
Construction Rules for the Morningstar® Bond Indexes

Morningstar Indexes

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Overview

The Morningstar bond indexes were created to provide bond investors with accurate benchmarks for performance measurement and to offer discrete building blocks for portfolio construction. These indexes provide an accurate, broad depiction of the performance and fundamental characteristics of the bond markets. There are four key features underlying the design and construction of the Morningstar bond indexes:

- ▶ Transparent and objective rules. Index construction is governed by a clear set of well-documented rules for security selection and exclusion, as well as reconstitution.
- ▶ The right balance between comprehensive market coverage and investability. Indexes are broad and inclusive enough to incorporate the prominent characteristics of active managers' portfolios and fulfill a market-monitoring function while still maintaining a focus on investability.
- ▶ Non-overlapping and hierarchical structure. Each index offers discrete exposure—without any overlap—to specific underlying bond sectors. This clear family-level organizational scheme affords the following benefits:
 - ▶ Distinct indexes serve as ideal tools for performance benchmarking and portfolio construction.
 - ▶ Well-suited for accurate analysis and attribution of performance in active strategies.
 - ▶ Avoiding overlap is critical in reducing concentration risk for users employing collections of indexes to build customized portfolios.
 - ▶ Finally, slicing the bond market into distinct pieces suits the needs of investors who are trying to match specific liabilities or manage specific risk exposures.
- ▶ Open access to index-level data and metrics to all users. Morningstar makes its bond index data available to all users through our products and websites.

Index Inception Date and Performance Inception Date

The performance inception date is when the first back-tested index value was calculated. The index inception date is the date that the index was placed in-service. The dates for each index are found in the appendix.

Morningstar Bond Indexes General Methodology

Assigning Securities to Morningstar Bond Indexes

The general index methodology applies to all Morningstar indexes unless otherwise indicated.

At each rebalancing date, eligibility rules for each index are applied based on the criteria described in each section. Each criterion is applied only to the survivors of the criteria applied previously.

- ▶ Securities must have a fixed coupon rate and a stated final maturity.
- ▶ Bonds with first-call dates within one year of final maturity are included. All other callable bonds are excluded, except for "make-whole" calls.
- ▶ Securities entering the indexes must have a minimum of 24 months to final maturity at the time of inclusion to qualify for the index.
- ▶ Securities must have a minimum of 12 months to final maturity to remain in the indexes.
- ▶ All securities must have an investment-grade composite rating to be eligible for the Global Core Bond indexes.

General Exclusions

The following exclusions apply to all Morningstar bond indexes unless otherwise indicated:

- ▶ Bonds with embedded options, such as puts and scheduled calls, are excluded from the Global Core Bond indexes except for options pertaining to structured securities, unless otherwise noted.
- ▶ Perpetual bonds
- ▶ Zero coupon bonds
- ▶ Step-up coupon bonds
- ▶ Fixed-to-floating rate and fixed-to-variable rate bonds
- ▶ Payment-in-kind (PIK) bonds
- ▶ Amortizing bonds
- ▶ Loans
- ▶ Sukuk (Islamic bonds)
- ▶ Subordinated debt
- ▶ Capital securities and contingent capital securities
- ▶ Convertible bonds
- ▶ Securitized corporate securities, such as pass-through trust certificates

Number of Constituents

The number of constituents in the indexes is subject to the selection and eligibility criteria at the time of rebalance.

Index Weighting

The indexes are market-capitalization-weighted unless stated otherwise.

Tenor Indexes

- ▶ The tenor indexes deconstruct the Morningstar fixed-income indexes by term to produce the 1-5 Year Bond Index, 5-10 Year Bond Index and 10+ Year Bond Index. These are also referred to as short term, intermediate term, and long term, respectively.
- ▶ All indexes follow the below maturity breakpoints:
 - ▶ Short term: Greater than one year, less than five years.
 - ▶ Intermediate term: At least five years, less than 10 years.
 - ▶ Long term: At least 10 years.
- ▶ The following three indexes have an additional 1-3 year index tenor:
 - ▶ The US Core Bond Index
 - ▶ The European Core Index
 - ▶ The UK Core Index

Required Minimum Balances for Index Inclusion

A major differentiating factor for each fixed-income index is the minimum par amount outstanding that is required for a security to be included in an index. These amounts are defined by currency and asset class.

The minimum par amounts outstanding (minimum balances) per security for index inclusion are listed in the table below in millions. The amounts are monitored at each rebalancing to determine security inclusions or exclusions.

Local Currency	USD	CAD	EUR	GBP	JPY	AUD	CHF	SEK	KRW	DKK	NOK	NZD
Treasury	10,000	2,000	2,000	2,000	500,000	2,000	1,000	10,000	1,000,000	10,000	10,000	2,000
Inflation Protected	10,000	2,000	2,000	2,000	500,000	1,000						
Government-Related	1,000	300	500	250	25,000	300	300	1,000				
Corporate	500	200	500	250	20,000	200	300	1,000				
Securitized/Covered				200								
MBS	1000											
CMBS	150											
ABS	150											
COVERED			500				300	1,000				

Notes:

1. The government-related sector includes foreign sovereign and sovereign-guaranteed securities; foreign and domestic agency securities; supranational; and U.S. taxable municipals.
2. Not every asset class in the chart above is published as a stand-alone index.

Morningstar Global Core Bond Index Families

The six Morningstar Global Core Bond Index families share a common construction methodology, differing only with respect to those rules that are specific to a region or currency. Each family is composed of securities denominated in its home currency except for the European Union, where the single common currency is the euro. There are no restrictions on the country of risk.

Regional Core Bond Indexes

- ▶ U.S.
- ▶ Canada
- ▶ U.K.
- ▶ European Union
- ▶ Japan
- ▶ Australia

Two additional Core Bond Indexes are available: Morningstar Swiss Core Bond Index and Morningstar Sweden Core Bond Index. These two indexes are not part of the Global Core Bond Index Family and do not have separate stand-alone corporate or securitized asset class indexes. However, treasury indexes are available.

Assigning Securities to the Morningstar Global Core Bond Index Families

To qualify for the Morningstar Global Core Bond Index family, a security must meet all the [general rules](#) mentioned above:

Asset Classes

The indexes aggregate securities into identical broad, non-overlapping asset classes:

- ▶ Domestic treasury
- ▶ Foreign treasury, domestic or foreign government related and supranational
- ▶ Securitized and collateralized
- ▶ Corporate

Domestic Treasury Asset Class

The regional domestic treasury indexes must meet all the inclusion criteria established for the Global Treasury Bond Index section. Refer to the "Required Minimum Balances for Index Inclusion", for more information.

- ▶ The domestic treasury asset class consists of the domestic treasury debt publicly issued by a sovereign government in its home currency.
- ▶ The domestic treasury component of each regional core bond index is identical to the country-specific index found in the subsequent section for Global Treasury Bond Index family:

Government-Related Asset Class

- ▶ Securities in this asset class consist of the sovereign bonds, foreign and domestic agency securities, government-sponsored enterprises, and supranational securities denominated in the index's home currency without regard to the country of issuance.
- ▶ The government-related securities must meet all the inclusion criteria established for the country-specific indexes defined in the Global Treasury Bond Index section.
- ▶ This asset class is not published as a stand-alone index. It is included in each Core Bond Index.

Corporate Bond Asset Class

Each Global Corporate Bond Index follows identical rules except as individually noted:

- ▶ Bonds issued by a quasi-sovereign issuer, defined as a corporation with more than 50% government ownership, are eligible.
- ▶ Corporate securities for each regional index must be denominated in that region's home currency. There is no restriction of the country of origin. For example, securities in the Eurozone Corporate Bond Index must be denominated in euro, and securities in the UK Corporate Bond Index must be denominated in British pound sterling.

Securitized Assets and Covered Bonds

Most Regional Core Bond Indexes contain securitized assets specific to their region which are included as asset class components in their respective core bond indexes. However, securitized/covered bonds are not included in the Canada, Japan and Australia core bond indexes.

- ▶ Securitized assets in the US Core Bond Index consist of U.S. mortgage-backed securities, asset-backed securities, and commercial mortgage-backed securities. There are three securitized asset indexes for the U.S.:
 - ▶ Morningstar US Mortgage-Backed Securities Index
 - ▶ Morningstar US Asset-Backed Securities Index
 - ▶ Morningstar US Commercial Mortgage-Backed Securities Index

These indexes are components of the US Core Bond Index. Detailed construction rules for these indexes can be found in the [US Core Bond Index family section](#).

- ▶ European markets have developed a different model for the securitization of pooled assets. The "covered bond" model allows issuers to sell bonds that are secured by a pool of eligible assets, often residential or commercial real estate. The collateral is referred to as a "cover pool," which is pledged to the investor but remains on the balance sheet of the issuer. Investors have recourse to both the cover pool and the general credit of the issuer. There are four securitized assets and covered bond indexes:
 - ▶ Morningstar Eurozone Covered Bond Index
 - ▶ Morningstar UK Securitized Assets Index
 - ▶ Morningstar Swiss Securitized Assets Index
 - ▶ Morningstar Sweden Securitized Assets Index

Only the Eurozone and UK securitized asset classes are published as stand-alone indexes.

Morningstar US Core Bond Index Family

The Morningstar US Core Bond Index family is a set of 13 indexes differentiated by asset class and term:

Asset Class Indexes

- ▶ US Government Bond Index.
- ▶ US Corporate Bond Index
- ▶ US Mortgage-Backed Securities Index
- ▶ US Commercial Mortgage-Backed Securities Index
- ▶ US Asset-Backed Securities Index
- ▶ The US Government/Corporate index combines the US Government and US Corporate indexes into one entity.
- ▶ The US Government Bond index combines the US Treasury and US Government Related and Agency indexes into one entity. The US Government Related and Agency is not available as a stand-alone index.

US Term Structure Indexes

Short, intermediate, and long tenor term structure indexes are available for the following asset class indexes in the US Core Bond Index family:

- ▶ US Core Bond Index
- ▶ US Government Bond Index
- ▶ US Treasury Bond Index
- ▶ US Corporate Bond Index

Note: The three U.S. securitized asset indexes are grouped into tenors based on average life: Short-term is one to five years, and intermediate-term is greater than five years. There is no long-term index.

Assigning Securities to the Morningstar US Core Bond Index

The Morningstar US Core Bond Index aggregates the securities contained in the following indexes:

- ▶ Morningstar US Government Bond Index
- ▶ Morningstar US Corporate Bond Index
- ▶ Morningstar US Mortgage Bond Index
- ▶ Morningstar US Commercial Mortgage-Backed Securities Index
- ▶ Morningstar US Asset-Backed Securities Index

Assigning Securities to the Morningstar US Government Bond Index

The US Government Bond Index is a composite of the following two subindexes:

- ▶ Morningstar US Treasury Bond Index: This index is identical to the U.S. country-specific index that is part of the Global Treasury Bond Index family and follows the same rules.
- ▶ Morningstar US Composite Government and Agency Bond Index: This index consists of U.S.-dollar-denominated debt issued in the U.S. domestic market by sovereign governments, foreign or domestic government-related agencies, supranationals and U.S. taxable municipals. For inclusion in the index, securities must meet all the other criteria established for the US Treasury Bond Index.

Assigning Securities to the Morningstar US Corporate Bond Index

To qualify for the US Corporate Bond Index, a security must meet the [general rules](#) mentioned above, along with the following criteria:

- ▶ Bonds issued by corporate and quasi-sovereign issuers, defined as corporations with more than 50% government ownership, are eligible for the index.
- ▶ Bonds must be SEC registered, or 144a securities. REG S bonds are excluded.
- ▶ “Paired” or “duplicate” bonds refer to bonds of the same issuer, having identical dated dates, maturity dates, and coupons. When this situation arises, only one bond will be included in the index using the following hierarchy: first SEC-registered bonds, then 144a private placements.

Assigning Securities to Morningstar US Mortgage-Backed Securities Index

The index tracks the performance of U.S.-dollar-denominated investment-grade fixed-rate residential mortgage-backed securities publicly issued in the U.S. domestic market.

- ▶ Index constituents must be U.S.-dollar-denominated fixed-rate residential mortgage pass-through securities publicly issued by U.S. agencies in the U.S. domestic market.
- ▶ Only 15- and 30-year fixed-rate mortgage pools are eligible for the index.
- ▶ Pools are required to have at least one-year remaining term to final maturity.
- ▶ The minimum amount outstanding per generic coupon must be at least \$5 billion.
- ▶ The minimum amount per production year within each combination of issuer, original term, and coupon must be at least \$1 billion.
- ▶ For aggregation purposes, all securities are grouped into tenors based on average life: Short term is one to five years, and intermediate term is greater than five years.
- ▶ Accrued interest is calculated assuming same-day settlement.

Assigning Securities to the Morningstar US Commercial Mortgage-Backed Securities Index

The index tracks the performance of U.S.-dollar-denominated investment-grade fixed-rate commercial mortgage-backed securities publicly issued in the U.S. domestic market.

- ▶ U.S. agency and 144a securities qualify for the index.
- ▶ Securities must meet the following requirements:
 - ▶ At least one-year remaining term to final maturity and at least one-month to the last expected cash flow.
 - ▶ A fixed-rate coupon with a stated final maturity.
 - ▶ An investment-grade rating.
 - ▶ An original deal size for the collateral group of at least \$500 million.
 - ▶ A current outstanding deal size for the collateral group that is greater than or equal to 10% of the original deal size.
 - ▶ At least \$150 million current amount outstanding per tranche.
- ▶ Securities are grouped into tenors based on average life: Short term is one to five years, and intermediate term is greater than five years.
- ▶ The following securities do not qualify for the index: floating-rate or fixed-to-floating-rate securities; perpetual securities; interest- or principal-only tranches of qualifying deals; and resecitized deals.
- ▶ Only senior securitized bonds are eligible.

Assigning Securities to the Morningstar US Asset-Backed Securities Index

The index tracks the performance of U.S.-dollar-denominated investment-grade asset-backed securities publicly issued in the U.S. domestic market.

- ▶ Securities must meet the following requirements:
 - ▶ At least one-year remaining term to final maturity and at least one-month to the last expected cash flow.
 - ▶ A fixed-rate coupon with a stated final maturity.
 - ▶ An investment-grade rating.
 - ▶ An original deal size for the collateral group of at least \$500 million.
 - ▶ A current outstanding deal size for the collateral group that is greater than or equal to 10% of the original deal size.
 - ▶ At least \$150 million current amount outstanding per tranche.
- ▶ Securities are grouped into tenors based on average life: Short term is one to five years, and intermediate term is greater than five years.
- ▶ The following securities do not qualify for the index: floating-rate or fixed-to-floating-rate securities; perpetual securities; interest- or principal-only tranches of qualifying deals; and re-securitized deals.
- ▶ Home equity loans, manufactured housing, and utility securities are excluded from the US Asset-Backed Securities Index.
- ▶ 144a securities qualify for the index.
- ▶ Only senior securitized bonds are eligible.

Rules Specific to the Regional Core Bond Indexes

Morningstar Canada Liquid Bond Index

The Canadian bond market is principally composed of Canadian government, Canadian government guaranteed, provincial, and provincial-guaranteed issuers. To have a more balanced weighting between government entities and Canadian corporate bonds, the Canada Liquid Bond Index is constrained such that Canadian government, Canadian government-guaranteed, provincial, and provincial-guaranteed issuers are capped at 50% of the market value of the overall index.

The remaining 50% is allocated to the corporate sector. This constraint helps the index avoid excessive exposure to sovereign or government entities and promotes diversification. Only corporate issuers domiciled in Canada are eligible for the index.

Assigning Securities to the Morningstar Canada Liquid Bond Index

This index is identical to the Canada Core Bond Index with the following exceptions:

- ▶ The index excludes supranational issuers.
- ▶ All issuers must be Canadian domiciled entities.
- ▶ The addition of a capping methodology described under index weighting. The weighting scheme ensures that the public and private sectors will have equal aggregate weighting in the index.

Index Weighting

- ▶ Canadian government, Canadian government-guaranteed, provincial, and provincial guaranteed issuers are capped at 50% of the index on a pro-rata basis, and the excess weight is redistributed on a par-weighted basis to the corporate issuers in the index.

Morningstar European Securitized and Covered Bond Indexes

Assigning Securities to the Morningstar European Covered Bond Indexes

There are four covered bond indexes in this series differentiated by country and currency: Eurozone (euro), UK (pound sterling), Switzerland (Swiss franc), and Sweden (Swedish krona). Each index is an asset class in its respective regional core bond Index.

Each index tracks the performance of investment grade securitized and collateralized debt publicly issued in the eurobond or euro-member domestic markets, or, in the case of Sterling, the U.K. domestic market, including pfandbriefe and non-pfandbrief covered bonds, mortgage-backed securities and asset-backed securities.

- ▶ Securities must meet the following requirements:
 - ▶ At least one-year remaining term to final maturity to remain in the index and at least two years remaining maturity at the time of inclusion.
 - ▶ A fixed-rate coupon with a stated final maturity or a stated extendible maturity.
 - ▶ An investment-grade rating.
 - ▶ Only senior securitized bonds are eligible.
- ▶ The following securities do not qualify for the index: floating-rate or fixed-to-floating-rate securities; perpetual securities; zero coupon securities.

Covered Bond Index Specific Rules

- ▶ Morningstar Eurozone Covered Bond Index
 - ▶ Each security must have at least EUR 500 million current face amount outstanding issued in the Eurobond or Euro-member domestic markets.
 - ▶ Each issuer must have at least EUR 1 billion current face amount outstanding.
- ▶ Morningstar UK Securitized Assets Index
 - ▶ Each security must have at least GBP 200 million current face amount outstanding issued in the Eurobond or U.K. domestic market.
- ▶ Morningstar Switzerland Securitized Assets Index
 - ▶ Each security must have at least CHF 300 million current face amount outstanding.
- ▶ Morningstar Sweden Securitized Assets Index
 - ▶ Each security must have at least SEK 1 billion current face amount outstanding.

These minimum face amounts can also be found in the “Required Minimum Balances” section. The Switzerland and Sweden securitized asset indexes are components of their respective Core Bond Indexes but are not separately published.

Morningstar Global Government-Related Bond Indexes

Assigning Securities to the Morningstar Government Related Bond Indexes

Each regional core bond index contains a “government-related” asset class ([Page 5](#)). Only the US and Canadian indexes have independent, stand-alone government-related indexes. The minimum balances required for index inclusion are found on [Page 3](#).

Morningstar Global Corporate Bond Indexes

Assigning Securities to the Morningstar Corporate Bond Indexes

Each regional core bond index contains a corporate bond asset class. The rules for inclusion or exclusion follow the general methodology found on [Page 2](#) and the minimum balances on [Page 3](#). The Swiss and Swedish corporate bond asset classes do not have stand-alone, published indexes.

Morningstar Global Treasury Bond Index Family

Securities in the Global Treasury Bond Index family consist of the domestic treasury debt publicly issued by each eligible sovereign government in its home currency, or in the case of eurozone countries, eligible treasury debt issued in euros. Government-related, and government agency debt are not included. The Morningstar Global Treasury Bond Index family consists of the following broad indexes and country-specific indexes:

Broad Indexes

- ▶ Morningstar Global Treasury Bond Index
- ▶ Morningstar Global ex-US Treasury Bond Index
- ▶ Morningstar Global ex-Japan Treasury Bond Index

In addition to the countries that have separate indexes mentioned below under Country Indexes, the eligible securities of New Zealand, Denmark, and Norway are included in their home currencies in the Morningstar Global Treasury Bond Index.

Country Indexes

- ▶ Morningstar US Treasury Bond Index
- ▶ Morningstar Canada Treasury Bond Index
- ▶ Morningstar Eurozone Treasury Bond Index
- ▶ Morningstar Switzerland Treasury Bond Index
- ▶ Morningstar Sweden Treasury Bond Index
- ▶ Morningstar UK GILT Bond Index
- ▶ Morningstar Japan Treasury Bond Index
- ▶ Morningstar Australia Treasury Bond Index
- ▶ Morningstar Korea Treasury Bond Index

Notes: (1) Morningstar Switzerland Treasury Bond Index and Morningstar Sweden Treasury Bond Index are a part of their respective Core Bond Indexes but are not included in the Global Core Bond Index.

(2) Morningstar Korea Treasury Bond Index is not included in the Global Core Bond Index or any other index family.

Assigning Securities to the Morningstar Global Treasury Bond Index Family

To qualify for the Morningstar Global Treasury Bond Index family, a security must meet the following additional criteria along with the [general rules](#) mentioned above:

- ▶ Securities in the Morningstar Japan Treasury Bond Index are added to the index at least one month after they are issued and must be listed on the Tokyo Stock Exchange.
- ▶ The securities in each country index consist of a single currency.
- ▶ Zero-coupon bonds are eligible for the Global Treasury Bond Index family.
- ▶ Minimum balances for inclusion in the Global Treasury Bond Index family are found in the table on [Page 3](#).

Morningstar Global Inflation-Linked Securities Index Family

The Morningstar Global Inflation-Linked Securities Indexes consist of the inflation-linked securities issued by each country in the Global Treasury Bond Index family. It consists of the following specific indexes:

- ▶ Morningstar US Treasury Inflation-Protected Securities Index
 - ▶ Morningstar US 1-5 Year Treasury Inflation-Protected Securities Index
 - ▶ Morningstar US 5-10 Year Treasury Inflation-Protected Securities Index
 - ▶ Morningstar US 10+ Year Treasury Inflation-Protected Securities Index
- ▶ Morningstar Canada Treasury Inflation-Linked Securities Index.
- ▶ Morningstar Eurozone Treasury Inflation-Linked Securities Index.
- ▶ Morningstar UK Treasury Inflation-Linked Securities Index.
- ▶ Morningstar Japan Treasury Inflation-Linked Securities Index.
- ▶ Morningstar Australia Treasury Inflation Linked Securities Index.

Assigning Securities to the Morningstar Global Inflation-Linked Bond Indexes

To qualify for the Morningstar Global Inflation-Linked Bond Index family, a security must meet the following additional criteria, along with the [general rules](#) mentioned above:

- ▶ Only inflation-linked bonds issued by each sovereign government and denominated in its home currency are eligible for each index.
- ▶ Minimum balances for inclusion in the Global Inflation-Linked Bond Index family are found in the table on [Page 3](#).

Morningstar Emerging Markets Bond Index Family

The Morningstar Emerging Markets Bond Index Family is designed to provide diversified exposure to credit-sensitive, U.S.-dollar-denominated sovereign and corporate debt domiciled in emerging markets through the most liquid issues in the market. The index methodology balances the need for adequate market coverage with ease of replication and diversification. This is achieved by excluding smaller issues that are difficult to purchase and that impose heavier transaction costs. It is also achieved through country weighting constraints that are meant to ensure diversified exposure.

The Morningstar Emerging Markets Bond Index Family consists of four indexes:

- ▶ Morningstar Emerging Markets Sovereign Bond Index
- ▶ Morningstar Emerging Markets Corporate Bond Index
- ▶ Morningstar Emerging Markets High-Yield Bond Index
- ▶ Morningstar Emerging Markets Composite Bond Index

The Morningstar Emerging Markets Composite Bond Index aggregates the Morningstar Emerging Markets Sovereign Bond Index, Morningstar Emerging Markets Corporate Bond Index and Morningstar Emerging Markets High-Yield Corporate Bond Index into a single composite index.

Assigning Securities to the Morningstar Emerging Markets Bond Indexes

To qualify for the Morningstar Emerging Market Bond Index family, a security must meet the following general criteria:

- ▶ The index only includes bonds from countries that are approved for the Morningstar Emerging Markets Country List for Bonds.
- ▶ All bonds must be issued under U.S. or U.K. jurisdiction.
- ▶ All bonds must be U.S.-dollar-denominated bonds.
- ▶ Only fixed-rate coupon bonds are included in the index.
- ▶ A minimum of \$500 million remaining face amount outstanding for the issue is required for a bond to be included in the index.
- ▶ A minimum of \$1 billion remaining face amount outstanding for the issuer is required for a bond to be included in the index. For measurement purposes, the aggregate remaining face amount is calculated based exclusively on securities eligible for the index without respect to issue size.
- ▶ All securities must have a minimum of 36 months to maturity at time of inclusion.
- ▶ All securities must have a minimum of 12 months remaining to maturity.
- ▶ Bonds with embedded options, such as calls and puts, and sinking fund bonds are included in the index.
- ▶ Bonds issued under Regulation S will be included in the index only after a 40-day seasoning period. Similar guidelines will be followed if there are obstacles that prevent a broad investor base from participating in a new bond offering.
- ▶ If bonds are issued under both Regulation S and Rule 144a for the same issuer, only the Regulation S version of the bond will be included in the index at the next rebalancing after a 40-day seasoning period.
- ▶ A bond issued only under Rule 144a will be included in the index at the next rebalancing.
- ▶ Issuers in default will be removed at the next rebalancing.
- ▶ Illiquid bonds are excluded or eliminated from the index. A bond is deemed illiquid when consistent pricing is unavailable or becomes unavailable.

Country Inclusion Criteria

Morningstar Indexes classifies countries as emerging for defining the investable universe. To arrive at the selection of emerging-market countries, Morningstar Indexes includes countries classified by the World Bank as low-income, middle-income, or upper-middle-income, or, by the International Monetary Fund as a nonadvanced country. A country classified as high-income by the World Bank or advanced by the IMF may still be included in the index if the government, legal, institutional, regulatory, or other criteria indicate that the country should be classified as emerging. In addition, to be eligible for emerging-market status, a country must have debt eligible for the index.

Additional Country Inclusion Criteria

Additional criteria are then applied to each country to identify characteristics of development and economic freedom that may include or exclude a country from the final selection. Conversely, exclusion from final selection may occur when an otherwise emerging-market country exhibits characteristics that demonstrate a developed bond market or when an emerging-market country's bond market is deemed non-investable.

Additional criteria used to classify emerging-market status include:

- ▶ Market regulatory authority
- ▶ Legal infrastructure and recourse
- ▶ Foreign ownership
- ▶ Repatriation (full/partial) of capital
- ▶ Foreign exchange market
- ▶ Custodian services
- ▶ Competitive brokerage services and trading cost
- ▶ Adequate liquidity
- ▶ Visibility and timely trade reporting process

Country Review

Morningstar Indexes reviews and announces the list of eligible countries annually in August, and it takes effect at the June rebalancing in the following year.

Assigning Securities to the Morningstar Emerging Markets Sovereign Bond Index

Along with the [general rules](#) mentioned above for the Morningstar Emerging Markets Bond Index family, the following rules apply only to the Emerging Markets Sovereign Bond Index:

- ▶ Only sovereign bonds issued by an eligible country or its central bank are included in the index.
- ▶ Development banks and sovereign-owned companies (quasi-sovereign) are not included in the index.
- ▶ The index has no restrictions on the credit ratings for the constituent bonds.

Sovereign Bond Index Weighting

The index is market-capitalization-weighted with country capping. The index is constrained so that no one country has a market weight greater than 15% of the market value of the overall index. Each month, all sovereigns are capped at 15%, and the excess weight is redistributed on a market-weighted basis to the other issuers in the index.

Assigning Securities to the Morningstar Emerging Markets Corporate and High Yield Corporate Bond Indexes

Along with the [general rules](#) mentioned above for the Morningstar Emerging Markets Bond Index family, the following rules apply only to the Emerging Markets Corporate and High Yield Bond Indexes.

- ▶ Bonds issued by corporate and quasi-sovereign issuers are eligible. No Treasury or sovereign issues are included in the indexes.
- ▶ There are no ratings restrictions on the country of risk.
- ▶ Securities must have an investment-grade composite credit rating to be eligible for the Emerging Markets Corporate Bond Index.
- ▶ Securities must have a below investment-grade (that is, high-yield) composite credit rating to be eligible for the Emerging Markets High Yield Corporate Bond Index.

Corporate and High Yield Corporate Bond Index Weighting

The index is market-capitalization weighted with capping. The index is constrained so that no one issuer has a market weight greater than 5% of the market weight of the overall index. Each month, corporate and quasi-sovereign issuers are capped at 5%, and the excess weight is redistributed on a market-weighted basis to the other issuers in the index. Corporate issuers within the same “issuer family” are aggregated as a single issuer for this purpose.

Assigning Securities to the Morningstar Emerging Markets Composite Bond Index

The Morningstar Emerging Markets Composite Bond Index aggregates the securities contained in the following indexes:

- ▶ Morningstar Emerging Markets Sovereign Bond Index
- ▶ Morningstar Emerging Markets Corporate Bond Index
- ▶ Morningstar Emerging Markets High Yield Corporate Bond Index

Composite Bond Index Weighting

The index is market-capitalization weighted with capping. The index is constrained so that no one sovereign issuer has a market weight greater than 15% of the index portfolio, Sovereign and quasi-sovereign issuers controlled by the same government are aggregated as a single issuer for this purpose. Corporate and quasi-sovereign issuers are capped at 5%, and the excess weight is redistributed on a market-weighted basis to the other issuers in the index. Corporate issuers within the same “issuer family” are aggregated as a single issuer for this purpose.

Morningstar Cash Indexes

Morningstar Cash Indexes are maintained for each currency in the Core Bond and Global Treasury Index families. These indexes are used to track the return on cash as an asset class when cash is used as a component in an asset-allocation strategy. They are not part of the Core Bond Index Family.

Each index tracks the performance of a synthetic asset purchased at par on the previous month-end, carrying an interest rate equal to the average of the currency specific one-month Libor and one-month Libid rates. The asset is held for one month and sold at month-end. The asset price remains constant, at par, throughout the month. During the month, interest income is accrued evenly on a daily basis. At rebalancing, the proceeds (interest income) are rolled into a new asset and the interest rate is reset.

Morningstar also maintains a US 3-month Treasury Bill Index.

General Methodology for Morningstar Indexes

Sector Classification

The Morningstar Bond Indexes use a four-tier classification schema segmenting constituent securities by asset class (Level 1), broad-sector (Level 2), sector (Level 3) and sub-sector (Level 4). The following table shows the taxonomy of the first three levels.

L1	Sovereign
L1	Quasi-Sovereign & Foreign Government
L2	Quasi & Foreign Government
L3	Foreign Sovereign
L3	Government Guaranteed
L3	Agency
L3	Local-Authority
L3	U.S. Taxable Municipal
L3	Supranational
L1	Corporate
L2	Financial
L2	Industrials
L2	Utility
L1	Securitized/Collateralized
L2	Covered
L2	Securitized
L3	Mortgage Backed
L3	Asset Backed
L3	Commercial Mortgage Backed

Country Designation

Unless otherwise noted, the standard country designation used is country of risk.

The methodology for determining country of risk is as follows:

- ▶ Sovereign debt (local and foreign currency debt): the country of risk is the same as the issuing country.
- ▶ Agency and Local Authority debt: the country of risk is the country in which the obligor resides.
- ▶ Supranational debt: the country of risk is “supranational”.
- ▶ Collateralized/secured asset classes: the country of risk is based on the location of the collateral.
- ▶ Corporate debt: the country of risk is based on the physical location of the issuer’s operating headquarters, or, the location of a majority of the operating assets. Bank branch issues are assigned the country of risk of the parent entity.
- ▶ Securities with a guarantee are assigned the guarantor’s country of risk.

Composite Rating Algorithm

Composite ratings are the simple averages of ratings from the three major rating agencies. The composite rating is calculated by assigning a numeric equivalent to each rating. The average of the numeric equivalents for each agency that rates a bond is rounded to the nearest integer and then converted back to an equivalent composite rating.

Cash Interest Accrued and Cash Received

Except for U.S. securitized products (MBS, CMBS and ABS), accrued interest is calculated assuming next-day settlement. Accrued interest for U.S. securitized products assumes same-day settlement.

Cash received from interest payments during the month are retained in the index until the end of the month, and then removed as part of the rebalancing. Cash does not earn reinvestment income while it is held in the index. The accumulated cash is reinvested in the index at the next rebalancing.

Cash is not included in the portfolio as an investment. Instead, it is shown for each security as cash interest received. However, the total accumulated portfolio cash is identified in the index aggregations.

The total market value of the index is defined as the sum of the daily market value of the individual securities plus the total accumulated portfolio cash.

Pricing, Trading and Transaction Costs

The index calculation agent uses third-party vendor pricing as the primary source of calculations. Bid-side prices are used for the daily bond index calculations and offer-side for adding new bonds to the index. Trading and settlement of securities follow local market conventions. The index does not take transaction costs (bid-offer spreads) or tax withholdings into account.

Foreign Exchange

Closing currency spot and forward rates are obtained from WM/Reuters and represent closing forward rates fixed at 4 p.m. U.K. time. Earlier or later times may be chosen according to WM/Reuters' policy on national holidays, or as a result of technical difficulties, a failure in the supply of the relevant data source or special market conditions for specific currencies. Other sources may be used by exception where the appropriate rates are not available

Index Maintenance Rules

Scheduled Maintenance

Unless otherwise specified, indexes are rebalanced on the last calendar day of the month, based on information available up to and including the third business day before the last business day of the month (the "lock-out date"). No changes are made to constituent holdings other than on month-end rebalancing dates.

Changes to the portfolio reflect re-openings, buybacks, new issuance, exchanges, exercised options, or rating changes. The new universe of bonds is last month's composition after accounting for the additions and deletions triggered by the inclusion/exclusion criteria and liquidity assessments for each constituent. These characteristics stay constant throughout the month. The weightings are fixed, after the close, on the last calendar day of each month.

A preliminary rebalancing report, or pro forma, indicating expected changes to the composition will be available for review on each of the last three business days before the last business day of the month.

No changes will be made to the index constituents after the third business day before the last business day of the month unless Morningstar considers a change to be absolutely necessary to be consistent with changing market conditions. This includes new issues, rating changes, balance changes and noncritical corporate actions. New index-eligible bonds that have not yet been priced will be added to the index at the rebalancing after the availability of pricing.

The pro forma reports and portfolios may differ from the actual rebalanced index. The portfolio as of the first business day of each month reflects all changes and is frozen for the month.

File Delivery Schedule

Index and constituent files are delivered daily on weekdays. However, if the month-end falls on a Saturday or a Sunday, then daily index and constituent files will be delivered on Saturday but not Sunday. All prices are carried forward (rolled) from the last business day and accrued interest is calculated for the new settlement date. One or two days of interest will be accrued depending on whether Saturday or Sunday is the last day of the month. The rebalanced portfolio for the forward month will also be delivered on Saturday if the last calendar day of the month falls on a weekend.

Holiday Rules

Weekdays on which WM Reuters does not publish closing foreign exchange rates are treated as “global holidays”. Indexes are not published on Global Holidays unless they fall on the last calendar day of the month. In that case, prices are updated in all local markets that are open. In markets that are closed, prices will be carried forward (rolled) from the prior business day and accrued interest will be calculated for the new settlement date.

Index files will not be delivered on New Year’s Day, Christmas Day, or Good Friday.

Tenor

For the application of the index inclusion and tenor rules, the term of a security is measured from the effective date of the rebalanced portfolio to maturity.

Called Securities

Securities that are announced as called are removed from the indexes at the next rebalancing provided this occurs on or before the third business day before the last business day of the month.

Defaulted Securities

Sovereign or corporate issues in default will be removed at the next rebalancing following the default event, provided this occurs on or before the third business day before the last business day of the month. Bonds are considered in default for failure to make a scheduled coupon and/or principal payment. A company filing bankruptcy papers, or the local market equivalent, is in default. Defaulted securities that are restructured will be reinstated or included in an index as a new security when issued.

Illiquid Securities

Illiquid bonds are excluded or eliminated from the index. A bond is deemed illiquid when consistent pricing is unavailable or becomes unavailable. Bonds with limited liquidity may be removed at the discretion of the index committee. If a bond that is removed due to lack of pricing that bond will not qualify for any index thereafter, even if adequate pricing subsequently becomes available.

Composite Rating

Index constituent composite ratings are updated once a month as part of the rebalancing process. Composite rating changes take effect on the last calendar day of the month based on information available up to and including the rebalancing lock-out date (the third business day before the last business day of the month).

Index Calculation Methodology

This section summarizes the computation of various security and portfolio total return measures for Morningstar Global Bond Indexes.

Calculating Index Values

The daily closing index value is a function of the prior month-end index value and the current month-to-date return:

$$IV_n = IV_0 \times (1 + TRR_n)$$

where:

IV_n = closing Index value on day n

IV_0 = closing Index value on prior month-end

TRR_n = month-to-date Index total return on day n

The month-to-date return of an Index (TRR_n) is equal to the sum of the individual constituent returns times their respective beginning of month weights:

$$TRR_n = \sum_{i=1}^k B_i TRR_n \times B_i Wgt_0$$

where:

TRR_n = Index month-to-date total return on day n

$B_i TRR_n$ = month-to-date total return on day n of bond i

$B_i Wgt_0$ = beginning of month weight of bond i

Periodic returns between any two dates can be derived from the beginning and end of period Index values. Since Index values represent closing levels, period returns will include market movement on the end of period date but exclude market movement on the beginning of period date. Therefore, to capture returns for June, divide the June 30 Index value by the May 31 Index value:

$$TRR = (IV_n / IV_0) - 1$$

where:

TRR = periodic total return

IV_n = closing Index value on the end of period date

IV_0 = closing Index value on the beginning of period date

Annualized returns are derived from period total returns:

$$AnnTRR_n = (1 + TRR_n)^{365/d} - 1$$

where:

AnnTRR_n = annualized total return for period n

TRR_n = periodic total return for period n

d = number of actual days in period n

Calculating bond total returns in local currency terms

Month-to-date total returns are calculated daily for each bond in its currency of denomination (i.e., local currency total return).

$$BTRR_n = \frac{(P_n + AI_n) - (P_0 + AI_0) + C \times \left(1 + \frac{r}{d}\right)^t}{P_0 + AI_0}$$

where:

BTRR_n = individual bond month-to-date total return on day n

P_n = current day price

P₀ = prior month-end price

AI_n = current day accrued interest

AI₀ = prior month-end accrued interest

C = coupon payments received during the period (including capital payments at current market value)

r = reinvestment rate (currently zero)

t = number of days between the receipt of the cash flow and day n

d = day count convention for reinvestment asset

Calculating inflation-linked security total returns in local currency terms

Month-to-date total returns for inflation-linked securities are calculated daily for each bond in its currency of denomination (local total return). Inflation-linked returns include the impact of the change in inflation factor over time.

$$BTRR_n = \frac{f_n \left(P_n + AI_n + C \times \left(1 + \frac{r}{d} \right)^t \right) - f_0 (P_0 + AI_0)}{f_0 (P_0 + AI_0)}$$

where:

BTRR_n = individual bond month-to-date total return on day n

f_n = current day inflation factor

f₀ = prior month-end inflation factor

P_n = current-day price

P_0 = prior month-end price

AI_n = current-day accrued interest

AI_0 = prior month-end accrued interest

C = coupon payments received during the period (including capital payments at current market value)

r = reinvestment rate (currently zero)

t = number of days between the receipt of the cash flow and day n

d = day count convention for reinvestment asset

U.S. mortgage pass-through total return formula

$$TRR = \frac{\left((P_n + AI_n) - (P_0 + AI_0) + \left(\frac{C}{12} \times \left(1 + \frac{r}{d \times 100} \right)^t \right) \right)}{P_0 + AI_0} + (1 - f) \times \frac{\left(\left(100 \times \left(1 + \frac{r}{d \times 100} \right)^t \right) - (P_n + AI_n) \right)}{P_0 + AI_0}$$

$$f = (1 - SPP) \times (1 - SMM)$$

$$SPP = \left(\frac{\frac{WAC_0}{1200}}{\left(1 + \frac{WAC_0}{1200} \right)^{WAM_0} - 1} \right)$$

where:

TRR = month to date total return

P_n = current day price (assuming cash settlement)

P_0 = prior month-end price (assuming cash settlement)

AI_n = current day accrued interest (assuming cash settlement)

AI_0 = prior month-end accrued interest (assuming cash settlement)

C = net coupon stated in percentage terms

r = reinvestment rate stated in percentage terms (currently zero)

d = day count for reinvestment asset

t = time to/since cash flow payment date (settlement date minus cash flow payment date)

SPP = schedule principal payment percentage

SMM = single monthly mortality

CPR = most recently reported constant prepayment rate

WACO = weighted average gross coupon rate as of the previous month stated in percentage terms

WAMO = remaining maturity (in terms of number of months) as of the previous month

U.S. mortgage pass-through cash settlement price

US mortgage pass-through cash settle prices are derived from the current month regular (forward) settlement price up to the date before the roll date using the following formula:

$$P_c = \left((P_r + AI_r) \times \left(\frac{1}{\left(1 + \frac{r}{d \times 100}\right)^n} \right) \right) - AI_c$$

where:

P_c = cash settle price

P_r = regular (forward) settle price for current month settlement

AI_c = cash settle accrued interest

AI_r = regular (forward) settle accrued interest for current month settlement

r = 1-month Libid stated in percentage terms

n = number of days between cash settle date and regular (forward) settle date

d = number of days in the year based on Libor day-count convention (360)

US mortgage pass-through cash settle prices are derived from the next month regular (forward) settlement price on the roll date through the end of the month using the following formula:

$$P_c = \left(\left(\frac{C}{12} + 100 \times (1 - f_e) \right) \times \left(\frac{1}{\left(1 + \frac{r}{d \times 100}\right)^{n_1}} \right) \right) + \left((P_r + AI_r) \times f_e \times \left(\frac{1}{\left(1 + \frac{r}{d \times 100}\right)^{n_2}} \right) \right) - AI_c$$

where:

P_c = cash settle price

P_r = regular (forward) settle price for next month settlement

AI_c = cash settle accrued interest

AI_r = regular (forward) settle accrued interest for next month settlement

r = 1-month Libid stated in percentage terms

n_1 = number of days between cash settle date and the next month cash flow payment date

n_2 = number of days between cash settle date and regular (forward) settle date

C = net coupon stated in percentage terms

f_e = estimated factor based on most recently reported actual CPR

d = number of days in the year based on Libor day-count convention (360)

U.S. ABS and CMBS total return formula

$$TRR = \frac{(P_n + AI_n) - (P_0 + AI_0) + (PCF + ICF) \left(1 + \frac{r}{d \times 100}\right)^t}{(P_0 + AI_0)} - \frac{(1 - f)(P_n + AI_n)}{(P_0 + AI_0)}$$

where:

TRR = individual bond month-to-date total return

P_n = current-day price (assuming cash settlement)

P₀ = prior month-end price (assuming cash settlement)

AI_n = current-day accrued interest (assuming cash settlement)

AI₀ = prior month-end accrued interest (assuming cash settlement)

ICF = interest cash flow received

PCF = principal cash flow received

f = end of period factor divided by the beginning of period factor

r = reinvestment rate (currently zero)

t = number of days between the receipt of the cash flow and day n

d = day count convention for the reinvestment asset

Converting returns into another base currency unhedged

Unhedged returns are converted into a given base currency using the following formulas:

$$CRR = \frac{FX_n}{FX_0} - 1$$

$$TRR_{converted} = ((1 + TRR_{local}) \times (1 + CRR)) - 1$$

where:

CRR = currency return

FX_n = end-of-period FX rate (stated in terms of the number of units of the base currency per one unit of the currency of denomination of the bond)

FX₀ = beginning-of-period FX rate (stated in terms of the number of units of the base currency per one unit of the currency of denomination of the bond)

TRR_{converted} = total return of the bond converted into the base currency unhedged

TRR_{local} = local total return of the bond

Converting returns into another base currency hedged

Currency hedged index returns assume a rolling one-month forward hedge, where forward contracts are purchased in an amount equal to the full market value of the index (including accrued interest) at the beginning of the month. In addition to the formulas used to calculate unhedged converted returns, hedged returns require the following additional formulas:

$$CRUTRR = CRR \times (1 + TRR_{local})$$

$$FCR = \frac{FWD_0}{FX_0} - 1$$

$$HR = HP_{ct} \times (FCR - CRR)$$

$$TRR_{hedged} = TRR_{local} + CRUTRR + HR$$

$$HIV_n = HIV_0 \times (1 + TRR_{hedged})$$

where:

CRUTRR = currency return on unhedged local total return

FCR = forward contract return

FWD0 = beginning-of-period forward rate (stated in terms of the number of units of the base currency per one unit of the currency of denomination of the bond)

HR = hedge return

HPct = percentage hedged

TRRhedged = total return hedged into the base currency

HIVn = closing hedged Index value on day n

HIV0 = closing hedged Index value on prior month-end

Analytical portfolio and security calculations

Morningstar Indexes contain numerous analytical calculations related to duration, convexity, yield and spread. A few analytical calculations require additional explanation.

Key rate durations

Key-rates measure the duration sensitivity of a security to a shift at a single point on the par coupon yield curve. The sum of a bond's key rate durations (also referred to as partial durations) at the six measured nodes on the par coupon yield curve will generally match its effective duration. This measure allows greater granularity and precision when calculating the effect of non-parallel shifts in the yield curve on the price of a bond, and, by extension, the price of a portfolio.

Excess return (duration adjusted return)

Key-rate durations can be used to measure that portion of a bond's (or portfolio's) total return that is attributed solely to credit and optionality risks by removing interest rate and yield curve risk. The result is a curve-adjusted return.

Return attribution methodology

The performance of an individual bond or a bond portfolio is dependent on a few key risk/return factors: interest rates, credit and optionality. Return attribution decomposes these factors into discrete "return factors", which quantify their effect on security or portfolio total return.

- ▶ Return components due to the passage of time: coupon, amortization or accretion and change in the present value of a bond as its term shortens (roll). For MBS, an additional factor is the return attributable to the receipt of principal payments at par.
- ▶ Changes in the yield curve: general changes in the level of interest rates, referred to as parallel curve shift, and changes in the shape of the government par value yield curve (curve reshaping).
- ▶ Changes in spread.
- ▶ Changes in implied volatility.

The sum of these return factors equals the local currency total return.

Methodology Review and Index Cessation Policy

The index methodology is continually reviewed to ensure it achieves all stated objectives. These reviews consider corporate action treatment, security selection, and maintenance procedures. Subscribers to the index will be notified before any methodology changes are made. For more details, refer to the [Morningstar Index Methodology Change Process](#).

Morningstar also notifies all subscribers and stakeholders of the index that circumstances might arise that require a material change to the index, or a possible cessation of the index. Circumstances that could lead to an index cessation include, but are not limited to, market structure change, product definition change, inadequate supply of data, insufficient revenue associated with the index, insufficient number of clients using the index, and/or other external factors beyond the control of the Morningstar Index Committee.

Because the cessation of the index or benchmark index could disrupt subscriber products that reference this index, all subscribers are encouraged to have robust fallback procedures if an index is terminated. For more details, refer to the [Morningstar Index Cessation Process](#).

Data Correction and Precision

Index Data Corrections

Incorrect pricing and corporate action data for individual issues in the database will be corrected upon detection. Commercially reasonable efforts are made to correct an older error subject to its significance and feasibility. For more details, refer to the [Recalculation Guidelines](#).

Index Errors

When errors are noted on the current index level, the calculation agent will make a best effort to address and correct the levels within one index calculation day of its publication. When historical errors are detected, the necessary change will be classified as immaterial or material according to criteria established by Morningstar.

Computational and Reporting Precision

All calculated and adjusted data are stored as real numbers. For reporting purposes, index values are rounded to two decimal places.

Market Events

In the case of a significant market event (default, delayed payment, debt restructuring), any affected securities will not be removed until the next rebalancing date. Market prices and the index team's best estimate of how to treat the securities in question will be used to compute index returns.

Since all bond indexes are calculated using month-to-date returns, errors in return calculations that occur only intramonth are self-correcting over time; that is, the impact on compounded total, excess, and price return levels are isolated to the affected dates and do not affect current index levels or index levels going forward. In this case, in which the error in returns calculations is limited in scope to intramonth dates, the change will generally be considered immaterial.

Calculation Agent

Morningstar partners with a third-party calculation agent to calculate the Morningstar Bond Indexes. The calculation agent calculates the actual change in all measured characteristics of the respective indexes daily including the individual bonds that make up the indexes.

The calculation agent for Morningstar Indexes is ICE Data Indices, LLC or its affiliates ("ICE Data"). Information pertaining to the sections labeled General Methodology for Morningstar Indexes, Index Maintenance Rules and Index Calculation Methodology can be found in the ICE Data Services Bond Index Methodologies document. The latest version of this document may be found on the ICE Index Platform, under Publications/General Methodology located here:

<https://indices.theice.com/publications/showPublications#>.

Additional information pertaining to the definition of data fields, taxonomy or analytical computations used in the Morningstar Bond Indexes may also be found in that document.

ICE Data and its third party suppliers make no express or implied warranties, and hereby expressly disclaims all warranties of merchantability or fitness for a particular purpose with respect to the index, index values or any data included therein as well as with respect to the calculation and dissemination of such index. In no event shall ICE Data and its third party suppliers have any liability for any special, punitive, direct, indirect, or consequential damages (including lost profits), even if notified of the possibility of such damages.

Appendix

Index Inception Date

The inception date for most Morningstar Bond Indexes is Dec. 31, 1999, with the following exceptions.

INDEX	INCEPTION DATE
Morningstar Korea Treasury Bond	6/30/2000

Index Performance Inception Date

The performance inception dates will vary for each index.

INDEX	PERFORMANCE INCEPTION DATE
Morningstar Japan Treasury Bond	4/1/2019
Morningstar Global ex-Japan Treasury Bond	4/1/2019
Morningstar Emerging Markets Sovereign Bond	4/1/2019
Morningstar Canada Treasury Bond	4/1/2019
Morningstar US Treasury Bond	4/1/2019
Morningstar US Composite Government and Agency Bond	4/1/2019
Morningstar US Treasury Inflation-Protected Securities	4/1/2019
Morningstar US Mortgage-Backed Securities	4/1/2019
Morningstar US Commercial Mortgage-Backed Securities	4/1/2019
Morningstar US Asset-Backed Securities	4/1/2019
Morningstar Eurozone Corporate Bond	4/1/2019
Morningstar Canada Corporate Bond	4/1/2019
Morningstar Canada Government and Provincial Bond	4/1/2019
Morningstar UK Gilt Bond	4/1/2019
Morningstar Eurozone Treasury Bond	4/1/2019
Morningstar Switzerland Treasury Bond	4/1/2019
Morningstar Sweden Treasury Bond	4/1/2019
Morningstar Australia Treasury Bond	4/1/2019
Morningstar Global Treasury Bond	4/1/2019
Morningstar Global ex-US Treasury Bond	4/1/2019
Morningstar Canada Core Bond	5/1/2019
Morningstar Canada Liquid Bond	5/1/2019
Morningstar US Corporate Bond	5/1/2019

INDEX	PERFORMANCE INCEPTION DATE
Morningstar US Composite Government and Corporate Bond	5/1/2019
Morningstar US Core Bond	5/1/2019

About Morningstar, Inc.

Morningstar, Inc. is a leading provider of independent investment research in North America, Europe, Australia, and Asia. Morningstar offers an extensive line of products and services for individual investors, financial advisors, asset managers, and retirement plan providers and sponsors. Morningstar provides data on approximately 510,000 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. Morningstar also offers investment management services through its investment advisory subsidiaries.

About Morningstar Indexes

Morningstar® Indexes combine the science and art of indexing to give investors a clearer view into the world's financial markets. Our indexes are based on transparent, rules-based methodologies that are thoroughly back-tested and supported by original research. Covering all major asset classes, our indexes originate from the Morningstar Investment Research Ecosystem—our network of accomplished analysts and researchers working to interpret and improve the investment landscape. Clients such as exchange-traded fund providers and other asset management firms work with our team of experts to create distinct, investor-focused products based on our indexes. Morningstar Indexes also serve as a precise benchmarking resource.

Morningstar Index Committee

The [Morningstar Index Committee](#) is currently comprised of senior officials who possess the appropriate levels of knowledge in relation to Indexes. A wide array of business groups are represented to allow for a broad voice to be heard and for a wider view to be expressed in evaluating all subjects brought up during Committee meetings. The Committee seeks to create indexes of the highest quality that meet the recognized qualities of a good benchmark.

For More Information

For any queries, reach out to us via our [communication page](#).



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