Morningstar Strategic Beta and Index Attributes
Methodology

Introduction
Index selection and weighting are the two main components of an index’s construction methodology, referring to how constituents are chosen and weighted within an index. Index selection and weighting also provide a more granular understanding of the distinction between traditional and strategic-beta indexes.

Strategic beta—widely referred to as smart beta—refers broadly to a group of indexes and the exchange-traded products and other investment products that track them. Most seek to enhance returns or minimize risk relative to more traditional benchmarks. Others seek to address oft-cited drawbacks of standard benchmarks such as the negative effect of contango in long-only commodity futures indexes and the overweighting of the most indebted issuers in market value-weighted fixed-income benchmarks. These indexes may also aim to capture a specific factor or set of factors such as value, momentum, small size, low volatility, or quality.

Index selection and weighting methodologies can vary for different strategic-beta indexes that otherwise appear similar. These indexes can also employ some of the same selection or weighting methodologies as more traditional benchmarks. Therefore, it is valuable to both recognize and distinguish strategic-beta indexes versus traditional benchmarks but also to understand the underlying index selection and weighting methodologies for both.

The goal of Morningstar’s Strategic Beta and Index attribute data is to provide a more granular view of how indexes are constructed. Morningstar first introduced its strategic beta taxonomy in 2014; it aimed to provide additional detail on strategic-beta products through assignment of one or more Strategic Beta Attributes as well as assignment of a Strategic Beta Group. Our updated methodology replaces Strategic Beta Attributes with Index Selection and Index Weighting attributes for all eligible index-tracking products and uses a more descriptive list of Strategic Beta Groups for strategic-beta index-tracking products.

The following document explains the circumstances under which Morningstar considers funds and the indexes they track eligible for collection of Index Strategy, Index Weighting, and Strategic Beta Group. The document also details how assignment is determined and regularly reviewed. This document represents Morningstar’s position on the subject; it is not a summary of local regulations.
How We Define Strategic Beta

In addition to collecting Index Selection, Index Weighting, and Strategic Beta Group, Morningstar also has a Strategic Beta tag in some products. We define this as an indication that the index, or the investable product that tracks the index, follows a strategic beta—widely referred to as *smart beta*—investment mandate. Strategic-beta products employ rules to exploit a specific list of factors in order to improve their return profile or alter their risk profile.

Below are general parameters and characteristics we use to recognize strategic-beta products:

- These benchmarks and the investable products that track them exploit many of the same “factors” (size, value, quality, momentum, and so on) or mitigate risk in a manner similar to active managers.

- This group represents a middle ground on the active-to-passive spectrum—deviating from a traditional strictly passive market portfolio but doing so in a rules-based, transparent, and relatively low-cost manner.

- Many have defined the space in the negative, including products tracking any benchmark that does not weight its constituents on the basis of their market capitalization.

- Per our definition, while most of the indexes’ underlying investment products in this class are not market-capitalization-weighted, some are (for example, those that have style “tilts”—which screen their investable universe for certain characteristics and subsequently weight constituents by their market capitalization).

- We do not include market-capitalization-weighted sector indexes (though we do include non-cap-weighted sector benchmarks), thematic indexes (for example, socially responsible indexes, clean energy indexes, and so on), market-capitalization-weighted country indexes (again, we will include non-cap-weighted ones), and other types of indexes that screen constituents strictly on the basis of sector membership, investment theme, or geography in this grouping.
We exclude products tracking benchmarks that employ options strategies (for example, covered calls, protective puts)

We exclude quantitative tactical strategies

We exclude products offering some form of exposure to volatility (for example, VIX or VSTOXX indexes)

We also exclude benchmarks that underlie those products that are included in our “trading” categories, such as leveraged and inverse funds

The common elements among this diverse set of products are:

1. They are index-tracking investment products
2. They track nontraditional benchmarks that have an “active” element contained within their methodology that typically aims to either improve returns or alter the index’s risk profile relative to a standard benchmark
3. Many of their benchmarks have short track records and were designed for the sole purpose of serving as the basis of an investment product
4. Their expense ratios tend to be lower relative to actively managed funds
5. Their expense ratios are often substantially higher relative to products tracking “bulk beta” benchmarks, like the S&P 500
Eligible for Collection

The Strategic Beta and Index Strategy data points reflect the methodology of an index, so that any two eligible investment products tracking the same index will also display the same data. Eligibility for collection is based off the investment product, though, so not all indexes Morningstar covers will have the Strategic Beta and Index Strategy data points populated.

Index Selection, Index Weighting, and Strategic Beta Group are not assigned to all indexes, exchange-traded products, and open-end funds. Index Selection and Index Weighting are collected for all eligible index-tracking products and the indexes they track. Strategic Beta Group will apply to eligible strategic-beta products and is assigned as “Not Applicable” for standard indexes and the investment products that track them. Index Selection, Index Weighting, and Strategic Beta Group will not be populated for excluded products.

Eligible
- We include global index tracking exchange-traded products and open-end funds, which do not track a blended benchmark and are not included in our “trading” categories, such as leveraged and inverse funds
- An index will be assigned only when an eligible investment product is tracking it
- If the investment product and its index are strategic-beta, a Strategic Beta Group is assigned. Standard benchmarks are assigned as “Not Applicable” for Strategic Beta Group.

Excluded
- We do not populate Index Selection, Index Weighting, or Strategic Beta Group for excluded products
- We exclude actively managed investment products
- We exclude investment products outside of ETPs and open-end funds
- We exclude index-tracking products that track a blended benchmark
- We exclude index-tracking products that are included in our “trading” categories, such as leveraged and inverse funds
- We exclude indexes that do not have an eligible investment product tracking them yet
Strategic Beta Group

Strategic Beta Group is defined as the group used to classify strategic-beta products with similar objectives. Eligible strategic-beta investment products and the indexes they track will be assigned to one group from the choices below.

Commodity
A group for strategic-beta products that aim to improve upon the performance of standard commodity indexes (such as the Bloomberg Commodity Index or S&P GSCI). They may do so by attempting to avoid the chief drawbacks of standard commodity indexes such as roll losses resulting from contango. These indexes may also seek to harness other fundamental factors, such as momentum.

Dividend
A group for strategic-beta products that seek to deliver equity income by employing a number of dividend-related screening and/or weighting criteria. Dividend-oriented strategies include screening a universe of stocks for dividend-paying firms, weighting stocks on the basis of dividend payments, screening on the basis of dividend growth or yield, isolating firms based on metrics that would indicate dividend stability, and other dividend-related criteria.

Fixed Income
A group for strategic-beta products that aim to enhance returns and/or reduce risk relative to traditional fixed-income benchmarks. They may do so by selecting and weighting constituents on the basis of measures of credit quality, momentum, yield, or other gauges of issuers' fundamentals in an effort. Other strategies in this category may have specific risk, yield, or duration targets.

Fundamentals
A group for strategic-beta products that select and weight constituents on a variety of fundamental measures of their value. These inputs may include sales, adjusted sales, cash flow, dividends, share buybacks, book value, and others.

Growth
A group for strategic-beta products that primarily aim to capture growth characteristics through their screening and/or weighting methodology. Strategic-beta products belonging to the Growth Strategic-Beta Group will screen a segment of the stock market looking to identify those stocks that display
growth characteristics and/or may also more heavily weight constituents based on growth characteristics. These characteristics will differ across index providers. Common growth characteristics include: above-average long-term projected earnings growth, historical earnings growth, sales growth, cash flow growth, book value growth, momentum, and others.

**Momentum**
A group for strategic-beta products that primarily aim to capture momentum characteristics through their screening and/or weighting methodology. Strategic-beta products belonging to the Momentum Strategic Beta Group will select and/or weight their constituent securities on a number of momentum factors, which might include price momentum, adjustments to earnings estimates, and earnings surprises.

**Multifactor**
A group for strategic-beta products that set out to combine a variety of factors (such as value, growth, size, momentum, quality, and low volatility) in an effort to improve risk-adjusted performance relative to a standard benchmark.

**Other**
A group for strategic-beta products that do not fit neatly into any of the remaining Strategic Beta Groups. They will tend to be highly specialized strategies and may be few in number—thus, not warranting a dedicated group of their own. As such, this group will represent different types of strategies. Morningstar routinely reviews industry trends and what vehicles are being assigned to Other to determine if a new stand-alone group is warranted.

**Quality**
A group for strategic-beta products that primarily aim to capture quality characteristics through their screening and/or weighting methodology. Strategic-beta products belonging to the Quality Strategic Beta Group will screen a segment of the stock market looking to identify those stocks that display quality characteristics and may also more heavily weight constituents based on quality characteristics. These characteristics will differ across index providers. Common quality characteristics include: high and stable levels of profitability, clean balance sheets, capital efficiency, return on assets, economic moats, and others.

**Risk-Oriented**
A group for strategic-beta products that attempt to either reduce or increase the level of risk relative to a standard benchmark. Low-volatility and high-beta strategies are the most common examples of risk-oriented strategies.
Value

A group for strategic-beta products that primarily aim to capture value characteristics through their screening and/or weighting methodology. Strategic-beta products in the Value Strategic Beta Group will screen a segment of the stock market looking to identify those stocks that display value characteristics and may also more heavily weight constituents based on value characteristics. These characteristics will differ across index providers. Common value characteristics include: low price/prospective earnings, price/book, price/sales, and price/cash flow ratios, above-average dividend yields, and others.
Index Selection

Index Selection is defined as the attributes that describe how indexes select their constituents. Eligible index-tracking investment products and the indexes they track will be assigned one or more index-selection criteria from the choices below.

**Beta**
An indication the index selects constituents based on their market beta.

**Buyback/Shareholder Yield**
An indication the index selects constituents based on one or more measures of share buybacks or shareholder yield.

**Committee**
An indication there is a committee that selects constituents based on various criteria.

**Credit**
An indication the index selects constituents based on one or more credit measures such as issuer credit ratings.

**Dividend**
An indication the index selects constituents based on one or more dividend-related measures such as dividend yield or dividend growth.

**Duration**
An indication the index selects bonds based on one or more duration measures such as targeted duration.

**Earnings**
An indication the index selects constituents based on one or more earnings measures such as the amount of earnings or earnings growth.

**Fixed**
An indication the index has a fixed universe of constituents.
Fundamentals
An indication the index selects constituents based on one or more measures of their fundamentals such as sales, adjusted sales, cash flow, dividends, share buybacks, book value, and others.

Growth
An indication the index selects constituents based on one or more growth measures such as long-term projected earnings growth, historical earnings growth, sales growth, cash flow growth, book value growth, momentum, and others.

Liquidity
An indication the index selects constituents based on one or more measures of their liquidity such as trading volume.

Market Capitalization
An indication the index selects constituents based on their market capitalization or market value.

Maturity
An indication the index selects bonds based on their maturity.

Momentum
An indication the index selects constituents based on one or more measures of their momentum such as price momentum, adjustments to earnings estimates, and earnings surprises.

Optimization
An indication the index uses an optimizer to select constituents.

Other
An indication the index selects constituents based on other measures that do not fit neatly within any of the remaining index-selection attributes. These factors will tend to be highly specialized. As such, they may be few in number and do not warrant a dedicated attribute of their own. Consequently, this attribute will be applied to a variety of different selection strategies. Morningstar routinely reviews industry trends to determine if a new stand-alone selection attribute may be warranted.

Proprietary
An indication the index selects constituents based on one or more proprietary measures.

Quality
An indication the index selects constituents based on one or more measures of quality such as profitability and financial leverage.
Sector
An indication the index selects constituents based on one or more specific sectors such as industrials and financial.

Single Commodity
An indication the index is composed of futures contracts for a single commodity.

Small Size
An indication the index tilts toward smaller stocks within its selection universe.

Target Maturity
An indication the index selects fixed-income constituents based on a targeted maturity date.

Value
An indication the index selects constituents based on one or more value measures such as low price/prospective earnings, price/book, price/sales, and price/cash flow ratios, above-average dividend yields, and others.

Volatility
An indication the index selects constituents based on one or more measures of volatility.

Yield
An indication the index selects constituents based on one or more yield measures.
Index Weighting

Index Weighting is defined as the attributes that describe how indexes weight their constituents. Eligible index-tracking investment products and the indexes they track will be assigned one or more index-weighting criteria from the choices below.

**Beta**
An indication the index weights constituents based on their market beta.

**Buyback/Shareholder Yield**
An indication the index weights constituents based on one or more measures of share buybacks or shareholder yield.

**Dividend**
An indication the index weights constituents based on one or more dividend-related measures such as dividend yield or total dividend payments.

**Duration**
An indication the index weights bonds based on one or more duration measures such as targeted duration.

**Earnings**
An indication the index weights constituents based on one or more earnings measures such as the amount of earnings or earnings growth.

**Equal**
An indication the index weights constituents equally.

**Fixed**
An indication the index applies fixed weights to constituents.

**Fundamentals**
An indication the index weights constituents based on multiple fundamental measures such as sales, adjusted sales, cash flow, dividends, share buybacks, book value, and others.
Growth
An indication the index weights constituents based on their growth characteristics such as long-term projected earnings growth, historical earnings growth, sales growth, cash flow growth, book value growth, momentum, and others.

Liquidity
An indication the index weights constituents based on one or more measures of their liquidity such as trading volume.

Market Capitalization
An indication the index weights constituents by market capitalization or market value.

Maturity
An indication the index weights bonds based on their maturity.

Modified Market Capitalization
An indication the index weights constituents based on their modified market capitalization. Examples include benchmarks that apply weighting caps or other adjustments to conform with diversification-related regulatory requirements.

Momentum
An indication the index weights constituents based on one or more measures of their momentum such as price momentum, adjustments to earnings estimates, and earnings surprises.

Optimization
An indication the index uses an optimizer to weight constituents.

Other
An indication the index weights constituents based on other measures that do not fit neatly within any of the remaining index-weighting attributes. These factors will tend to be highly specialized. As such, they may be few in number and do not warrant a dedicated attribute of their own. Consequently, this attribute will be applied to a variety of different weighting strategies. Morningstar routinely reviews industry trends to determine if a new stand-alone weighting attribute may be warranted.

Production
An indication the index weights commodities based on the quantity of each commodity in the index that is produced.
Proprietary
An indication the index weights constituents based on proprietary metrics.

Quality
An indication the index weights constituents on the basis of their quality characteristics such as profitability and financial leverage.

Revenue
An indication the index weights constituents based on their revenue.

Single Commodity
An indication the index is composed of futures contracts for a single commodity.

Size
An indication the index weights constituents on the basis of their size in an effort to tilt toward smaller companies within the selection universe.

Tiered
An indication the index assigns constituents to multiple tiers. Each tier will likely have a target weight. Within each tier, constituents may be weighted in a variety of ways (equally, based on market cap, and so on).

Value
An indication the index weights constituents based on their value characteristics such as low price/prospective earnings, price/book, price/sales, and price/cash flow ratios, above-average dividend yields, and others.

Volatility
An indication the index weights constituents based on one or more measures of their volatility.

Yield
An indication the index weights constituents based on one or more measures of their yield.
Review Process

The investment industry will continue to evolve and demonstrate new trends in index-construction methodology. As index construction becomes more complex, Morningstar anticipates the need to regularly review the choices offered for Index Selection, Index Weighting, and Strategic Beta Group assignment. We conduct, at a minimum, an annual review process to assess what products and indexes have been assigned as Other within these three data points to decide whether a new choice is warranted. In addition to the review process for added new choices, we accept appeals for existing assignments throughout the year. Morningstar reviews all appeals but generally rejects those based on a difference in definition. We do not have a required form for appeals but stress that successful appeals typically provide information demonstrating that our analysis is incomplete or inaccurate. Appeals can be submitted only by fund or index representatives and not by third parties.

Fund and index representatives may send a request to appeal by emailing surveyedoperationsdata@morningstar.com.

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