M RNINGSTAR®

Morningstar Global Fixed Income Classification

Morningstar Research Effective Oct. 31, 2016

Contents

- 1 Introduction
- 2 Super Sectors
- 10 Sectors

Important Disclosure

The conduct of Morningstar's analysts is governed by Code of Ethics/Code of Conduct Policy, Personal Security Trading Policy (or an equivalent of), and Investment Research Policy. For information regarding conflicts of interest, please visit: http://global.morningstar.com/equitydisclosures

Introduction

Fixed-Income Sectors

The fixed-income securities and fixed-income derivative exposures within a portfolio are mapped into Secondary Sectors that represent the most granular level of classification. Each item can also be grouped into one of several higher-level Primary Sectors, which ultimately roll up to five fixed-income Super Sectors.

Cash Sectors

Cash securities and cash-derivative exposures within a portfolio are mapped into Secondary Sectors that represent the most granular level of classification. Each item can also be grouped into cash & equivalents Primary Sector and into cash & equivalents Super Sector (cash & equivalents Primary Sector = cash & equivalents Super Sector).

Morningstar includes cash within fixed-income sectors. Cash is not a bond, but it is a type of fixedincome. When bond-fund managers are feeling nervous about interest rates rising, they might increase their cash stake to shorten the portfolio's duration. Moving assets into cash is a defensive strategy for interest-rate risk. In addition, Morningstar includes securities that mature in less than 92 days in the definition of cash. The cash & equivalents Secondary Sectors allow for more-detailed identification of cash, allowing clients to see, for example, if the cash holdings are in currency or short-term government bonds.

These classifications can help investors and investment professionals easily compare and understand the sector exposures of each portfolio. The data is especially useful for comparing two investments that may be in the same Morningstar Category.

Cash and fixed-income sectors are calculated for all portfolios. Morningstar products may set allocation thresholds to determine whether to display cash and fixed-income sectors for a portfolio. Morningstar cash and fixed-income sectors will always be available for dedicated bond funds and those with significant bond exposure, such as allocation funds. Sector breakdowns are based on the cash and fixed-income securities and related derivatives in the most recently available portfolio.

Super Sectors

Primary Sectors are consolidated into six Super Sectors: government, municipal, corporate, securitized, cash & equivalents, and derivatives. These Super Sectors are a broader representation of Morningstar sectors.

10 Government

1010 Government

1020 Government-Related

The government Super Sector includes all conventional debt issued by governments other than those which are included in the Municipal sector, including bonds issued by a Central Bank or Treasury, and bonds issued by local governments, cantons, regions, and provinces.

20 Municipal

2010 Municipal Taxable2020 Municipal Tax-Exempt

The municipal Super Sector includes taxable and tax-exempt debt obligations issued under the auspices of states, cities, counties, provinces, and other nonfederal government entities. This includes issues of private entities which are considered to municipal issues from a regulatory perspective.

30 Corporate

- 3010 Bank Loan
- 3020 Convertible
- 3030 Corporate Bond
- 3040 Preferred Stock

The corporate Super Sector includes bank loans, convertible bonds, conventional debt securities issued by corporations, and preferred stock.

40 Securitized

- 4010 Agency Mortgage-Backed
- 4020 Nonagency Residential Mortgage-Backed 4030 Commercial Mortgage-Backed
- 4040 Covered Bond
- 4050 Asset-Backed

The securitized Super Sector includes all types of mortgage-backed securities, covered bonds, and assetbacked securities.



50 Cash & Equivalents

5010 Cash & Equivalents

The cash & equivalents Super Sector includes cash in the bank, certificates of deposit, currency, and money market holdings. Cash can also be any fixed-income securities that mature in less than 92 days. This Super Sector also includes commercial paper and any repurchase agreements held by the fund.

60 Derivatives (Other)

6010Swap6020Future/Forward6030Option/Warrant

The derivatives Super Sector includes the common types of fixed-income derivative contracts: futures and forwards, options, and swaps. For display purposes, products may elect to identify this sector as Other.



Government

This Primary Sector includes all conventional debt issued by governments other than those which are included in the Municipal sector, including bonds issued by a Central Bank or Treasury and bonds issued by local governments, cantons, regions and provinces. *Securities in this sector include U.S. Treasury, inflation-protected instruments , and sovereign bonds such as German Bundesobligationen, U.K. index-linked gilts, and Japanese government securities.*

Government-Related

This Primary Sector includes debt obligations issued by government agencies as well as interest-rate swaps and Treasury futures that are generally considered to have a risk profile commensurate with government bonds but may not have explicit government backing. Bonds issued by government-sponsored enterprises such as Federal National Mortgage Association and Federal Home Loan Mortgage Corporation can be found in this Primary Sector, while securities backed by mortgages that carry guarantees from government agencies can be found in the agency mortgage-backed Primary Sector. Securities in this sector include U.S. bonds issued by the Export-Import Bank of the United States, the Tennessee Valley Authority, the Commodity Credit Corporation, and the Small Business Administration as well as Treasury futures. This Primary Sector also includes bonds issued by agencies of central governments and bonds issued by supranational agencies. Securities in this Primary Sector include Bundesschatzanweisungen (German federal notes); Australian bonds issued by electrical suppliers and backed by the commonwealth of Australia; and securities issued by the International Bank for Reconstruction and Development (World Bank), the European Investment Bank, the Inter-American Development Bank, and more.



Municipal

Municipal Taxable

U.S. regulations require that bonds benefiting from a federal tax exemption be issued only for certain purposes. The interest on municipal bonds may be taxable (that is, not excluded from gross income for federal income tax purposes) if they are deemed to be issued in support of certain private activities. A municipal security is considered a private-activity bond if it meets either of two sets of conditions set out in Section 141 of the Internal Revenue Code, which includes limits on the use of bond proceeds for private business use. The interest from so-called qualified private-activity bonds may be excluded from gross income for federal income tax purposes, but it remains subject to the Alternative Minimum Tax. These "AMT bonds" are included in the municipal tax-exempt Primary Sector. This sector also includes Build America Bonds, which were issued under the 2009 American Recovery and Reinvestment Act, and non-U.S. municipal bonds.

Municipal Tax-Exempt

Local governments, state governments, provinces, and regional authorities are often referred to more generally as "municipalities" and typically issue bonds in order to raise money for operations and development. This financing is sometimes used to build or upgrade hospitals, sewer systems, schools, housing, stadiums, or industrial complexes. Some municipal bonds are backed by the issuing entity, while others are linked to a revenue stream, such as from a toll way or a utility. Municipal bonds in the United States are typically exempt from federal taxes and often the taxes of the states in which they are issued. Those taxation advantages may allow municipal governments to sell bonds at lower interest rates than those offered by comparable taxable bonds. This Primary Sector includes issues that are subject to the Alternative Minimum Tax but not other federal taxes.



Corporate

Bank Loan

The bank loans most commonly held within investment portfolios are typically referred to as leveraged loans because the balance sheets of their borrowers carry heavy debt burdens. Loans of this kind are normally issued with interest payments that float above a commonly used short-term benchmark such as the London Interbank Offered Rate, or Libor, by at least 300 basis points, typically senior to nearly all other debt and equity in a company's capital structure, and very often secured by specific assets or cash flows.

Convertible

Convertible bonds give their owners an opportunity to convert each security to a certain number of shares of common stock at a certain price. As the stock approaches that price, the option to convert becomes more valuable and the price of the convertible also rises. These securities usually provide lower interest payments because the option to convert to stock could potentially be quite valuable at some point in the future.

Corporate Bond

This sector includes all conventional debt securities that are issued by corporations. Corporate bonds are issued with a wide range of coupon rates and maturity dates.

Preferred Stock

Preferred stock is legally structured as equity but does not offer voting rights. Preferred stock often pays a fixed dividend and has priority over common equity when an issuing company elects to pay dividends. Although preferred stocks are not debt instruments, investors often treat them as such because of their income payouts and higher capital-structure placement.



Securitized

Agency Mortgage-Backed

This sector contains securities that represent a claim on the cash flows associated with pools of mortgages guaranteed by a government agency. Rolling into this sector are items such as mortgage pass-throughs, mortgage CMOs, and mortgage ARMs. These securities are guaranteed by Ginnie Mae, an agency of the U.S. government, or by U.S.-government-sponsored enterprises such as Fannie Mae or Freddie Mac.

Nonagency Residential Mortgage-Backed

Nonagency residential mortgage-backed securities are those not issued and guaranteed by Fannie Mae, Freddie Mac, or Ginnie Mae. Conforming loan size limits set by the U.S. government determine if a mortgage loan can qualify for an agency guarantee, and those that do not qualify make up the bulk of nonagency RMBS collateral. Because they lack a third-party guarantee, protection in the case of nonagency RMBS is generally provided through the creation of subordinate securities. These are first in line to offer credit protection to the senior-most AAA rated classes and are accordingly priced at lower prices relative to AAAs, reflecting their higher exposure to credit risk.

Commercial Mortgage-Backed

A mortgage-backed security backed by mortgages on commercial properties rather than residential real estate.

Covered Bond

Covered bonds are securities issued by a financial institution and usually backed by either high-quality mortgage loans or public-sector loans, which represent the "cover pool." Issuers raise assets for cover pools by selling "covered bonds" to investors, who maintain a claim on the cover pool but also a claim on the general credit of the issuer. Part of what differentiates a cover pool from the assets supporting a typical mortgage-backed security is that the cover pool remains on the balance sheet of its issuer, usually a bank or special financial institution set up for this purpose.

Asset-Backed

Asset-backed securities are based on the expected cash flows from debts such as auto loans, credit card receivables, and computer leases, among others. The cash flows for asset-backed securities can be fixed or variable. These securities typically range in effective maturity from two to seven years.



Cash & Equivalents

Cash & Equivalents

Cash can be cash in the bank, certificates of deposit, currency, or money market holdings. Cash can also be any fixed-income securities that mature in less than 92 days. Cash also includes commercial paper and any repurchase agreements held by the fund.



Derivatives (Other)

Swap

Swaps are risk-shifting, over-the-counter agreements that allow one party to trade one type of exposure for another. Each party agrees in advance to trade one set of payments (for example, fixed or floating interest rates on a predetermined notional amount) for a different set of payments for a set amount of time.

Future/Forward

By entering into a futures contract, the buyer (long position) has an obligation to purchase a specific underlying asset at an agreed-upon price at a specific date in the future. The seller of the futures contract takes a short position in the asset and agrees to sell it according to those terms.

Forward contracts are very similar to futures contracts in that they also represent the obligation to buy or sell a specific asset on a specific future date.

Option/Warrant

Options are contracts that allow the holder to profit if the price of the underlying asset moves in a certain direction. Call options give the holder (the long position) the right, but not the obligation, to buy an asset at a predetermined strike price and profit when the asset price is higher than the strike price. Put options give the holder the right to sell an asset at a specific strike price and profit when the market price of the asset is below the strike price. The parties that write options take a short position and have the obligation to sell or buy the asset from the long position if the option is exercised.

Warrants are a type of call option that is issued by the company, usually as part of a bond offering.



Sectors

Super Sector	Super Sector	Super Sector
Government	Government	Treasury This sector includes all conventional debt issued by a government's Treasury (that is, it excludes inflation-protected securities). Some examples of government debt are Treasury bonds and Treasury notes. Treasury bills are included in the cash & equivalents Super Sector because they mature in less than 92 days.
		Inflation Protected For securities domiciled in the U.S., these are referred to as TIPS, or Treasury Inflation-Protected Securities. These bonds have principal and coupon payments that are linked to movements in the Consumer Price Index. They can be used as a defensive measure against expectations of inflation (which typically erodes the real yield of conventional bonds). Even if inflation fears are in check, these bonds can benefit when yields fall on traditional Treasuries. These unique securities act very differently from fixed-rate bonds, and their volatility can change over time, depending on the level of interest rates.
		For non-U.Sdomiciled securities, these are often referred to as inflation-linked bonds, or linkers. In Canada, these are termed real return bund, and in Britain, the inflation-linked gilt. In Australia, inflation-protected bonds are called Treasury- indexed bonds and are capital-linked to the Australian Consumer Price Index. In most countries, the consumer price index or an equivalent is used as an inflation proxy.
	Government- Related	Agency/Quasi Agency This sector includes low-risk debt obligations issued by a government agency or bonds issued by an agency of a central government.
		Supranational This sector includes bonds issued by supranational agencies, such as the International Bank for Reconstruction and Development [World Bank], European Investment Bank, Inter-American Development Bank, and others.
		 For securities domiciled in the U.S., these are referred to as TIPS, or Treasury Inflation-Protected Securities. These bonds have principal and coupon payments that are linked to movements in the Consumer Price Index. They can be used as a defensive measure against expectations of inflation (which typically erodes the real yield of conventional bonds). Even if inflation fears are in check, these bonds can benefit when yields fall on traditional Treasuries. These unique securities act very differently from fixed-rate bonds, and their volatility can change over time, depending on the level of interest rates. For non-U.Sdomiciled securities, these are often referred to as inflation-linked bonds, or linkers. In Canada, these are termed real return bund, and in Britain, the inflation-linked gilt. In Australia, inflation-protected bonds are called Treasury- indexed bonds and are capital-linked to the Australian Consumer Price Index. In most countries, the consumer price index or an equivalent is used as an inflation proxy. Agency/Quasi Agency This sector includes low-risk debt obligations issued by a government agency or bonds issued by an agency of a central government. Supranational This sector includes bonds issued by supranational agencies, such as the International Bank for Reconstruction and Development [World Bank], European Investment Bank, Inter-American Development Bank, and others. Interest-Rate Derivative This sector includes interest-rate swaps, interest-rate futures, and interest-rate forwards. With an interest-rate swap, one party (the receiver) receives a fixed rate and pays a floating rate (usually Libor) to the counterparty. The receiver side of an interest-rate swap has exposure that is like a long investment-grade bond as well as short cash exposure, and the payer side has the opposite. Interest-rate futures are future contracts on interest rates. Interest-rate forwards are forward contr
		By entering into a futures contract, the buyer (long position) has an obligation to purchase a U.S. Treasury instrument at an agreed-upon price at a specific date in the future. The seller of the futures contract takes a short position in the asset
		This sector includes government-related securities where the Secondary Sector



Super Sector	Super Sector	Super Sector
Municipal	Municipal Taxable	Municipal Taxable Some municipal bonds are issued for certain purposes that are not tax-exempt. This Primary Sector includes taxable U.Sissued muni bonds, such as Build America Bonds, and non-U.Sissued muni bonds. The Secondary Sectors under this Primary Sector are the same as those under the municipal tax-exempt Primary Sector.
	Municipal Tax-Exempt	Municipal Tax-Exempt This Primary Sector includes bonds that benefit from federal tax exemptions. The Secondary Sectors under this Primary Sector are the same as those under the municipal taxable Primary Sector.
		State and Local General Obligation These are municipal bonds issued by state governments or local municipalities. The source of re-payment is not always specified in advance, nor is the use of proceeds. They are sometimes considered among the safest municipal bonds in the market because they are backed by the taxing power of their issuer, but they may be viewed otherwise during periods of great economic stress.
		Advance Refunded State and local issuers advance-refund municipal bonds to refinance debt at lower costs. However, issuers cannot always call the bonds at par immediately. So, they issue new bonds, buy U.S. Treasury bonds with the proceeds, and place them in an escrow account to back the "old" or advance-refunded bonds until either their first call-date or maturity.
		Tobacco The tobacco Secondary Sector combines both State and Non-State Appropriated Tobacco. State Appropriated TobaccoStates began issuing these municipal bonds after settling with a group of tobacco companies. The Master Settlement Agreement requires these companies to make ongoing payments to state governments as compensation for smoking-related state health-care expenditures. States issuing tobacco-backed bonds essentially opt to take the whole payment upfront by issuing bonds. They then pay the bonds' interest payments using revenues from the settlement. Appropriation-backed means the states have already earmarked funds to make bond payments. They are safer than nonappropriated bonds. Non-State Appropriated TobaccoThese bonds are backed by the same settlement that backs state-appropriated tobacco bonds. They carry modestly higher default risk because they aren't already backed by state appropriations.
		Education Most of these municipal bonds fall into two groups: bonds for local school districts and bonds for higher education. Local district bonds finance buildings and projects to promote primary and secondary education. They can be backed by local municipalities or by state-level agencies. They may also include charter school bonds. Higher-education bonds are issued both by public university systems and by private institutions. Other education-related bonds included projects such as public libraries.
		by local municipalities or by state-level agencies. They may also include school bonds. Higher-education bonds are issued both by public univers systems and by private institutions. Other education-related bonds inclu

hospital projects and equipment, and more. For example, they finance construction of everything from new rural-area hospitals to urban hospitals linked to larger care networks.



Super Sector Super Sector

Super Sector

Housing

Housing-related municipal bonds back several types of projects. For example, land-development bonds finance projects preparing land, sewer, road, and other systems for either single-family housing neighborhoods or multifamily housing complexes. These bonds are backed by property taxes, which are usually initially paid by developers. As residents move into completed neighborhoods and complexes, they assume the property-tax obligation. Other housing-related bonds finance the brick-and-mortar construction of low-income government housing developments.

Industrial

Industrial municipal bonds may be backed by local municipalities, state governments, or even for-profit corporations. They finance a wide variety of projects including pollution cleanup and private activity. Similar to some housing- related bonds, private-activity bonds may back, for example, the preparation of land that a for-profit company will use to build a new facility. Such bonds may be initially backed by government entities before responsibility for their repayment transfers to corporations. The interest from private-activity bonds is typically subject to the Alternative Minimum Tax.

Transportation

Transportation-related municipal bonds finance all sorts of projects, including non- toll and toll-backed road, bridge, and tunnel construction. They may also finance airport and seaport construction, recurring maintenance of intracounty and city public transportation systems, and more. They may be backed by taxes, tolls, ridership fees, and more.

Water & Sewer

These municipal bonds are similar to utility-related issues. They provide initial financing for construction of water and sewer systems that property taxes or other income will eventually repay.

Utilities

Utility-related municipal bonds finance construction and maintenance of power plants, electrical grids, telephone grids, and more. Their source of backing varies but may include property taxes, usage fees, and more.

Miscellaneous Revenue

This category describes harder-to-categorize municipal bonds that may finance a wide variety of projects.

rporate	Bank Loan	Bank Loan Rather than issuing bonds directly, bank loans or leveraged loans. The Secondary Sectors for each of the Primary Sectors under the corporate Super Sector are identical.
	Convertible	Convertible Convertible bonds give their owners an opportunity to convert each security to a certain number of shares of common stock at a certain price. The Secondary Sectors for each of the Primary Sectors under the corporate Super Sector are identical
	Corporate Bond	Corporate Bonds This includes all conventional debt securities that are issued by corporations. Corporate bonds are issued with a wide range of coupon rates and maturity dates. The Secondary Sectors for each of the Primary Sectors under the

corporate Super Sector are identical.

Cor



Super Sector	Super Sector	Super Sector
Preferred Stock	Preferred Stock Preferred stock is legally structured as equity, above common equity in a company's capital structure, but does not offer voting rights. Although preferred stocks are not debt instruments, investors often treat them as such because of their income payouts and higher capital-structure placement. The Secondary Sectors for each of the Primary Sectors under the corporate Super Sector are identical.	
		Basic Materials This includes companies that manufacture chemicals, building materials, and paper products. This Secondary Sector also includes companies engaged in commodities exploration and processing.
		Communication Services This includes companies that provide communication services using fixed-line networks or those that provide wireless access and services. This Secondary Sector also includes companies that provide Internet services such as access, navigation, and Internet-related software.
		Consumer Cyclical The consumer cyclical sector includes industries significantly impacted by economic shifts. When the economy is prosperous these industries tend to expand and when the economy is in a downturn these industries tend to shrink. In general, the stocks in these industries have betas of greater than 1.
		Consumer Defensive The consumer defensive sector includes industries that are relatively immune to economic cycles. These industries provide services that consumers require in both good and bad times, such as healthcare and utilities. In general, the stocks in these industries have betas of less than 1.
		Energy This includes companies that produce or refine oil and gas, oil field services and equipment com-panies, and pipeline operators. This Secondary Sector also includes companies engaged in the mining of coal.
		Financial Services This includes companies that provide financial services, which includes banks, savings and loans, asset-management companies, credit services, investment brokerage firms, and insurance companies.
	Healthcare This includes biotechnology, pharmaceuticals, research services, home healthcare, hospitals, long-term-care facilities, and medical equipment and supplies.	
		Industrials This includes companies that manufacture machinery, hand-held tools, and industrial products. This Secondary Sector also includes aerospace and defense firms as well as companies engaged in transportation and logistics services.
		Real Estate This includes mortgage companies, property management companies, and REITs.
		Technology Companies engaged in the design, development, and support of computer operating systems and applications. This sector also includes companies



Super Sector	Super Sector	Super Sector
		engaged in the manufacturing of computer equipment, data storage products, networking products, semi-conductors, and components. Companies in this sector include Apple, Google, and Microsoft.
		Utilities This includes electric, gas, and water utilities. Companies in this Secondary Sector include Electricité de France, Exelon Corporation, and PG&E Corporation.
		Unspecified Corporate sector designation could not be determined.
Securitized	Agency Mortgage-Backed	Agency Pass-Through These are securities that represent a claim on the cash flows associated with a pool of mortgages. Pass-through bondholders are entitled to a pro-rata share of the principal and interest payments paid by the homeowners. The timely payment of principal and interest for agency pass-through securities is guaranteed by government agencies. The underlying collateral of bonds in this Secondary Sector are fixed-rate mortgages; bonds backed by adjustable-rate mortgages are included in the agency ARM Secondary Sector.
		Agency ARM Agency adjustable-rate mortgages are securities that are backed by residential home mortgages where the interest rate is reset periodically in relation to a benchmark. The timely payment of interest and principal is guaranteed by a government agency.
		Agency CMO Agency-backed collateralized mortgage obligations are backed by pools of mortgage pass-throughs (or a pool of mortgage loans) whose underlying cash flows are guaranteed by a government agency such as Ginnie Mae, Fannie Mae or Freddie Mac. They are structured into several classes of securities (known as tranches) with varying maturities and rules for the distribution of principal and interest payments from the underlying collateral. Each tranche typically has a different degree of prepayment and interest-rate risk. Generally, the goal is to create a series of tranches that can offer greater stability or predictability of cash flows over a wide range of prepayment speeds. Investors in search of those traits are typically willing to accept lower yields in exchange, while other tranches in the structure normally offer higher yields as compensation for taking on the risks eliminated from the more predictable tranches. There are several ways to structure CMOs, resulting in a variety of tranche names that are not always present in each CMO. There are other factors that may make an individual tranche of an individual CMO act differently from others with similar names, but under normal conditions those labeled as sequentials, PACs, and VADMs, for example, are considered relatively safe or stable, while others such as IOs, POs, inverse floaters, and Z bonds are normally expected to offer significantly higher potential returns and volatility.
		Unspecified Securities that are identifiable as agency mortgage-backed, but further classification could not be determined.
	Nonagency Residential Mortgage-Backed	Nonagency Residential Mortgage-Backed Nonagency residential mortgage-backed securities are those not issued and guaranteed by Fannie Mae, Freddie Mac, or Ginnie Mae. Conforming loan size limits set by the U.S. government determine if a mortgage loan can qualify for an agapty guarantee, and these that do not gualify make up the bulk of



an agency guarantee, and those that do not qualify make up the bulk of

Super Sector	Super Sector
	nonagency RMBS collateral. Because they lack a third-party guarantee, protection in the case of nonagency RMBS is generally provided through the creation of subordinate securities. These are first in line to offer credit protection to the senior-most AAA rated classes and are accordingly priced at lower prices relative to AAAs, reflecting their higher exposure to credit risk.
Commercial Mortgage- Backed	Commercial Mortgage-Backed A type of mortgage-backed security backed by mortgages on commercial rather than residential real estate.
Covered Bond	Covered Bonds Issuers raise assets for cover pools by selling "covered bonds" to investors, who maintain a claim on the cover pool but also a claim on the general assets and credit of the issuer. Part of what differentiates a cover pool from the assets supporting a typical mortgage-backed security is that the cover pool remains on the balance sheet of its issuer, usually a bank or special financial institution set up for this purpose.
Asset-Backed	Auto These issues are backed by automobiles, including auto leases, auto receivables and motorcycle sales contracts.
	CBO/CDO Collateralized bond obligations and collateralized debt obligations are structured asset-backed securities. The underlying assets often carry high default risk; CBOs and CDOs are intended to mitigate this risk through securitization.
	Credit Card Credit card issuers, such as banks, issue asset-backed securities whose collateral is the amount that cardholders must pay to repay their credit card debt.
	Home Equity These ABS are backed by home equity loans. Unlike mortgage-backed securities home equity loans are typically second-lien debts that are junior to a primary mortgage.
	Student Loan These asset-backed securities have student loan repayments as their collateral.
	Other These are unidentified asset-backed securities and those that do not fit into one of the categories specified above.
Cash & Equivalents	ABS See definition of asset-backed securities above . These are securities with a maturity of less than less than 92 days.
	Cash This includes cash denominated in the base currency of the fund.
	Cash Collateral Cash collateral is nondiscretionary. Certain mutual funds are required to hold segregated cash collateral against short positions. These are not offsets against derivatives contracts and should be treated separately.
	Commercial Mortgage- Backed Covered Bond Asset-Backed



Super Sector Super Sector

Super Sector

This includes low-risk debt instruments with short-term maturity dates less than 92 days issued by nonfinancial corporations and other borrowers to meet short-term financing needs.

Corporate

See definition of corporate Super Sector above. These are securities with a maturity of less than 92 days.

Derivative Cash Offset

Derivative contracts legally obligate the seller and/or the buyer of the contract to transact in the underlying instrument at the predetermined price and time. The legal liability (or asset) associated with this obligation is recorded as the cash offset. For a futures contract, Morningstar records three positions: the long exposure embedded in the contract at full market value, the long cash collateral and accumulated gains held by the central clearinghouse, and short cash offset equal to the notional value of the contract.

Floating-Rate Note

Floating-rate notes are bonds that have variable interest rates. The variable rates are equal to a money market reference rate such as the federal-funds rate or Libor plus a spread that remains constant. These are securities with maturities of less than 92 days.

Government

This includes Treasury bills and short-term debt obligations backed by governments with maturities of less than 92 days.

GSE/Agency

See Agency definition above . These are securities with maturities of less than 92 days.

MBS

See Mortgage-Backed Securities definition above . These are securities with maturities of less than 92 days.

Money Market

These are investments in money market funds designed to provide a level of current income that is consistent with the preservation of capital. These are securities with a maturity of less than 92 days.

Municipal

See Municipal definition above. These are securities with a maturity of less than 92 days.

Repurchase Agreement

A form of short-term borrowing where two parties have an agreement where one party sells a security at a specified price with a commitment to buy the security back at a later date. Most repurchase agreements are overnight transactions.

TD/CD

A time deposit is an interest-bearing deposit at a savings institution that has a specific maturity . A certificate of deposit represents a fixed-income debt security, usually issued by chartered banks. The minimum deposit is usually \$1,000, and the maturity terms of less than 92 days.



Super Sector	Super Sector	Super Sector
		Other This includes securities with a maturity of less than 92 days.not listed in one of the secondary sectors above.
Derivatives	Swap	Credit Default Swap In these agreements, one party pays fees (that are analogous to insurance premiums) to the other party in return for gaining protection against a default or bonds from a third company or entity. If the reference entity does default, the party selling protection must reimburse the party buying protection with the difference between the par value and the postdefault market value of the reference entity's bonds.
		Total Return Swap These are commonly used to gain exposure to a bond that the fund does not own. The fund pays a floating rate and receives the income and capital gains from the bond in return. This provides the fund with long exposure to the reference bond and short exposure to cash.
		Debt Swap A debt swap is a series of transactions where debts or receivables are exchanged between two entities.
	Future/Forward	Bond Future These are futures contracts on specific bond issues, generally corporate bonds.
	Option/Warrant	Currency Forward/Future These are future and forward contracts on currencies.
		Bond - Option Options are contracts that allow the holder to profit if the price of the underlying asset moves in a certain direction. Call options give the holder (the long position) the right, but not the obligation, to buy an asset at a predetermined strike price and profit when the asset price is higher than the strike price. Put options give the holder the right to sell an asset at a specific strike price and profit when the market price of the asset is below the strike price. The parties that write options take a short position and have the obligation to sell or buy the asset from the long position if the option is exercised. Options can be used for speculation or for hedging. Bond index options are included in this sector.
		Bond - Warrant/Right Warrants or rights function in a similar way as options, except they are sold attached to the issuance of a stock or bond. The Fixed Income Classification Structure only includes warrants and rights attached to bonds. After initial issuing, they can be detached and traded in the market with their own market values.

Recent Changes

Effective Oct. 31 2016, redefined cash & equivalents from instruments maturing in less than 12 months to instruments maturing in less than 92 days. Five years of portfolios will be reprocessed concurrent to launch.



M RNINGSTAR®

22 West Washington Street Chicago, IL 60602 USA

©2016 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses, and opinions presented herein do not constitute investment advice; are provided solely for informational purposes and therefore are not an offer to buy or sell a security; and are not warranted to be correct, complete, or accurate. The opinions expressed are as of the date written and are subject to change without notice. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages, or other losses resulting from, or related to, the information, data, analyses, or opinions or their use. References to "Morningstar Credit Ratings" refer to ratings issued by Morningstar Credit Ratings, LLC, a credit rating agency registered with the Securities and Exchange Commission as a nationally recognized statistical rating organization ("NRSRO"). Under its NRSRO registration, Morningstar Credit Ratings issues credit ratings on financial institutions (e.g., banks), corporate issuers, and asset-backed securities. While Morningstar Credit Ratings issues credit ratings on insurance companies, those ratings are not issued under its NRSRO registration. All Morningstar credit ratings and related analysis are solely statements of opinion and not statements of fact or recommendations to purchase, hold, or sell any securities or make any other investment decisions. Morningstar credit ratings and related analysis should not be considered without an understanding and review of our methodologies, disclaimers, disclosures, and other important information found at https://ratingagency.morningstar.com. The information contained herein is the proprietary property of Morningstar and may not be reproduced, in whole or in part, or used in any manner, without the prior written consent of Morningstar. To license the research, call +1 312 696-6869.

