from Contributors, IMBA may also seek clarifications pre-calculation if a contribution is not in line with comparable levels.

4) Conflicts of Interest

IMBA and its affiliates do not issue financial instruments or financial contracts and do not manage investment funds.

IMBA's governance framework is designed to protect the integrity and quality of our benchmark indices and comply with applicable regulatory standards and accepted industry practice. This framework includes independence in the development, maintenance, and distribution of benchmarks. The governance framework ensures effective conflicts of interest mitigation and management, an oversight function, and a robust quality review program. The execution of this framework is overseen through Index Governance functions and ongoing oversight from Legal, Compliance and Risk functions and the IOC.

Employees of S&P DJI and its affiliates are required to attest annually to the S&P Global Code of Business Ethics ("COBE"); also, all staff are required to complete the S&P DJI Compliance training on an annual basis and have an ongoing obligation to disclose details regarding any actual or apparent conflict of interest in line with the COBE and S&P Global's Securities Disclosure & Trading Policy.

All staff members are strictly prohibited from contributing input data to a benchmark index on a personal basis or on behalf of market participants unless such contribution is explicitly required under an index methodology and is subject to specific controls.

No IMBA or S&P DJI staff involved in the calculation, production or maintenance of an index is compensated based on the level of an IMBA or S&P DJI benchmark index. We are committed to competitive compensation which reflects individual performance, experience, scope of responsibility and leadership skills.

5) Market Disruption and Force Majeure Events

IMBA's benchmark indices are rules based and do not typically permit the use of discretion or expert judgment unless there are exceptional circumstances that are not addressed by either the relevant index methodology or an IMBA policy. Such scenarios may include (but are not limited to):

- Failure of data providers;
- Significant changes to the underlying market;
- Action by governmental or regulatory bodies that causes market disruption; or
- Events beyond human control.

Where urgent decisions on an ad hoc basis are required and would lead to a material temporary change to or alternative interpretation of the index methodology, they shall be escalated to the IAC. The IAC shall make a decision which is consistent with the objective of the index in question and that causes minimal disruption to index stakeholders. IMBA may consult with index stakeholders, in accordance with the Benchmark Methodology Changes and Cessation Policy available on our website. Following any ad hoc decision, the IAC shall assess whether a permanent change to the methodology would be appropriate.

The use of discretion or expert judgment is reported to the IMBA Board and reviewed by the IOC.

6) Methodology Changes and Cessations

Any termination of or material change to a benchmark index (including those due to a lack of demand, market structure change or other reason) is governed by the relevant IAC and is conducted in accordance with the Methodology Changes and Cessations Policy (available on our website) and undertaken in an orderly manner, taking into consideration the potential impact to the client(s) and market integrity.

When considering whether to change or terminate a benchmark index, IMBA will:

- Confirm whether there are any instruments which reference the relevant benchmark;
- Conduct a stakeholder consultation if the change to or termination of the methodology is material. Such consultation will contain a clear rationale for the proposed change or termination, an implementation timeline and the timeframe during which stakeholders may provide feedback;
- Make available to stakeholders upon request a summary of the comments received during any consultation process along with IMBA's responses, except where a commenter has requested confidentiality;
- Notify stakeholders of the decision, along with adequate notice of the date on which the termination will take place, taking into account the type of benchmark and the extent of its use; and
- Notify the Board and IOC of methodology changes or cessations that are material.

A methodology change to a benchmark index is likely to be material if it has a substantial impact on the benchmark index calculation process or formula, the quality of the input data, the benchmark index selection rules, the underlying market or reality measured, the panel of Contributors to the benchmark index, or the benchmark index level. A cessation to a benchmark index is likely to be material if it applies to a large number of benchmark indices, an entire benchmark index family, or there are financial instruments referencing the benchmark index.

7) Errors and Restatements

Should IMBA identify, or is made aware of, an error in previously published information relating to a benchmark index, an analysis of the affected benchmark index values will be undertaken and a decision will be made as to whether to restate the benchmark index, consistent with the applicable restatement policy. A restatement policy for each benchmark index family is available on our website.

Restatement decisions are based on the materiality of the error which is determined based on all relevant factors, including the number of benchmark indices and sub-indices affected, the time between the publication and when the error is detected, the impact at the constituent level, whether month-end benchmark index levels are affected, the size of the deviation between published and updated benchmark index levels, the impact on ancillary calculations such as benchmark index- or constituent-level analytics, the data processing impact on clients and vendors, financial product impact, and general market conditions.

Not all factors need to be present to warrant a restatement and some may be more determinative than others depending on the circumstances.

8) Complaints

IMBA maintains a transparent complaint handling process which is set out in detail in our Complaints Handling Policy, available on our website. The policy, in summary, provides for the submission and identification of complaints, as well as describing the processes S&P DJI Compliance will follow when resolving a formal complaint.

Any complaint made by a stakeholder (including users of and contributors to benchmark indices) relating to a benchmark index will be dealt with in a timely manner by S&P DJI Compliance and will be conducted independently of any person or persons who are the subject of the complaint. S&P DJI Compliance will update the Board and the IOC on complaints and their resolution.

9) Reporting of Infringements or Misconduct

IMBA has established controls, including automated threshold monitoring, to identify suspicious input data. In cases where input data appears to be suspicious, IMPG will first engage with the contributor to establish the grounds for the contribution. If not satisfied with the response, IMPG will escalate the issue to S&P DJI Compliance.

S&P DJI Compliance will review the circumstances and ensure swift reporting to the relevant regulatory authority if there are reasonable grounds to suspect misconduct in respect to, or attempted manipulation of, a benchmark index.

All staff are able to report infringements of UK BMR or misconduct via the S&P Global Ethics Point website and / or hotline as referenced in the COBE. This policy provides guidance related to the establishment and administration of a system that allows all colleagues, officers, members of the IMBA Board, and other interested third parties (i.e. customers, vendors, contractors, etc.) to report known or suspected violations of the law, the COBE or company policies.

10) Methodology validation and review

IMBA shall ensure that its benchmark index methodologies:

- Take into account factors including the size and normal liquidity of the market, the transparency of trading and the positions of market participants, market concentration, market dynamics and the adequacy of any sample to represent the market or economic reality that the benchmark index is intended to measure;
- Determine what constitutes an active market for the purposes of that benchmark index; and
- Establish the priority given to different types of input data.

The relevant IAC will review the definition and methodology of all benchmark indices at least annually and a summary of Annual Methodology Reviews (AMRs) is provided to the Board and the IOC. AMRs shall include a review of the performance, methodology and rationale of the benchmark index, to ensure the benchmark index continues to operate in accordance with the methodology and represents the market, strategy or economic reality which that benchmark index is intended to measure, as stated in the methodology document.

11) Business Continuity

S&P Global maintains a Business Continuity Management Policies (“BCM” Policy). In addition, each benchmark index family maintains a family specific Business Continuity Plan (“BCP”) and disaster recovery policy. The purpose of the benchmark index family specific BCPs is to provide a means of ensuring that the delivery of core services and business processes for benchmark indices can be maintained in the event of a disaster or other disruption. These BCPs outline risks to the benchmark index family, and detail countermeasures to manage the threats posed by those risks and required responses to manage any disaster recovery situations that do occur. In particular, the BCPs outline the contingency procedures and recovery targets in the event an incident impacts either the technological or physical capability of IMBA to determine and publish benchmark indices. IMBA is responsible for the annual testing and review of the benchmark index family specific BCPs.

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).

Intellectual Property Notices/Disclaimer

© 2022 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, SPX, SPY, The 500, US500, US 30, S&P 100, S&P COMPOSITE 1500, S&P 400, S&P MIDCAP 400, S&P 600, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, Select Sector, S&P MAESTRO, S&P PRISM, S&P STRIDE, GICS, SPIVA, SPDR, INDEXOLOGY, iTraxx, iBoxx, ABX, ADBI, CDX, CMBX, MBX, MCDX, PRIMEX, HHPI, and SOVX are registered trademarks of S&P Global, Inc. ("S&P Global") or its affiliates. DOW JONES, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P DJI does not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P DJI is impersonal and not tailored to the needs of any person, entity, or group of persons. S&P DJI receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P DJI does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P DJI makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P DJI is not an investment advisor, commodity trading advisor, fiduciary, "promoter" (as defined in the Investment Company Act of 1940, as amended) or "expert" as enumerated within 15 U.S.C. § 77k(a), and S&P DJI makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. S&P DJI is not a tax advisor. Inclusion of a security, commodity, crypto currency, or other asset within an index is not a recommendation by S&P DJI to buy, sell, or hold such security, commodity, crypto currency, or other asset, nor is it considered to be investment or trading advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse engineered, reproduced, or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P DJI. The Content shall not be used for any unlawful or unauthorized purposes. S&P DJI and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness, or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" "WHERE IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIMS ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any

direct, indirect, incidental, exemplary, compensatory, punitive, special, or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related information and other analyses, including ratings, research and valuations are generally provided by licensors and/or affiliates of S&P Dow Jones Indices, including but not limited to S&P Global's other divisions such as S&P Global Market Intelligence. Any credit-related information and other related analyses and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. Any opinion, analyses and rating acknowledgement decisions are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Dow Jones Indices does not assume any obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P DJI does not act as a fiduciary or an investment advisor. While S&P DJI has obtained information from sources it believes to be reliable, S&P DJI does not perform an audit or undertake independent verification of any information it receives. S&P DJI reserves the right to vary or discontinue any index at any time for regulatory or other reasons. Various factors, including external factors beyond S&P DJI's control might necessitate material changes to indices.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P Global Ratings reserves the right to assign, withdraw or suspend such acknowledgement at any time and in its sole discretion. S&P Dow Jones Indices, including S&P Global Ratings, disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgement as well as any liability for any damage alleged to have been suffered on account thereof. Affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. Such affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, reserve the right to disseminate its opinions and analyses. Public ratings and analyses from S&P Global Ratings are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P Global Ratings publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

S&P Global keeps certain activities of its various divisions and business units separate from each other to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions, and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate, or otherwise address.

Some indices use the Global Industry Classification Standard (GICS[®]), which was developed by, and is the exclusive property and a trademark of, S&P Global and MSCI. Neither MSCI, S&P DJI nor any other party involved in making or compiling any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability, or fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P DJI, any of their affiliates or any third party involved in making or compiling any GICS classifications have any liability for any direct,

indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

S&P Dow Jones Indices products are governed by the terms and conditions of the agreements under which they may be provided. A license is required from S&P Dow Jones Indices to display, create derivative works of and/or distribute any product or service that uses, is based upon and/or refers to any S&P Dow Jones Indices and/or index data.