# IOSCO Statement of Compliance

**Morningstar Indexes**
April 2017
Version 1.0

## Overview

Morningstar Indexes claims compliance with the International Organization of Securities Commissions' Principles for Financial Benchmarks for Morningstar-branded indexes. For each benchmark, the IOSCO principles cover the governance arrangements intended to ensure the benchmark's integrity, the quality of its design, and its methodology.

## About Morningstar, Inc.

Incorporated on May 16, 1984, and headquartered in Chicago, Illinois, Morningstar, Inc. is a leading provider of independent investment research in North America, Europe, Australia, and Asia. We offer an extensive line of products and services for individual investors, financial advisors, asset managers, and retirement plan providers and sponsors.

Morningstar provides data on more than 500,000 investment offerings, including stocks, mutual funds, and similar vehicles, along with real-time global market data on more than 17 million equities, indexes, futures, options, commodities, and precious metals, in addition to foreign-exchange and Treasury markets as of December 31, 2016. Morningstar also offers investment management services through its investment advisory subsidiaries, with more than $200 billion in assets under advisement or management as of December 31, 2016. We have operations in 27 countries.

## Morningstar Indexes

Launched in 2002, the Morningstar Indexes Group delivers innovative indexing solutions. Built on principles outlined in Modern Portfolio Theory, Morningstar indexes offer passive investment opportunities to deliver beta exposure. Using transparent, rules-based methodologies, our indexes cover all of the markets' main asset categories—global equities, global bonds, alternatives, and multi-asset. Morningstar's award-winning research inspires our products—from broad equity indexes that track global markets, to a family of commodity indexes. We access a wide array of investment research—quantitative, qualitative, and portfolio construction— from various groups within Morningstar to harness market anomalies, empowering us to offer superior portfolio solutions.

## About Morningstar

The following IOSCO compliance report includes Morningstar's responses to the 19 IOSCO principles and the outcome of Morningstar's audit. It is structured as follows:

**Section I** contains an overview of Morningstar, company history, business, and descriptions of major families of index families that comply with IOSCO.

**Section II** contains the independent auditor's report issued by Morningstar.

**Section III** includes the management's statement of compliance with the IOSCO principles.

**Section IV** details Morningstar's responses to individual IOSCO principles followed by the procedures administered by Morningstar.

**Exhibit 1** Our Leadership

| **Executive Management** | Title |
|---|---|
| Joe Mansueto | Executive Chairman |
| Kunal Kapoor | Chief Executive Officer, Interim Chief Financial Officer |
| Daniel Dunn | Chief Revenue Officer |
| Bevin Desmond | Head of Global Markets and Human Resources |
| Haywood Kelly | Head of Global Research |
| Daniel Needham | President and Chief Investment Officer, Investment Management |
| Catherine Odelbo | Executive Vice President of Corporate Strategy and Partnerships |
| Rob Pinkerton | Chief Marketing Officer |
| Tricia Rothschild | Chief Product Officer |
| Mitch Shue | Chief Technology Officer |
| David Williams | Managing Director, Design |
| Don Phillips | Managing Director |

| **Board of Directors** | Board Member Since |
|---|---|
| Joe Mansueto | 1984 |
| Robin Diamonte | 2015 |
| Cheryl Francis | 2002 |
| Steven Kaplan | 1999 |
| Gail Landis | 2013 |
| Bill Lyons | 2007 |
| Jack Noonan | 1999 |
| Paul Sturm | 1999 |
| Hugh Zentmyer | 2010 |

## Morningstar Index Families

### Equity

Morningstar Equity Indexes span the risk spectrum, providing asset-class beta and strategic-beta products. Our vast equity index offerings consist of style, sector, factor-based, dividend, analyst advantage, and global equity indexes. Covering more than 40 countries and 19 regions, Morningstar's Global Equity series provides a comprehensive view of the fundamental characteristics of global equity markets. Using a structured review process, Morningstar Global Equity Indexes, spanning global, developed, and emerging markets, cover the top 97% of the investable universe by market capitalization. Beyond beta, we turn to the Morningstar Equity Research team—one of the largest independent equity research groups in the world, covering over 1,800 companies across the globe—to develop our strategic equity indexes. Designed around a specific investment thesis, Morningstar takes a measured, disciplined, rules-based approach to developing strategic indexes that clearly define the outcomes we want to achieve.

### US Style

The Morningstar Style Index family tracks the equity market in the United States by capitalization and investment style using a comprehensive, rules-based, 10-factor methodology. Morningstar Style Indexes are based on the same methodology as the Morningstar Style Box, giving investors a framework to accurately track the behavior and characteristics of each market segment. Constructed without gaps or overlap, each Morningstar Style Index can be used as a discrete building block for efficient portfolio construction.

### US Sector

The Morningstar Sector Index family tracks the U.S. equity market by isolating the performance of stocks by Morningstar sector and super sectors. Morningstar's sector classification system maps the equity universe through a consumption-based view of economic sectors. Our Sector Indexes help investors evaluate portfolios by determining how their equity exposure falls within our three super sectors, while identifying where other holdings fit at a sector and industry level.

### Active Equity

The Morningstar Active Equity Indexes leverage one of the world's largest independent equity research groups with its team of award-winning equity analysts. These analysts and researchers, working within the Morningstar investment research ecosystem, contribute their ideas to help us develop indexes that provide investors access to active investing strategies in rules-based passive vehicles.

### Global Equity

The Morningstar Global Equity Index family captures the performance of world markets through portfolios of highly investable, liquid stocks. Each index can be used as a discrete building block to create products or to construct diverse portfolios with asset allocations across geographic regions. The index family covers 97% of the market cap in each developed and emerging market. Morningstar uses a structured review process to build each index, screening for countries with a high level of transparency, market regulation, and operational efficiency, as well as the absence of broad-based investment restrictions.

## Index Families

### Dividend Based

The Morningstar Dividend Index family offers a suite of products tracking dividend-paying equities. The Morningstar Dividend Index family is reinforced by one of the world's largest independent equity research groups as well as our team of award-winning quantitative analysts. The art of our research-inspired approach has resulted in intelligent dividend indexes that focus on company sustainability, use smarter weighting schemas, and maximize investment scalability.

### Factor-Based

The Morningstar Factor-Based Index family relies on the premise that, whether markets are efficient or not, anomalies exist. By capitalizing on the expertise of our qualitative and quantitative researchers, Morningstar can identify fundamental factors and use them to construct intelligent indexes for achieving specific equity investing strategies.

### Fixed Income

Morningstar has set a new standard for global fixed-income indexing that has helped to fill a critical void in the bond market. Morningstar makes performance data broadly accessible, with all index- and bond-level data publicly available on websites, in publications, through data vendors, and within our products. This helps investors and advisors better understand and invest in the market. We are also committed to using the best bond-pricing data available. The Morningstar Fixed-Income Index family includes U.S., Canadian, European, global, and emerging-markets bond indexes.

### Alternative

The Morningstar Alternative Index family includes broad commodity, commodity sector, individual commodity, hedge fund, and managed future indexes. Built on the underlying economics of the global commodity futures markets, Morningstar Commodity Indexes are the foundation of our Alternative Index family, providing investment exposure in much the same way professional commodity traders would. Our approach employs strategic combinations of long, short, and cash positions to maximize sources of excess return.

**Commodity**

The Morningstar Commodity Indexes family offers passive alternatives to active commodity strategies. Built on the underlying economics of the global commodity futures markets, our indexes employ strategic combinations of long futures, short futures, and cash. We allocate to long or short positions in commodity futures based on each commodity future's price momentum. This momentum-based long/short approach is better than the long-only exposure of other indexes because it captures the full excess return from a futures strategy. Part of the Morningstar Alternative Index family, this family includes broad commodity, commodity sector, managed futures, and individual commodity indexes.

**Multi-Asset Class**

The Morningstar Multi-Asset Indexes leverage groundbreaking research from Ibbotson, an asset-allocation thought leader that's now part of our investment management group. The Multi-Asset Indexes provide asset-class exposure to global equities, global fixed-income, commodities, and Treasury Inflation-Protected Securities by using existing Morningstar indexes as allocation building blocks. The Morningstar Lifetime Allocation Index series consists of 13 indexes available in three risk profiles: aggressive, moderate, and conservative. The five indexes in the Morningstar Target Risk Index series represent equity market risk levels ranging from aggressive to conservative. The Morningstar Multi-Asset index family also includes Multi-Asset high income, real asset, global allocation, and 529 college savings indexes.

## Independent Auditor's Report

**To**: Morningstar Indexes Group

**From**: Gregory Kalin, Director of Internal Audit and Chief Audit Executive

**Date**: April 18, 2017

**Subject**: Morningstar Indexes, Statement of Compliance with the IOSCO's Principles for Financial Benchmarks

### Background

In April 2013, the International Organization of Securities Commissions (IOSCO) published its Principles for Financial Benchmarks. The goal of these principles is to create an overarching framework for benchmarks used in financial markets. Specifically, IOSCO seeks to articulate policy guidance and principles for benchmarks that will address conflicts of interest and transparency. These 19 principles set forth a comprehensive set of objectives and standards on how index providers should operate.

Morningstar Indexes engaged Morningstar's Internal Audit Services to perform an independent assessment of Morningstar Indexes' compliance with the Principles for Financial Benchmarks as of December 31, 2016.

Reporting to the Audit Committee of the Board of Directors, Morningstar's Internal Audit Services provides independent assurance to the board of directors and executive management on the effectiveness of the company's risk management, internal control, and business processes. Internal Audit Services mission is to offer independent, objective assurance and consulting services designed to add value and improve the company's operations.

### Objective, Scope and Methodology

The objective of this compliance review was to independently assess the business processes and internal controls in place within the Morningstar Indexes operations to address the IOSCO best practice guidance and provide assurance that the business is complying with the Principles for Financial Benchmarks and to ensure these business processes and internal controls are properly reflected in the company's IOSCO Statement of Compliance.

Our review focused on assessing the design and operational effectiveness of Morningstar Indexes' business processes, governance practices, and internal control structure associated with the benchmark determination process to address the IOSCO Principles for Financial Benchmarks as of December 31, 2016.

Specifically, our review methodology consisted of the following procedures:

Inquire and obtain documentation supporting Morningstar Indexes' business processes, governance practices and internal control structure;
Perform design and operational effectiveness review to assess Morningstar Indexes' compliance with each of the Principles for Financial Benchmarks;
Conduct interviews with Morningstar Indexes' management to understand objectives and associated risks;
Prepare process maps to reflect the key business processes with the assistance of the process owners;
Perform walkthroughs and obtain documentary evidence to validate the operational effectiveness of the company's compliance with each of the Principles for Financial Benchmarks;
Identify any gaps in compliance and document overall compliance assessment;
Provide best practice guidance and process improvement recommendations; and
Confirm that the IOSCO Statement of Compliance as documented by Morningstar Indexes is fairly stated and accurately presents the business processes and internal controls in place to ensure compliance with the IOSCO Principles for Financial Benchmarks.

Our review was conducted in conformance with the International Standards for the Professional Practice of Internal Auditing as issued by The Institute of Internal Auditors.

**Statement of Compliance**

We found that the Morningstar Indexes Group's business processes and internal controls complied with the IOSCO Principles for Financial Benchmarks as of December 31, 2016. Additionally, we confirmed that the IOSCO Statement of Compliance as documented by Morningstar Indexes operations is fairly stated and accurately presents the business processes and internal controls in place within the benchmark determination process.

Gregory A. Kalin

Gregory A. Kalin, CIA, CISA, CFE, CRMA
Director of Internal Audit and Chief Audit Executive
Morningstar, Inc.
April 18, 2017

## Transparency and Mission

Sanjay Arya, CFA
Head of Morningstar Indexes

We're delighted to share with the Morningstar Indexes Community an update on our efforts to comply with guidance from the International Organization of Securities Commissions.

The IOSCO guidelines represent a collective effort by the world's securities regulators to adopt a global standard in transparency, regulation, enforcement, and oversight. Morningstar's adoption of IOSCO principles is consistent with our firm's mission, which is to build better outcomes for investors, and with our commitment to stewardship, transparency, and a focus on the end investor.

This is a challenging time in our industry; it is imperative that we provide investors with stable, reliable benchmarks for the accurate measurement of investment performance. We salute IOSCO's work to create a framework for responsible, open behavior in financial markets and we are excited to be part of this global effort.

Sincerely yours,

Sanjay Arya
Indexes@morningstar.com

## Morningstar Responses to IOSCO Principles

1. **Overall Responsibility of the Administrator**
   The administrator should retain primary responsibility for all aspects of the benchmark determination process. This includes:

A. Development: The definition of the benchmark and benchmark methodology;
B. Determination and dissemination: Accurate and timely compilation, publication, and distribution of the benchmark;
C. Operation: Ensuring appropriate transparency over significant decisions affecting the compilation of the benchmark and any related determination process, including contingency measures in the event of absence of or insufficient inputs, market stress or disruption, failure of critical infrastructure, or other relevant factors, and;
D. Governance: Establishing credible and transparent governance, oversight, and accountability procedures for the benchmark determination process, including an identifiable oversight function accountable for the development, issuance, and operation of the benchmark.

**Morningstar Indexes Response**
Morningstar Indexes, as the administrator, holds responsibility for all aspects of the management of Morningstar Indexes through all stages including the development, determination, dissemination, operation, and governance of the benchmark. Policies and processes of each index are further discussed in their individual methodologies/rulebooks.

2. **Oversight of Third Parties**

Where activities relating to the benchmark determination process are undertaken by third parties—for example, collection of inputs, publication, or where a third party acts as a calculation agent—the administrator should maintain appropriate oversight of such third parties. The administrator (and its oversight function) should consider adopting policies and procedures that:

A. Clearly define and substantiate through appropriate written arrangements the roles and obligations of third parties that participate in the benchmark determination process well as the standards the administrator expects these third parties to comply with;
B. Monitor third parties' compliance with standards set out by the administrator;
C. Make available to stakeholders and any relevant regulatory authority the identity and roles of third parties that participate in the benchmark determination process, and;
D. Take reasonable steps, including contingency plans, to avoid undue operation risk related to the participation of third parties in the benchmark determination process.

This principle does not apply in relation to a third party from whom an administrator source data if that third party is a regulated market or exchange.

**Morningstar Indexes Response**

Morningstar Indexes may outsource activities related to the benchmark determination process. Specifically, Morningstar Indexes may use third-party vendors to provide feeds of exchange/market data to calculate an index. These third-party vendors may also provide company information, number of shares, company shareholdings, dividends, and corporate events. This distribution of data is maintained via written licensed agreements between Morningstar Inc. and the third-party data vendors that state the specific functions of the third party. Further information regarding Morningstar Indexes' third-party data vendors may be obtained on request from IndexOperations@Morningstar.com

A. Morningstar has clearly defined written arrangements in place with third parties that participate in the benchmark determination process. These arrangements ensure that third-party involvement in the benchmark determination process maintains accuracy and minimal operational risk.
B. Morningstar monitors third-party vendors by establishing data delivery agreements and standards to hold vendors to a Morningstar standard. File delivery times and other quality-assurance checks are in place to actively track the integrity of third-party services. In the event of data discrepancy or delayed deliverables, Morningstar will contact the third-party vendor's client-services representative.
C. Stakeholders in Morningstar Indexes are provided all relevant information such as the identity and roles of third parties involved in the benchmark determination process.
D. Morningstar Indexes ensures through its controls framework that potential operational risks arising from third parties are duly managed. Principle 4 details the prescribed procedures Morningstar Indexes practices to avoid such undue risks. Additionally, third-party data centers hold independent contingency plans and report to Morningstar when necessary.

3. **Conflicts of Interest**

To protect the integrity and independence of benchmark determinations, administrators should document, implement, and enforce policies and procedures to identify, disclose, manage, mitigate, or avoid conflicts of interest.

Administrators should review and update their policies and procedures as appropriate. Administrators should disclose any material conflicts of interest to their users and any relevant regulatory authority. The framework should be appropriately tailored to the level of existing or potential conflicts of interest identified and the risks that the benchmark poses and should seek to ensure:
A. Existing or potential conflicts of interest do not inappropriately influence benchmark determinations;
B. Personal interests and connections or business connections do not compromise the administrator's performance of its functions;
C. Segregation of reporting lines within the administrator, where appropriate, to clearly define responsibilities and prevent unnecessary or undisclosed conflicts of interest or the perception of such conflicts;
D. Adequate supervision and sign-off by authorized or qualified employees before releasing benchmark determinations;
E. The confidentiality of data, information and other inputs submitted to, received by, or produced by the administrator, subject to the disclosure obligations of the administrator;

F. Effective procedures to control the exchange of information between staff engaged in activities involving a risk of conflicts of interest or between staff and third parties, where that information may reasonably affect any benchmark determinations; and
G. Adequate remuneration policies that ensure all staff who participate in the benchmark determination are not directly or indirectly rewarded or incentivized by the levels of the benchmark.

An administrator's conflict-of-interest framework should seek to mitigate existing or potential conflicts created by its ownership structure or control, or due to other interests the administrator's staff or wider group may have in relation to benchmark determinations.

**Morningstar Indexes Response**
Morningstar Indexes is committed to achieving the highest standards of professionalism and ethical conduct in its operations and activities. As such, it expects all employees to conduct their business according to the highest ethical standards of conduct and to comply with all applicable practices.

Morningstar Inc.'s conflicts of interest policy is used as the base for Morningstar Indexes' policy, which has been reviewed and supplemented as necessary to reflect Morningstar Indexes' business. Both Morningstar Inc.'s and Morningstar Indexes' conflicts of interest policies are reviewed annually by the Index Committee; the Committee also reviews annual training and updating of the policies for all employees.

Regarding relevant activities within each respective suggestion for the principle, Morningstar Indexes has implemented the following policies and procedures:

A., B. Potential and/or existing conflicts of interest are logged and detailed in the Morningstar Outside Business Activities form, maintained by Morningstar, Inc.'s Compliance Team through an online reporting system. Any potential or realized interest, connection, and/or conflict is reviewed by the Compliance Team to ensure that the integrity of the Indexes Team is maintained at the highest level, and that all benchmark determinations are free from influence.

C., D. A current mapping of all roles and responsibilities is reviewed and updated twice a year, highlighting the teams and individuals involved in the indexes launch process. This includes all reporting lines and who is responsible throughout each step of the index life cycle. Within this framework, Morningstar Indexes believes all members of the team have the sufficient knowledge and expertise to properly sign off on a benchmark, with the frameworks of doing so included within Principles 4 and 15.

E., F., G. Included within Morningstar Indexes' overall Conflicts of Interest policy is a specific confidentiality policy amendment that addresses the confidentiality necessary for data and other sensitive information. Included in this policy, all Morningstar Indexes employees are subject to a blackout period during proforma periods prior to a rebalance/reconstitution of an Index. All employees are bound by controls to ensure all necessary data remains confidential and is not used in a way that would violate the Conflicts of Interest policy. Further, Morningstar Indexes is subject to a Chinese wall structure to limit any sharing of sensitive information to only those "inside the wall." For those who fall within this category, a comprehensive personal trading restrictions policy is followed monitor trading activities and Conflicts of Interest or improper information. Morningstar Indexes restricts any type of reward to influence decisions made by the levels of a benchmark.

4. **Control Framework**

An administrator should implement an appropriate control framework for the process of determining and distributing the benchmark. The control framework should be tailored to the materiality of the potential or existing conflicts of interest identified to the extent of the use of discretion in the benchmark setting process and to the nature of benchmark inputs and outputs.

The control framework should be documented and available to any relevant regulatory authorities. A summary of its main features should be published or made available to stakeholders.

This control framework should be reviewed periodically and updated as appropriate. The framework should address the following areas:

A. Conflicts of interest in line with Principle 3 on conflicts of interests;
B. Integrity and quality of benchmark determination:
   i. Arrangements to ensure that the quality and integrity of benchmarks is maintained, in line with principles 6 to 15 on the quality of the benchmark and methodology;
   ii. Arrangements to promote the integrity of benchmark inputs, including adequate due diligence on input sources;
   iii. Arrangements to ensure accountability and complaints mechanisms are effective, in line with principles 16 to 19; and
   iv. Providing robust infrastructure, policies, and procedures to manage risk, including operational risk.

C. Whistleblowing mechanism: Administrators should establish an effective whistleblowing mechanism to facilitate early awareness of any potential misconduct or irregularities. This mechanism should allow for external reporting of such cases where appropriate.
D. Expertise: I. Ensuring that benchmark determinations are made by personnel who possess the relevant levels of expertise, with a process for periodic review of their competence; and II. Staff training, including ethics and conflicts-of-interest training, and continuity and succession planning for personnel.

**Morningstar Indexes Response**

Morningstar's Index Team is committed to achieving the highest standards of professionalism and ethical conduct in its operations and activities, and it expects its employees to conduct their business per the highest ethical standards of conduct and to comply with all applicable laws. To achieve these aims, Morningstar Indexes has implemented a robust conflict-of-interest policy. A more detailed description of this policy can be found in Principle 3.

A. Morningstar Indexes implements various control frameworks to improve the benchmark determination process. These process reviews such as our index reviews, changes to methodology, index decommissioning, and data inputs are routinely reviewed to minimize risk. Controls that address potential conflicts of interest are detailed in Principle 3.
B. The Morningstar Index Team has specific processes and controls in place to promote index integrity and ensure data input quality:
   i. To promote index quality:
      Index restatement process: Morningstar Indexes strives to deliver the highest-quality data. Despite Morningstar's focus on excellence, index-level and/or constituent inaccuracies may occur. These inaccuracies may arise as a result of a late or missed dividend, a pricing error, an incorrect application of methodology, or any other missed/incorrectly applied data input. If a vendor, client, or internal member of the indexes group identifies a possible benchmark inaccuracy, Morningstar Indexes conducts a thorough restatement of the index. This restatement process can be found in the Morningstar Indexes Recalculation Guidelines.
      Index QA Processes: The Morningstar Index Team employs a wide range of data QA processes, including variance reporting, rebalancing and reconstitution QA, and missing data alerts to minimize operational risks:
   ii. To ensure data integrity:
      *Data protection framework*: The Morningstar Index Team follows a host of processes to ensure that data is protected. This includes an employee exit procedure, mandatory periodic password updates, data transmission and collection processes, and a new data vendor selection process.
      *Indexes committee*: The Morningstar Indexes Committee meets quarterly, and metrics related to index management are presented. Any incidents are reviewed by the committee to assure that quality checks will minimize reoccurrence in the future. An overview can be found in the Indexes Committee Overview.
      To ensure that the complaints procedure is effective:
      *Gatekeeper framework*: The Morningstar Index Team has a gatekeeper whose responsibility is to manage and ensure that the complaints procedure is being properly followed.
      *Morningstar code of ethics*: Morningstar Indexes employees must comply with standards detailed in Principle 4 and in the Morningstar code of ethics. Employees semiannually certify that they have read, understood, and comply with the Morningstar code.
   iii. Morningstar Indexes has implemented a complete disaster recovery framework and disaster recovery site to allow for proper backup procedures.

C. To help ensure that the Morningstar Index Team follows all prescribed ethical and professional standards, a twofold whistleblowing and ethics hotline process is employed. For a more detailed description of this policy, please contact IndexOperations@morningstar.com
D. To ensure that all employees of Morningstar Indexes are properly qualified:
   i. All Morningstar Indexes personnel undergo an annual review.
   ii. All Morningstar Indexes personnel are trained and regularly updated on ethics and conflict-of-interest expectations.

5. **Internal Oversight**

Administrators should establish an oversight function to review and challenge all aspects of the benchmark determination process. This should include consideration of the features and intended, expected, or known usage of the benchmark and the materiality of existing or potential conflicts of interest identified. Oversight should be carried out either by a separate committee or other governance arrangements. The oversight function and its composition should provide effective scrutiny of the administrator. Such oversight could consider groups of benchmarks by type or asset class, provided that it otherwise complies with this principle. An administrator should develop and maintain robust procedures regarding oversight, which should be documented and available to any relevant Regulatory authorities. The main features of the procedures should be made available to stakeholders. These procedures should include:

A. The terms of reference of the oversight function;
B. Criteria to select members of the oversight function;
C. The summary details of membership of any committee or arrangement charged with the oversight function, along with any declarations of conflicts of interest and processes for election, nomination or removal and replacement of committee members.

The responsibilities of the oversight function include:
A. Oversight of the benchmark design:
   i. Periodic review of the definition of the benchmark and its methodology;
   ii. Taking measures to remain informed about issues and risks to the benchmark, as well as commissioning external reviews of the benchmark (as appropriate.;
   iii. Overseeing any changes to the benchmark methodology, including assessing whether the methodology continues to appropriately measure the underlying interest, reviewing proposed and implemented changes to the methodology, and authorizing or requesting the administrator to consult with stakeholders where known or its subscribers on such changes as per Principle 12; and

**Morningstar Indexes Response**

The Morningstar Indexes Committee is responsible for the oversight of all benchmarks. The committee is an independent governing body, but may work in tandem with the Morningstar Products Council and/or the Morningstar Research Committee when reviewing and overseeing the design and construction of new benchmarks. The official overview of the Indexes Committee can be found on the corporate website.

Morningstar, Inc. employees compose each of the respective governing bodies. The Indexes Committee is staffed by several senior leaders with the experience and expertise necessary to evaluate changes to methodologies, the creation and approval of new methodologies, and the general operation of all benchmarks.

Morningstar, Inc. does not make public the names of any employees who sit on the Indexes Committee to retain the independent nature of our governance procedures. Morningstar Indexes has also implemented a conflicts of interest framework referred to in the response to Principle 3 above that stipulates how all possible conflicts are handled, along with the confidentiality policy.

In regards to IOSCO's recommendations (a. (i-iv), the Indexes Committee oversees benchmark design. Specifically, it is responsible for supervising the initial benchmark determinations and rulebook construction. The committee considers issues and risks and periodically reviews rulebooks to determine whether methodologies are continuing to be achieved. If an index is decommissioned, the committee will review according to the response outlined in Principle 13.

In regards to IOSCO's recommendations (B. i-iv), the Indexes Committee oversees the identification and possible resolutions of risks to the management and operation of Morningstar Indexes, including internal and external issues. Furthermore, the committee is responsible for periodically reviewing internal controls associated with Principle 4 and maintaining the results and subsequent action items for any internal or external audit.

6. **Benchmark Design**

The design of the benchmark should seek to achieve and result in an accurate and reliable representation of the economic realities of the interest it seeks to measure, and eliminate factors that might distort the price, rate, index, or value of the benchmark.

Benchmark design should take into account the following generic nonexclusive features, and other factors should be considered, as appropriate to the particular interest:

A. Adequacy of the sample used to represent the interest;
B. Size and liquidity of the relevant market (for example whether there is sufficient trading to provide observable, transparent pricing;
C. Relative size of the underlying market in relation to the volume of trading in the market that references the benchmark;
D. The distribution of trading among market participants (market concentration); and
E. Market dynamics (to ensure that the benchmark reflects changes to the assets underpinning a benchmark, for example.

**Morningstar Indexes Response**

For over a decade, Morningstar has been developing indexes to understand market performance across regions, styles, and asset classes. With stable methodologies and index design, investors use Morningstar Indexes to analyze market performance. Custom benchmarks are also licensed by clients to create distinct index-linked investable products. Given these business needs, Morningstar designs its benchmarks while considering the IOSCO design recommendation in consideration. Details of an index's individual design, calculation, and maintenance procedures are set in the index rulebooks available at www.corporate.morningstar.com/indexes.

7. **Data Sufficiency**

The data used to construct a benchmark determination should be sufficient to accurately and reliably represent the interest measured by the benchmark and should:

A. Be based on prices, rates, indexes, or values that have been formed by the competitive forces of supply and demand in order to provide confidence that the price discovery system is reliable; and
B. Be anchored by observable transactions entered into at arm's length between buyers and sellers in the market for the interest the benchmark measures in order for it to function as a credible indicator of prices, rates, indexes, or values.

This principle requires that a benchmark be based on, or anchored in, an active market having observable bona fide, arm's-length transactions. This does not mean that every individual benchmark determination must be constructed solely of transaction data. Provided that an active market exists, conditions in the market on any given day might require the administrator to rely on different forms of data tied to observable market data as an adjunct or supplement to transactions. Depending on the administrator's methodology, this could result in an individual benchmark determination being based predominantly, or exclusively, on bids and offers or extrapolations from prior transactions. This is further clarified in Principle 8.

Provided that subparagraphs a. and b. above are met, Principle 7 does not preclude benchmark administrators from using executable bids or offers as a means to construct benchmarks where anchored in an observable market consisting of bona fide, arm's-length transactions. This principle also recognizes that various indexes may be designed to measure or reflect the performance of a rule-based investment strategy, the volatility or behavior of an index or market or other aspects of an active market. Principle 7 does not preclude the use of non-transactional data for such indexes that are not designed to represent transactions and where the nature of the index is such that non-transactional data is used to reflect what the index is designed to measure. For example, certain volatility indexes, which are designed to measure the expected volatility of an index of securities transactions, rely on non-transactional data, but the data is derived from and thus "anchored" in an actual functioning securities or options market.

**Morningstar Indexes Response**

Morningstar Indexes measures and calculates the sufficiency of all data inputs for its indexes to assure that the accuracy of a benchmark is sufficiently met. These determinations may include, but are not limited to, those measurements listed in (A. and B., with all data sourced from third parties overseen by the Indexes Committee. Each index's methodology document, or a similar rulebook that is separately referenced in the methodology, will dictate the treatment of data used in the calculation, generally aligned to the asset class type of the index.

8. **Hierarchy of Data Inputs**

An administrator should establish and publish or make available clear guidelines regarding the hierarchy of data inputs and exercise of expert judgment used for the determination of benchmarks.

In general, the hierarchy of data inputs should include:

A. Where a benchmark depends on submissions, the submitters' own concluded arm's-length transactions in the underlying interest or related markets;
B. Reported or observed concluded arm's-length transactions in the underlying interest;
C. Reported or observed concluded arm's-length transactions in related markets;
D. Firm (executable. bids and offers; and
E. Other market information or expert judgments.

Provided that the data sufficiency principle is met (that is, an active market exists), this principle is not intended to restrict an administrator's flexibility to use inputs consistent with the administrator's approach to ensuring the quality, integrity, continuity, and reliability of its benchmark determinations, as set out in the administrator's methodology.

The administrator should retain flexibility to use the inputs it believes are appropriate under its methodology to ensure the quality and integrity of its benchmark. For example, certain administrators may decide to rely on expert judgment in an active albeit low-liquidity market, when transactions may not be consistently available each day.

IOSCO also recognizes that there might be circumstances (a low-liquidity market, for example. when a confirmed bid or offer might carry more meaning than an outlier transaction. Under these circumstances, nontransactional data such as bids and offers and extrapolations from prior transactions might predominate in a given benchmark determination.

**Morningstar Indexes Response**

Morningstar Indexes are based on prices sourced from regulated trading venues, including those for equities, fixed income, and commodities. For our end-of-day equity indexes we use the official closing prices from exchanges, as detailed in our Morningstar Indexes Closing Prices document. If a price is missing for a certain day, we use the last available closing price.

If a stock is suspended from trading or delisted, resulting in a last-traded price that does not represent the value of the stock, then the average of the last bid and ask is used (as outlined in the "Bankruptcy, Extreme Financial Distress, and/or Delisting" section of our Style Indexes rulebook.

For our real-time equity indexes, we also use real-time prices from exchanges. All closing values of Morningstar indexes are calculated in U.S. dollars, yen, pounds sterling, and euro using an average WM/Reuters bid and ask price at 16:00 GMT.

9. **Transparency of Benchmark Determinations**

The administrator should describe and publish with each benchmark determination, to the extent reasonable without delaying an administrator publication deadline:

A. A concise explanation, sufficient to facilitate a stakeholder's or market authority's ability to understand how the determination was developed, including, at a minimum, the size and liquidity of the market being assessed (meaning the number and volume of transactions submitted., the range and average volume and range and average of price, and indicative percentages of each type of market data that have been considered in a benchmark determination; terms referring to the pricing Methodology should be included (i.e., transaction-based, spread-based or interpolated/extrapolated.;
B. A concise explanation of the extent to which and the basis upon which expert judgment if any, was used in establishing a benchmark determination.

**Morningstar Indexes Response**

A. Morningstar publishes index methodology documents at http://www.indexes.morningstar.com/. Indexes are typically based on data sourced from regulated markets or exchanges. Index methodology documents clearly describe the benchmark determination process and are publicly available. These documents provide sufficient transparency for stakeholders or market authorities to understand how the benchmark determination was developed.
   Morningstar clients have access to data files via FTP relevant to their product that contain adequate information to validate the benchmark determination calculations for an index.
B. For indexes that may include expert judgment, the explanation of this involvement is disclosed with each index determination in the methodology document.

10. **Periodic Review**

The administrator should periodically review the conditions in the underlying interest that the benchmark measures to determine whether the interest has undergone structural changes that might require changes to the design of the methodology. The administrator also should periodically review whether the interest has diminished or is nonfunctioning such that it can no longer function as the basis for a credible benchmark.

The administrator should publish or make available a summary of such reviews where material revisions have been made to a benchmark, including the rationale for the revisions.

**Morningstar Indexes Response**

Morningstar Indexes are rebalanced and reconstituted on different calendars, as laid out in their respective rulebooks. Equity and Multi-Asset indexes are rebalanced quarterly, semiannually, or annually, while fixed-income indexes are rebalanced monthly or semiannually. During this process, each index methodology is evaluated to ensure it is still achieving the strategy it's meant to measure. When a material methodology change is undertaken, Morningstar will follow our methodology change process, from Principle 12, to include all public announcements and applicable consultations with relevant stakeholders. Before a methodology change is made to an index, the Indexes Committee will review the proposal and provide feedback and the ultimate decision to implement the change.

11. **Content Methodology**

The administrator should document and publish or make available the methodology used to make benchmark determinations. The administrator should provide the rationale for adopting a particular methodology. The published methodology should provide sufficient detail to allow stakeholders to understand how the benchmark is derived and to assess its representativeness, its relevance to particular stakeholders, and its appropriateness as a reference for financial instruments. At a minimum, the methodology should contain:

A. Definitions of key terms;
B. All criteria and procedures used to develop the benchmark, including input selection, the mix of inputs used to derive the benchmark, the guidelines that control the exercise of expert judgment by the administrator, priority given to certain data types, minimum data needed to determine a benchmark, and any models or extrapolation methods;
C. Procedures and practices designed to promote consistency in the exercise of expert judgment between benchmark determinations;
D. The procedures that govern benchmark determination in periods of market stress or disruption, or periods where data sources may be absent (theoretical estimation models, for example.;
E. The procedures for dealing with error reports, including when a revision of a benchmark would be applicable;
F. Information regarding the frequency for internal reviews and approvals of the methodology. Where applicable, the published methodologies should also include information regarding the procedures and frequency for external review of the methodology;
G. The circumstances and procedures under which he administrator will consult with stakeholders, as appropriate and;
H. The identification of potential limitations of a benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs.

**Morningstar Indexes Response**

Morningstar publishes methodology documents for all its indexes at http://www.indexes.morningstar.com/. The public rulebooks highlight Morningstar's rationale behind the methodology and calculation for each index.

Morningstar key terms are defined in the indexes' fact sheets, which are publicly available to stakeholders. The index methodologies within the rulebooks detail all criteria and procedures such as eligibility requirements, weightings, and calculations used for the determination of the benchmarks. The methodologies provide stakeholders with sufficient information to understand how the index is calculated and its relevance to the market as an instrument for financial measurement. If expert judgment is considered in the benchmark determination, all analysis is provided in the index rulebook.

In the event of market stress or disruption, stakeholders will be made aware. Such events will be resolved at the discretion of the Morningstar Indexes Committee and will follow the Morningstar governance process. Information regarding the frequency for internal reviews and approvals of the methodology are available in published methodology rulebooks. Any methodology changes are made public on the corporate website. Additionally, stakeholders are contacted about any changes and their impact to the index.

12. **Changes to Methodology**

An administrator should publish or make available the rationale for any proposed material change in its methodology and the procedures for making such changes. These procedures should clearly define what constitutes a material change and the method and timing for consulting or notifying subscribers (and other stakeholders when appropriate, taking into account the breadth and depth of the benchmark's use. of changes. The procedures should be consistent with the overriding objective of ensuring the continued integrity of an administrator's benchmark determinations. When changes are proposed, the administrator should specify exactly what these changes entail and when they are intended to apply.

The administrator should specify how changes to the methodology will be scrutinized by the oversight function.

The administrator should develop stakeholder consultation procedures in relation to changes to the methodology that are deemed material by the oversight function and that are appropriate and proportionate to the breadth and depth of the benchmark's use and the nature of the stakeholders. Procedures should:

A. Provide advance notice and a clear time frame that gives stakeholders sufficient opportunity to analyze and comment on the impact of such proposed material changes, having regard to the administrator's assessment of the overall circumstances; and
B. Provide for stakeholders' summary comments and the administrator's summary response to those comments to be made accessible to all stakeholders after any given consultation period, except where the commenter has requested confidentiality.

**Morningstar Indexes Response**

Changes to the methodology of indexes are disclosed on the Morningstar corporate website in the Morningstar Indexes Methodology Change Process document. Any changes that affect the methodology of an index will be publicly published, and all relevant stakeholders will be notified. Morningstar's governance structure ensures that such changes are reviewed by the Morningstar Index Committee and that all stakeholders are notified of when and how changes will take effect.

13. **Transition**

Administrators should have clear written policies and procedures to address the possible cessation of a benchmark because of market structure change, product definition change, or any other condition that makes the benchmark no longer representative of its intended interest. These policies and procedures should be proportionate to the estimated breadth and depth of contracts and financial instruments that reference a benchmark and the economic and financial stability impact that might result from the cessation of the benchmark. The administrator should take into account the views of stakeholders and any regulatory and national authorities to determine what policies and procedures are appropriate for a particular benchmark.

These written policies and procedures should be published or made available to all stakeholders. Administrators should encourage subscribers and other stakeholders who have financial instruments that reference a benchmark to ensure that:

A. Contracts or other financial instruments that reference a benchmark have robust fallback provisions in the event of material changes to, or cessation of, the referenced benchmark; and
B. Stakeholders are aware that various factors, including external factors beyond the control of the administrator, might require material changes to a benchmark.

Administrators' written policies and procedures to address the possibility of benchmark cessation could include the following factors, if determined to be reasonable and appropriate by the administrator:

A. Criteria to guide the selection of a credible alternative benchmark such as, but not limited to, criteria that seek to match to the extent practicable the existing benchmark's characteristics (credit quality, maturities, and liquidity of the alternative market, for example., differentials between benchmarks, the extent to which an alternative benchmark meets the asset/liability needs of stakeholders, whether the revised benchmark is investable, the availability of transparent transaction data, the impact on stakeholders, and the impact of existing legislation.
B. The practicality of maintaining parallel benchmarks (e.g., where feasible, maintain the existing benchmark for a defined period of time to permit existing contracts and financial instruments to mature and publish a new benchmark) in order to accommodate an orderly transition to a new benchmark;
C. The procedures that the administrator would follow if a suitable alternative cannot be identified;
D. If a benchmark or a tenor of a benchmark will be discontinued completely, the policy defining the period of time in which the benchmark will continue to be produced in order to permit existing contracts to migrate to an alternative benchmark if necessary; and
E. The process by which the administrator will engage stakeholders and any market and national authorities, as appropriate, in the process for selecting and moving toward an alternative benchmark, including the time frame for any such action commensurate with the tenors of the financial instruments referencing the benchmarks and the adequacy of notice that will be provided to stakeholders.

**Morningstar Indexes Response**

The Morningstar Index Team has clearly documented internal and external index cessation procedures. Although decommissioning an index is uncommon, circumstances may arise that call for the cessation of a Morningstar index, including, but not limited to: market structure change, geopolitical events, regulatory changes, product definition change, inadequate supply of data, and/or other external factors beyond the control of Morningstar.

As outlined in the Morningstar Indexes Cessation Policy, available on the corporate website, the index team reserves the right to decommission or transition any index given that all stakeholders and the public are notified in an appropriate time frame. Decommissioning is subject to contract approval.

Morningstar's cessation policy contains language that makes stakeholders aware of external factors that may require the cessation of an index.

Before any index is decommissioned, the Morningstar Index Team evaluates the potential cessation impact and consults with all stakeholder subscribers (if applicable. to determine best suitable course of action. Given the cessation impact as well as takeaways from the stakeholder consultation, the Morningstar Index Committee will determine if and how Morningstar Indexes will provide specific transition assistance. Transition assistance could be (but is not limited to) the continued calculation of index for specified time period, until a suitable alternative index has been identified.

In accordance with Morningstar Indexes' cessation policy, all stakeholders are notified at least three months before an index is decommissioned. All notifications of an index cessation and other announcements are made publicly available on Morningstar's corporate website.

14. **Submitter Code of Conduct**

When a benchmark is based on submissions, the following additional principle also applies: The administrator should develop guidelines for submitters, a code of conduct, that should be available to any relevant regulatory authorities and published or made available to stakeholders. The administrator should only use inputs or submissions from entities that adhere to the submitter code of conduct, and the administrator should monitor and record adherence from submitters. The administrator should require submitters to confirm adherence to the code of conduct annually and whenever a change to the code has occurred. The administrator's oversight function should be responsible for the continuing review and oversight of the submitter code of conduct. The code of conduct should address:

A. The selection of inputs;
B. Who may submit data and information to the administrator;
C. Quality control procedures to verify the identity of a submitter and any employee of a submitter who reports data or information and the authorization of such persons to report market data on behalf of a submitter;
D. Criteria applied to employees of a submitter who are permitted to submit data or information to an administrator on behalf of a submitter;

E. Policies to discourage the interim withdrawal of submitters from surveys or panels;
F. Policies to encourage submitters to submit all relevant data; and
G. The submitters' internal systems and controls, which should include:
   i. Procedures for submitting inputs, including methodologies, to determine the type of eligible inputs, in line with the administrator's methodologies;
   ii. Procedures to detect and evaluate suspicious inputs or transactions, including intergroup transactions, and to ensure the bona fide nature of such inputs, where appropriate;
   iii. Policies guiding and detailing the use of expert judgment, including documentation requirements;
   iv. Record-keeping policies;
   v. Presubmission validation of inputs, and procedures for multiple reviews by senior staff to check inputs;
   vi. Training, including training with respect to any relevant regulation (covering benchmark regulation or any market abuse regime.;
   vii. Suspicious submission reporting;
   viii. Roles and responsibilities of key personnel and accountability lines;
   ix. Internal sign-off procedures by management for submitting inputs;
   x. Whistleblowing policies (in line with Principle 4); and
   xi. Conflicts-of-interest procedures and policies, including prohibitions on the submission of data from front-office functions unless the administrator is satisfied that there are adequate internal oversight and verification procedures for front-office function submissions of data to an administrator (including safeguards and supervision to address possible conflicts of interests as per paragraphs (v) and (ix) above., the physical separation of employees and reporting lines where appropriate, the consideration of how to identify, disclose, manage, mitigate, and avoid existing or potential incentives to manipulate or otherwise influence data inputs (whether or not in order to influence the benchmark levels), including, without limitation, through appropriate remuneration policies and by effectively addressing conflicts of interest that may exist between the submissions (including all staff who perform or otherwise participate in benchmark submission responsibilities) and any other business of the submitter or of any of its affiliates or any clients or customers.

**Morningstar Indexes Response**

Morningstar indexes are calculated based on data from regulated trading venues and are therefore not based on submissions, except for the Morningstar Hedge Fund Nexus Index, according to the terms of IOSCO principles. Morningstar currently excludes this index from IOSCO compliance.

15. **Internal Controls Over Data Collection**

When data is collected from any external source, the administrator should ensure that there are appropriate internal controls over the collection and transmission processes. These controls should address the process for selecting the source, collecting the data, and protecting the integrity and confidentiality of the data. When administrators receive data from employees of the front-office function, the administrator should seek corroborating data from other sources.

**Morningstar Indexes Response**

As referred to in Principle 4, the Morningstar Index Team follows a host of processes to ensure that data is protected. This includes an employee exit procedure, mandatory periodic password updates, data transmission and collection processes via secured data portals, and a new data vendor selection process. In addition, Morningstar Indexes maintains a full Disaster Recovery site, along with ensuring a properly established segregation of duties between members of the team.

16. **Complaints Procedures**

The administrator should establish and publish or make available a written complaints procedures policy by which stakeholders may submit complaints, including whether a specific benchmark determination is representative of the underlying interest it seeks to measure, applications of the methodology in relation to specific benchmark determinations, and other administrator decisions in relation to a benchmark determination.

The complaints procedures policy should:

A. Permit complaints to be submitted through a user-friendly complaints process such as an electronic submission system;
B. Contain procedures for receiving and investigating complaints made about the administrator's benchmark determination process timely and fairly by personnel who are independent of anyone who may be or may have been involved in the subject of the complaint, advising the complainant, and other relevant parties of the outcome of its investigation within a reasonable period and retaining all records concerning complaints;
C. Contain a process for escalating complaints, if needed, to the administrator's governance body; and
D. Require all documents relating to a complaint, including those submitted by the complainant as well as the administrator's own record, to be retained for a minimum of five years, subject to applicable national legal or regulatory requirements.

Disputes about a benchmarking determination, which are not formal complaints, should be resolved by the administrator by the appropriate standard procedures. If a complaint results in a change in a benchmark determination, that should be published or made available to subscribers and published or made available to stakeholders as soon as possible as set out in the methodology.

A. The exercise of Expert judgment made by the administrator in reaching a benchmark determination;
B. Other changes in or deviations from standard procedures and methodologies, including those made during periods of market stress or disruption;
C. The identity of each person involved in producing a benchmark determination; and
D. Any queries and responses relating to data inputs.

If these records are held by a regulated market or exchange, the administrator may rely on these records for compliance with this principle, subject to appropriate written record-sharing agreements.

When a benchmark is based on submissions, the following additional principle also applies:

Submitters should retain records for five years subject to applicable national legal or regulatory requirements on:

A. The procedures and methodologies governing the submission of inputs;
B. The identity of any other person who submitted or otherwise generated any of the data or information provided to the administrator;
C. Names and roles of individuals responsible for submission and submission oversight;

**Morningstar Indexes Response**

To ensure that all Morningstar Indexes' clients and prospects receive accurate, timely, and detailed responses to any Morningstar index-related inquiry or complaint, we employ a global support framework. The Morningstar Indexes Inquiry and Complaint Process can be found on our corporate website.

A. All complaints or queries regarding index methodology, reconstitution/rebalance results, corporate actions, publication, and other special requests can be submitted via email or phone.
B. All queries and complaints are logged and evaluated by designated gatekeepers who further disseminate or escalate the issues. In accordance with Morningstar's internal complaints and inquiries procedure, all critical issues are responded to within one business day, while all standard issues are responded to within three business days.
C. The internal inquiries and complaints procedure contains a process to escalate issues up to the Morningstar Index Committee.
D. All documents relating to a complaint or inquiry are logged electronically and are retained for at least five years.

If a vendor or client submits an inquiry or complaint that identifies a benchmark inaccuracy, the Morningstar Index Team will evaluate and handle according to the Morningstar Indexes Recalculation Guidelines, which can be found on the corporate website.

17. **Audit**

The administrator should appoint an independent internal or external auditor with appropriate experience and capability to periodically review and report on the administrator's adherence to its stated criteria and with the principles. The frequency of audits should be proportionate to the size and complexity of the administrator's operations. Where appropriate to the level of existing or potential conflicts of interest identified by the administrator (except for benchmarks that are otherwise regulated or supervised by a national authority other than a relevant regulatory authority), an administrator should appoint an independent external auditor with appropriate experience and capability to periodically review and report on the administrator's adherence to its stated criteria and with the principles. The frequency of audits should be proportionate to the size and complexity of the administrator's operations. Where appropriate to the level of existing or potential conflicts of interest identified by the administrator (except for benchmarks that are otherwise regulated or supervised by a national authority other than a relevant regulatory authority), an administrator should appoint an independent external auditor with appropriate experience and capability to periodically review and report on the administrator's adherence to its stated methodology. The frequency of audits should be proportionate to the size and complexity of the administrator's benchmark operations and the breadth and depth of benchmark use by stakeholders.

**Morningstar Indexes Response**
The Index Governance Committee may elect to use Morningstar's compliance and/or internal audit department to periodically review and report on the index team's adherence to its stated policy, procedures, and practices. The frequency of such reviews is based on several factors, including complaints received, the identified conflicts of interests, and the complexity in the operations and administration of an index.

When warranted, Morningstar's Index Committee may appoint an independent external auditor with appropriate experience and capability to periodically review and report on the adherence to its stated methodologies. Similar to above, the frequency of such reviews is based on factors like the size and complexity of the index team's operations and the identified conflicts of interests.

18. **Audit Trails**
Written records should be retained by the administrator for five years, subject to applicable national legal or regulatory requirements on:

A. All market data, submissions and any other data and information sources relied upon for benchmark determination;
B. The exercise of expert judgment made by the administrator in reaching a benchmark determination;
C. Other changes in or deviations from standard procedures and methodologies, including those made during periods of market stress or disruption;
D. The identity of each person involved in producing a benchmark determination; and
E. Any queries and responses relating to data inputs.

If these records are held by a regulated market or exchange, the administrator may rely on these records for compliance with this principle, subject to appropriate written record-sharing agreements. When a benchmark is based on submissions, the following additional principle also applies: Submitters should retain records for five years subject to applicable national legal or regulatory requirements on:

A. The procedures and methodologies governing the submission of inputs;
B. The identity of any other person who submitted or otherwise generated any of the data or information provided to the administrator;
C. Names and roles of individuals responsible for submission and submission oversight;
D. Relevant communications between submitting parties;
E. Any interaction with the administrator;
F. Any queries received regarding data or information provided to the administrator;
G. Declaration of any conflicts of interests and aggregate exposures to benchmark-related instruments;

H. Exposures of individual traders/desks to benchmark-related instruments in order to facilitate audits and investigations; and
I. Findings of external/internal audits, when available, related to benchmark submission remedial actions and progress in implementing them.

**Morningstar Indexes Response**

Morningstar Indexes is committed to maintaining the necessary requirements for all auditable information necessitated by IOSCO. This includes:

a. All data used in index determination and maintenance kept for at least five years, with data replication to be stored in a backup location in accordance with a disaster recovery plan.

b, c. The use of expert judgment and the changes and/or deviations in policy or methodology are kept on record within the meeting minutes of all Index Committee meetings, as determined by the Index Committee. Each Index Committee's meeting is recorded and kept for a minimum of five years.

d. All Morningstar employees and teams involved in the determination of an index are documented, including role, function, and relevant human resources data.

e. All communication related to Morningstar Indexes' data, methodologies, and/or queries are stored for a minimum of five years.

19. **Cooperation with Regulatory Authorities**

Any relevant documents or audit trails shall be made available to any regulatory authorities performing their regulatory or supervisory duties and handed over promptly upon request.

**Morningstar Indexes Response**

Within reason, Morningstar Indexes will cooperate with all regulatory authorities in relation to relevant and legitimate requests or investigations, barring any applicable legal constraints, including, but not limited to, confidentiality.

## Appendix

**Administrator:** An organization or legal person that controls the creation and operation of the benchmark administration process, whether or not it owns the intellectual property relating to the benchmark. In particular, it has responsibility for all stages of the benchmark administration process, including

A. The calculation of the benchmark;
B. Determining and applying the benchmark methodology; and
C. Disseminating the benchmark.

**Calculation agent**: A legal entity with delegated responsibility for determining a benchmark through the application of a formula or other method of calculating the information or expressions of opinions provided for that purpose, in accordance with the methodology set out by the administrator.
Expert judgment: Refers to the exercise of discretion by an administrator or submitter with respect to the use of data in determining a benchmark. Expert judgment includes extrapolating values from prior or related transactions, adjusting values for factors that might influence the quality of data such as market events or impairment of a buyer or seller's credit quality, or weighting firm bids or offers greater than a particular concluded transaction.

**FTP (File Transfer Protocol):** A standard network protocol used to transfer computer files between a client and server on a computer network.

**Methodology:** The written rules and procedures according to which information is collected and the benchmark is determined.

**Stakeholder:** Refers to subscribers and other people or entities who own contracts or financial instruments that reference a benchmark.

**Submissions:** Prices, estimates, values, rates, or other information that is provided by a submitter to an administrator for the purposes of determining a benchmark. This excludes data sourced from regulated markets or exchanges with mandatory post-trade transparency requirements.

**Submitter:** A legal person providing information to an administrator or calculation agent required in connection with the determination of a benchmark.

**Subscriber:** A person or entity that purchases benchmark determination services from an administrator.

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