

# The Morningstar Category™ Classifications

(for portfolios available for sale in the United States)

# Morningstar Methodology Paper July 31, 2008

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# Category List

Asset Class	Code	Category Name	
U.S. Stock	LV	Large Value	8
U.S. Stock	LB	Large Blend	8
U.S. Stock	LG	Large Growth	8
U.S. Stock	MV	Mid-Cap Value	8
U.S. Stock	MB	Mid-Cap Blend	9
U.S. Stock U.S. Stock U.S. Stock	MG	Mid-Cap Growth	9
	SV	Small Value	9
	SB	Small Blend	9
U.S. Stock	SG	Small Growth	10
U.S. Stock	SC	Specialty-Communications	10
U.S. Stock	SF	Specialty-Financial	10
U.S. Stock	SH	Specialty-Health	10
U.S. Stock	SN	Specialty-Natural Resources	11
U.S. Stock	SR	Specialty-Real Estate	11
U.S. Stock	ST	Specialty-Technology	11
U.S. Stock	SU	Specialty-Utilities	11
U.S. Stock	LN	Leveraged Net Long	11
Balanced	CV	Convertibles	12
Balanced	CA	Conservative Allocation	12
Balanced	MA	Moderate Allocation	12
Balanced	IH	World Allocation	12
Balanced	TA	Target-Date 2000-2014	13
Balanced	TB	Target-Date 2015-2029	13
Balanced	TC	Target-Date 2030+	13
International Stock	FV	Foreign Large Value	14
International Stock	FB	Foreign Large Blend	14
International Stock	FG	Foreign Large Growth	14
International Stock	FA	Foreign Small/Mid Value	15
International Stock	FR	Foreign Small/Mid Growth	15
International Stock	WS	World Stock	15
International Stock	EM	Diversified Emerging Mkts	15
International Stock	LS	Latin America Stock	16
International Stock	ES	Europe Stock	16



Asset Class	Code	Category Name	
International Stock	JS	Japan Stock	16
International Stock	PJ	Pacific/Asia ex-Japan Stk	16
International Stock	DP	Diversified Pacific/Asia	17
International Stock	GR	Global Real Estate	17
Alternative	BM	Bear Market	18
Alternative	CR	Currency	18
Alternative	LO	Long-Short	18
Alternative	NE	Market Neutral	18
Alternative	SP	Specialty-Precious Metals	18
Taxable Bond	GL	Long Government	19
Taxable Bond	GI	Intermediate Government	19
Taxable Bond	GS	Short Government	19
Taxable Bond	IP	Inflation-Protected Bond	19
Taxable Bond	CL	Long-Term Bond	20
Taxable Bond	CI	Intermediate-Term Bond	20
Taxable Bond	CS	Short-Term Bond	20
Taxable Bond	UB	Ultrashort Bond	20
Taxable Bond	BL	Bank Loan	20
Taxable Bond	VL	Stable Value	21
Taxable Bond	HY	High Yield Bond	21
Taxable Bond	MU	Multisector Bond	21
Taxable Bond	IB	World Bond	21
Taxable Bond	EB	Emerging Markets Bond	22
Municipal Bond	ML	Muni National Long	23
Municipal Bond	MI	Muni National Interm	23
Municipal Bond	MS	Muni National Short	23
Municipal Bond	HM	High Yield Muni	23
Municipal Bond	SL	Muni Single State Long	24
Municipal Bond	SI	Muni Single State Interm	24
Municipal Bond	SS	Muni Single State Short	24
Municipal Bond	MC	Muni California Long	24
Municipal Bond	MF	Muni California Int/Sh	25
Municipal Bond	MT	Muni Massachusetts	25
Municipal Bond	SM	Muni Minnesota	25
Municipal Bond	MJ	Muni New Jersey	25
Municipal Bond	MY	Muni New York Long	25
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Asset Class	Code	Category Name	
Municipal Bond	MN	Muni New York Int/Sh	26
Municipal Bond	MO	Muni Ohio	26
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	TM	Taxable Money Market	27
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### Introduction

The Morningstar Category<sup>™</sup> classifications were introduced in 1996 to help investors make meaningful comparisons between mutual funds. Morningstar found that the investment objective listed in a fund's prospectus often did not adequately explain how the fund actually invested. For example, many funds claimed to be seeking "growth," but some were investing in established blue-chip companies while others were seeking growth by investing in small-cap companies.

The Morningstar Category classifications solved this problem by breaking portfolios into peer groups based on their holdings. The categories help investors identify the top-performing funds, assess potential risk, and build well-diversified portfolios. Morningstar regularly reviews the category structure and the portfolios within each category to ensure that the system meets the needs of investors.

Morningstar assigns categories to all types of portfolios, such as mutual funds, variable annuities, and separate accounts. Portfolios are placed in a given category based on their average holdings statistics over the past three years. Morningstar's editorial team also reviews and approves of all category assignments. If the portfolio is new and has no history, Morningstar estimates where it will fall before giving it a more permanent category assignment. When necessary, Morningstar may change a category assignment based on recent changes to the portfolio.

The driving principles behind the classification system are as follows:

- Individual portfolios within a category invest in similar types of securities and therefore share the same risk factors (e.g. style risk, prepayment risk).
- Individual portfolios within a category can, in general, be expected to behave more similarly to one another than to portfolios outside the category.
- The aggregate performance of different categories differs materially over time.
- Categories have enough constituents to form the basis for reasonable peer group comparisons.
- The distinctions between categories are meaningful to investors and assist in their pursuit of investing goals.

In the United States, Morningstar supports 72 categories, which map into five broad asset classes (U.S. Stock, Balanced, International Stock, Taxable Bond, and Municipal Bond). The primary and secondary indexes listed with each category are used in Morningstar's tools and reports to show performance relative to a benchmark. In addition, Morningstar has 2 categories for Money Market funds: Taxable and Tax-Free.



# Recent Changes

#### May 31, 2003

- Added Bear Market, Bank Loan, High Yield Muni, Muni Florida, Muni Massachusetts, Muni Minnesota, Muni New Jersey, Muni Ohio, and Muni Pennsylvania
- ► Replaced the Domestic Hybrid category with two new categories: Conservative Allocation and Moderate Allocation
- Name changes from Muni Short to Muni National Short, from Muni Single State Intermediate to Muni Single State Int/Sh, from Muni California Intermediate to Muni California Int/Sh, from Muni New York Intermediate to Muni New York Int/Sh, from International Hybrid to World Allocation, and from International Bond to World Bond

#### September 30, 2003

Replaced the Foreign Stock category with five new categories: Foreign Large Value, Foreign Large Blend, Foreign Large Growth, Foreign Small/Mid Value, and Foreign Small/Mid Growth

#### May 31, 2004

- Replaced the Muni Single State Int/Sh category with two new categories: Muni Single State Interm and Muni Single State Short
- Added Stable Value category (currently used for custom funds and separate accounts only)

#### February 28, 2006

- ► Added Inflation-Protected Bond, Long-Short, Target-Date 2000-2014, Target-Date 2015-2029, and Target Date 2030+
- Added the Balanced broad asset class

#### **September 30, 2007**

Added Leveraged Net Long and Market Neutral to the separate accounts and custom funds databases.

#### July 31, 2008

- Added Global Real Estate and Currency.
- Added the Alternative broad asset class.
- Removed Muni Florida.



### U.S. Stock

#### Large Value, LV

Large-value portfolios invest primarily in big U.S. companies that are less expensive or growing more slowly than other large-cap stocks. Stocks in the top 70% of the capitalization of the U.S. equity market are defined as large-cap. Value is defined based on low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow).

Primary Index: S&P 500 Secondary Index: Russell 1000 Value

#### Large Blend, LB

Large-blend portfolios are fairly representative of the overall U.S. stock market in size, growth rates, and price. Stocks in the top 70% of the capitalization of the U.S. equity market are defined as large-cap. The blend style is assigned to portfolios where neither growth nor value characteristics predominate. These portfolios tend to invest across the spectrum of U.S. industries, and owing to their broad exposure, the portfolios' returns are often similar to those of the S&P 500 Index.

Primary Index: S&P 500 Secondary Index: Russell 1000

#### Large Growth, LG

Large-growth portfolios invest in big U.S. companies that are projected to grow faster than other large-cap stocks. Stocks in the top 70% of the capitalization of the U.S. equity market are defined as large-cap. Growth is defined based on fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields). Most of these portfolios focus on companies in rapidly expanding industries.

Primary Index: S&P 500 Secondary Index: Russell 1000 Growth

#### Mid-Cap Value, MV

Some mid-cap value portfolios focus on medium-size companies while others land here because they own a mix of small-, mid-, and large-cap stocks. All look for U.S. stocks that are less expensive or growing more slowly than the market. The U.S. mid-cap range for market capitalization typically falls between \$1 billion-\$8 billion and represents 20% of the total capitalization of the U.S. equity market. Value is defined based on low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow).

Primary Index: S&P 500 Secondary Index: Russell Midcap Value



# U.S. Stock (continued)

#### Mid-Cap Blend, MB

The typical mid-cap blend portfolio invests in U.S. stocks of various sizes and styles, giving it a middle-of-the-road profile. Most shy away from high-priced growth stocks, but aren't so price-conscious that they land in value territory. The U.S. mid-cap range for market capitalization typically falls between \$1 billion-\$8 billion and represents 20% of the total capitalization of the U.S. equity market. The blend style is assigned to portfolios where neither growth nor value characteristics predominate.

Primary Index: S&P 500 Secondary Index: S&P Mid Cap 400

#### Mid-Cap Growth, MG

Some mid-cap growth portfolios invest in stocks of all sizes, thus leading to a mid-cap profile, but others focus on midsize companies. Mid-cap growth portfolios target U.S. firms that are projected to grow faster than other mid-cap stocks, therefore commanding relatively higher prices. The U.S. mid-cap range for market capitalization typically falls between \$1 billion-\$8 billion and represents 20% of the total capitalization of the U.S. equity market. Growth is defined based on fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields).

Primary Index: S&P 500 Secondary Index: Russell Mid Cap Growth

#### Small Value, SV

Small-value portfolios invest in small U.S. companies with valuations and growth rates below other small-cap peers. Stocks in the bottom 10% of the capitalization of the U.S. equity market are defined as small-cap. Value is defined based on low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow).

Primary Index: S&P 500 Secondary Index: Russell 2000 Value

#### Small Blend, SB

Small-blend portfolios favor U.S. firms at the smaller end of the market-capitalization range. Some aim to own an array of value and growth stocks while others employ a discipline that leads to holdings with valuations and growth rates close to the small-cap averages. Stocks in the bottom 10% of the capitalization of the U.S. equity market are defined as small-cap. The blend style is assigned to portfolios where neither growth nor value characteristics predominate.

Primary Index: S&P 500 Secondary Index: Russell 2000



# U.S. Stock (continued)

#### Small Growth, SG

Small-growth portfolios focus on faster-growing companies whose shares are at the lower end of the market-capitalization range. These portfolios tend to favor companies in up-and-coming industries or young firms in their early growth stages. Because these businesses are fast-growing and often richly valued, their stocks tend to be volatile. Stocks in the bottom 10% of the capitalization of the U.S. equity market are defined as small-cap. Growth is defined based on fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields).

Primary Index: S&P 500 Secondary Index: Russell 2000 Growth

#### **Specialty-Communications, SC**

Specialty-communications portfolios concentrate on telecommunications and media companies of various kinds. Most buy some combination of cable television, wireless-communications, and communications-equipment firms as well as traditional phone companies. A few favor entertainment firms, mainly broadcasters, film studios, publishers, and on-line service providers.

Primary Index: S&P 500 Secondary Index: DJ US Telecommunications

#### Specialty-Financial, SF

Specialty-financial portfolios seek capital appreciation by investing primarily in equity securities of U.S. or non-U.S. financial-services companies, including banks, brokerage firms, insurance companies, and consumer credit providers.

Primary Index: S&P 500 Secondary Index: DJ US Financial

#### Specialty-Health, SH

Specialty-health portfolios focus on the medical and health-care industries. Most invest in a range of companies, buying everything from pharmaceutical and medical-device makers to HMOs, hospitals, and nursing homes. A few portfolios concentrate on just one industry segment, such as service providers or biotechnology firms.

Primary Index: S&P 500 Secondary Index: DJ US Health Care



# U.S. Stock (continued)

#### **Specialty-Natural Resources, SN**

Specialty-natural resources portfolios focus on commodity-based industries such as energy, chemicals, minerals, and forest products in the U.S. or outside of the U.S. Some portfolios invest across this spectrum to offer broad natural resources exposure. Others concentrate heavily or even exclusively in specific industries including energy or forest products.

Primary Index: S&P 500 Secondary Index: Goldman Sachs Natural Resources

#### Specialty-Real Estate, SR

Specialty-real estate portfolios invest primarily in real-estate investment trusts (REITs) of various types. REITs are companies that develop and manage real-estate properties. There are several different types of REITs, including apartment, factory-outlet, health-care, hotel, industrial, mortgage, office, and shopping center REITs. Some portfolios in this category also invest in real-estate operating companies.

Primary Index: S&P 500 Secondary Index: DJ Wilshire REIT TR

#### Specialty-Technology, ST

Specialty-technology portfolios buy high-tech businesses in the U.S. or outside of the U.S. Most concentrate on computer, semiconductor, software, networking, and Internet stocks. A few also buy medical-device and biotechnology stocks and some concentrate on a single technology industry.

Primary Index: S&P 500 Secondary Index: NYSE Arca Tech 100

#### **Specialty-Utilities, SU**

Specialty-utilities portfolios seek capital appreciation by investing primarily in equity securities of U.S. or non-U.S. public utilities including electric, gas, and telephone-service providers.

Primary Index: S&P 500 Secondary Index: DJ Utilities Average

#### Leveraged Net Long, LN

Leveraged net long portfolios seek income by establishing long and short positions in securities. The most common strategy for leveraged net long portfolios is to take long positions in securities that have been identified as attractive and short positions in securities that have been identified as overvalued. These portfolios typically hold long positions in securities with an aggregate value of up to 130% of its net assets. In addition, these portfolios will establish short positions in securities with a market value of up to 30% of its net assets. The net long exposure therefore remains 100%, but it is a leveraged exposure. This category is only used in Morningstar's custom fund and separate account databases.

Primary Index: S&P 500 Secondary Index: DJ Wilshire 5000



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### Balanced

#### Convertibles, CV

Convertible bond portfolios are designed to offer some of the capital-appreciation potential of stock portfolios while also supplying some of the safety and yield of bond portfolios. To do so, they focus on convertible bonds and convertible preferred stocks. Convertible bonds allow investors to convert the bonds into shares of stock, usually at a preset price. These securities thus act a bit like stocks and a bit like bonds.

Primary Index: DJ Moderate Portfolio

Secondary Index: ML Converted Bonds All Qualities

#### **Conservative Allocation, CA**

Conservative-allocation portfolios seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds, and cash. These portfolios tend to hold smaller positions in stocks than moderate-allocation portfolios. These portfolios typically have 20% to 50% of assets in equities and 50% to 80% of assets in fixed income and cash.

Primary Index: DJ Moderate Portfolio

Secondary Index: DJ US Moderately Conservative

#### **Moderate Allocation, MA**

Moderate-allocation portfolios seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds, and cash. These portfolios tend to hold larger positions in stocks than conservative-allocation portfolios. These portfolios typically have 50% to 70% of assets in equities and the remainder in fixed income and cash.

Primary Index: DJ Moderate Portfolio

Secondary Index: DJ US Moderate Portfolio

#### World Allocation, IH

World-allocation portfolios seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds, and cash. While these portfolios do explore the whole world, most of them focus on the U.S., Canada, Japan, and the larger markets in Europe. It is rare for such portfolios to invest more than 10% of their assets in emerging markets. These portfolios typically have at least 10% of assets in bonds, less than 70% of assets in stocks, and at least 40% of assets in non-U.S. stocks or bonds.

Primary Index: DJ Moderate Portfolio

Secondary Index: MSCI World NR USD



# Balanced (continued)

#### **Target-Date 2000-2014, TA**

Target-date portfolios provide a diversified exposure to stocks, bonds, and cash for those investors who have a specific date in mind (in this case, the years 2000-2014) for retirement or another goal. These portfolios aim to provide investors with an optimal level of return and risk, based solely on the target date. Over time, management adjusts the allocation among asset classes to more conservative mixes as the target date approaches.

Primary Index: DJ Moderate Portfolio Secondary Index: DJ Portfolio Target 2010

#### **Target-Date 2015-2029, TB**

Target-date portfolios provide a diversified exposure to stocks, bonds, and cash for those investors who have a specific date in mind (in this case, the years 2015-2029) for retirement or another goal. These portfolios aim to provide investors with an optimal level of return and risk, based solely on the target date. Over time, management adjusts the allocation among asset classes to more conservative mixes as the target date approaches.

Primary Index: DJ Moderate Portfolio Secondary Index: DJ Portfolio Target 2025

#### Target-Date 2030+, TC

Target-date portfolios provide a diversified exposure to stocks, bonds, and cash for those investors who have a specific date in mind (in this case, the years 2030 and beyond) for retirement or another goal. These portfolios aim to provide investors with an optimal level of return and risk, based solely on the target date. Over time, management adjusts the allocation among asset classes to more conservative mixes as the target date approaches.

Primary Index: DJ Moderate Portfolio Secondary Index: DJ Portfolio Target 2040



# International Stock

#### Foreign Large Value, FV

Foreign large-value portfolios invest mainly in big international stocks that are less expensive or growing more slowly than other large-cap stocks. Most of these portfolios divide their assets among a dozen or more developed markets, including Japan, Britain, France, and Germany. These portfolios primarily invest in stocks that have market caps in the top 70% of each economically integrated market (such as Europe or Asia ex-Japan). Value is defined based on low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow). These portfolios typically will have less than 20% of assets invested in U.S. stocks.

Primary Index: MSCI EAFE NR USD Secondary Index: MSCI EAFE Value NR USD

#### Foreign Large Blend, FB

Foreign large-blend portfolios invest in a variety of big international stocks. Most of these portfolios divide their assets among a dozen or more developed markets, including Japan, Britain, France, and Germany. These portfolios primarily invest in stocks that have market caps in the top 70% of each economically integrated market (such as Europe or Asia ex-Japan). The blend style is assigned to portfolios where neither growth nor value characteristics predominate. These portfolios typically will have less than 20% of assets invested in U.S. stocks.

Primary Index: MSCI EAFE NR USD Secondary Index: MSCI AC World Ex USA NR USD

#### Foreign Large Growth, FG

Foreign large-growth portfolios focus on high-priced growth stocks, mainly outside of the United States. Most of these portfolios divide their assets among a dozen or more developed markets, including Japan, Britain, France, and Germany. These portfolios primarily invest in stocks that have market caps in the top 70% of each economically integrated market (such as Europe or Asia ex-Japan). Growth is defined based on fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields). These portfolios typically will have less than 20% of assets invested in U.S. stocks.

Primary Index: MSCI EAFE NR USD Secondary Index: MSCI EAFE Growth NR USD



# International Stock (continued)

#### Foreign Small/Mid Value, FA

Foreign small-/mid-value portfolios invest in international stocks that are smaller and less expensive than other stocks. These portfolios primarily invest in stocks that fall in the bottom 30% of each economically integrated market (such as Europe or Asia ex-Japan). Value is defined based on low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow). These portfolios typically will have less than 20% of assets invested in U.S. stocks.

Primary Index: MSCI EAFE NR USD Secondary Index: MSCI World ex US NR USD

#### Foreign Small/Mid Growth, FR

Foreign small-/mid-growth portfolios invest in international stocks that are smaller, growing faster, and higher-priced than other stocks. These portfolios primarily invest in stocks that fall in the bottom 30% of each economically integrated market (such as Europe or Asia ex-Japan). Growth is defined based on fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields). These portfolios typically will have less than 20% of assets invested in U.S. stocks.

Primary Index: MSCI EAFE NR USD Secondary Index: MSCI World ex US NR USD

#### World Stock, WS

World-stock portfolios have few geographical limitations. It is common for these portfolios to invest the majority of their assets in the U.S., Europe, and Japan, with the remainder divided among the globe's smaller markets. These portfolios typically have 20%-60% of assets in U.S. stocks.

Primary Index: MSCI EAFE NR USD Secondary Index: MSCI World NR USD

#### **Diversified Emerging Mkts, EM**

Diversified emerging-markets portfolios tend to divide their assets among 20 or more nations, although they tend to focus on the emerging markets of Asia and Latin America rather than on those of the Middle East, Africa, or Europe. These portfolios invest at least 70% of total assets in equities and invest at least 50% of stock assets in emerging markets.

Primary Index: MSCI EAFE NR USD Secondary Index: MSCI EM USD



# International Stock (continued)

#### Latin America Stock, LS

Latin America stock portfolios invest almost exclusively in stocks from Latin America. Most of these portfolios strongly favor the area's large markets, specifically Brazil, Mexico, and Argentina. Smaller markets such as Peru or Colombia aren't generally as well-represented in these portfolios. These portfolios invest at least 70% of total assets in equities and invest at least 75% of stock assets in Latin America.

Primary Index: MSCI EAFE NR USD Secondary Index: MSCI EM Latin America USD

#### **Europe Stock, ES**

Europe-stock portfolios invest at least 70% of total assets in equities and invest at least 75% of stock assets in Europe. Most of these portfolios emphasize the region's larger and more developed markets, including Britain, the Netherlands, Germany, France, and Switzerland. Many also invest in the region's smaller markets, including the emerging markets of eastern Europe.

Primary Index: MSCI EAFE NR USD Secondary Index: MSCI Europe NR USD

#### Japan Stock, JS

Japan stock portfolios emphasize companies based in Japan. The Japanese stock market is one of the largest in the world, so these portfolios' holdings vary significantly. Some portfolios concentrate on Japan's larger companies, while others concentrate on the nation's smaller firms. These portfolios invest at least 70% of total assets in equities and invest at least 75% of stock assets in Japan.

Primary Index: MSCI EAFE NR USD Secondary Index: MSCI Japan NR USD

#### Pacific/Asia ex-Japan Stk, PJ

Pacific/Asia ex-Japan stock portfolios cover a wide geographic range. Most of these portfolios focus on export-oriented nations such as Hong Kong, Singapore, Taiwan, and Korea. These portfolios invest at least 70% of total assets in equities and invest at least 75% of stock assets in Pacific countries, with less than 10% in Japan.

Primary Index: MSCI EAFE NR USD Secondary Index: MSCI AC Far East Ex Japan NR USD



# International Stock (continued)

#### **Diversified Pacific/Asia, DP**

Diversified Pacific/Asia stock portfolios have a wider investment range than other Asia-oriented portfolios. These portfolios can invest throughout the Pacific Rim, including Australia and New Zealand. As a result, country weightings for these portfolios vary tremendously, though most retain some exposure to Japan and Hong Kong. These portfolios invest at least 70% of total assets in equities and invest at least 75% of stock assets in Pacific countries, including at least 10% in Japan.

Primary Index: MSCI EAFE NR USD Secondary Index: MSCI Pacific NR USD

#### **Global Real Estate, GR**

Global real estate portfolios invest primarily in non-US real estate securities, but may also invest in U.S. real estate securities. Securities that these portfolios purchase include: debt & equity securities, convertible securities, and securities issued by Real Estate Investment Trusts (REITs) and REIT like entities. Portfolios in this category also invest in real-estate operating companies.

Primary Index: MSCI EAFE NR USD Secondary Index: MSCI World/Real Estate NR USD



### **Alternative**

#### Bear Market, BM

Bear-market portfolios invest in short positions and derivatives in order to profit from stocks that drop in price. Because these portfolios often have extensive holdings in shorts or puts, their returns generally move in the opposite direction of the benchmark index.

Primary Index: ML USD LIBOR 3 Mon CM Secondary Index: S&P 500 TR

#### Currency, CR

Currency portfolios invest in US and foreign currencies through the use of short term money market instruments; derivative instruments, including and not limited to, forward currency contracts, index swaps and options; and cash deposits.

Primary Index: ML USD LIBOR 3 Mon CM Secondary Index: ML US Treasury Bill 3 Mon

#### Long-Short, LO

Long-short portfolios hold sizable stakes in both long and short positions. Some funds that fall into this category are market neutral — dividing their exposure equally between long and short positions in an attempt to earn a modest return that is not tied to the market's fortunes. Other portfolios that are not market neutral will shift their exposure to long and short positions depending upon their macro outlook or the opportunities they uncover through bottom-up research.

Primary Index: ML USD LIBOR 3 Mon CM Secondary Index: S&P 500 TR

#### Market Neutral, NE

Market neutral portfolios seek income while maintaining low correlation to fluctuations in market conditions. Market neutral portfolios typically hold 50% of net assets in long positions and 50% of net assets in short positions in order to deliver positive returns regardless of the direction of the market. This category is only used in Morningstar's custom fund and separate account databases.

Primary Index: ML USD LIBOR 3 Mon CM Secondary Index: IA SBBI US 30 Day TBill TR

#### **Specialty-Precious Metals, SP**

Specialty-precious metals portfolios focus on mining stocks, though some do own small amounts of gold bullion. Most portfolios concentrate on gold-mining stocks, but some have significant exposure to silver-, platinum-, and base-metal-mining stocks as well. Precious-metals companies are typically based in North America, Australia, or South Africa.

Primary Index: ML USD LIBOR 3 Mon CM Secondary Index: MSCI World Metals & Mining USD



### Taxable Bond

#### Long Government, GL

Long-government portfolios have at least 90% of their bond holdings invested in bonds backed by the U.S. government or by government-linked agencies. This backing minimizes the credit risk of these portfolios, as the U.S. government is unlikely to default on its debt. They are not risk free, though. Because these portfolios have durations of more than six years (or, if duration is unavailable, average effective maturities greater than 10 years), they are more sensitive to interest rates, and thus riskier, than portfolios that have shorter durations.

Primary Index: LB US Aggregate Secondary Index: LB US Government Long

#### Intermediate Government, GI

Intermediate-government portfolios have at least 90% of their bond holdings in bonds backed by the U.S. government or by government-linked agencies. This backing minimizes the credit risk of these portfolios, as the U.S. government is unlikely to default on its debt. These portfolios have durations between 3.5 and six years (or, if duration is unavailable, average effective maturities between four and 10 years). Consequently, the group's performance--and its level of volatility--tends to fall between that of the short government and long government bond categories.

Primary Index: LB US Aggregate Secondary Index: LB US Government

#### **Short Government, GS**

Short-government portfolios have at least 90% of their bond holdings in bonds backed by the U.S. government or by government-linked agencies. This backing minimizes the credit risk of these portfolios, as the U.S. government is unlikely to default on its debt. These portfolios have durations between one and 3.5 years (or, if duration is unavailable, average effective maturities between one and four years), so they have relatively less sensitivity to interest rates, and thus low risk potential.

Primary Index: LB US Aggregate Secondary Index: LB Government 1-5 Yr Bd

#### Inflation-Protected Bond, IP

Inflation-protected bond portfolios invest primarily in debt securities that adjust their principal values in line with the rate of inflation. These bonds can be issued by any organization, but the U.S. Treasury is currently the largest issuer for these types of securities.

Primary Index: LB US Aggregate Secondary Index: LB US Treasury US TIPS



# Taxable Bond (continued)

#### Long-Term Bond, CL

Long-term bond portfolios invest primarily in corporate and other investment-grade U.S. fixed-income issues and have durations of more than six years (or, if duration is unavailable, average effective maturities greater than 10 years). Due to their long durations, these portfolios are exposed to greater interest rate risk.

Primary Index: LB US Aggregate Secondary Index: LB US Govt/Credit Long

#### Intermediate-Term Bond, CI

Intermediate-term bond portfolios invest primarily in corporate and other investment-grade U.S. fixed-income issues and have durations of 3.5 to six years (or, if duration is unavailable, average effective maturities of four to 10 years). These portfolios are less sensitive to interest rates, and therefore less volatile, than portfolios that have longer durations.

Primary Index: LB US Aggregate Secondary Index: LB US Govt/Credit 5-10 Yr

#### **Short-Term Bond, CS**

Short-term bond portfolios invest primarily in corporate and other investment-grade U.S. fixed-income issues and have durations of one to 3.5 years (or, if duration is unavailable, average effective maturities of one to four years). These portfolios are attractive to fairly conservative investors, because they are less sensitive to interest rates than portfolios with longer durations.

Primary Index: LB US Aggregate Secondary Index: LB Govt/Credit 1-5 Yr

#### **Ultrashort Bond, UB**

Ultrashort bond portfolios invest primarily in investment-grade U.S. fixed-income issues and have durations of less than one year (or, if duration is unavailable, average effective maturities of less than one year). This category can include corporate or government ultrashort bond portfolios, but it excludes international, convertible, multisector, and high yield bond portfolios. Due to their focus on bonds with very short durations, these portfolios offer minimal interestrate sensitivity and therefore low risk and total return potential.

Primary Index: LB US Aggregate Secondary Index: USTREAS Certificate of Deposit 6 Mon

#### Bank Loan, BL

Bank-loan portfolios primarily invest in floating-rate bank loans instead of bonds. In exchange for their credit risk, these loans offer high interest payments that typically float above a common short-term benchmark such as the London interbank offered rate, or LIBOR.

Primary Index: LB US Aggregate Secondary Index: LB Govt/Credit 1-5 Yr



# Taxable Bond (continued)

#### Stable Value, VL

Stable-value portfolios seek to provide income while preventing price fluctuations. The most common stable-value portfolios invest in a diversified portfolio of bonds and enter into wrapper agreements with financial companies to guarantee against fluctuations in their share prices. These wrapper agreements typically provide price stability on a day-to-day basis, thereby insulating each portfolio's net asset value from interest-rate volatility. Therefore, the duration for each of these funds is essentially zero. This category is only used in Morningstar's custom fund and separate account databases.

Primary Index: LB US Aggregate Secondary Index: USTREAS Constant Mat Treasury 3 Yr

#### High Yield Bond, HY

High-yield bond portfolios concentrate on lower-quality bonds, which are riskier than those of higher-quality companies. These portfolios generally offer higher yields than other types of portfolios, but they are also more vulnerable to economic and credit risk. These portfolios primarily invest in U.S. high-income debt securities where at least 65% or more of bond assets are not rated or are rated by a major agency such as Standard & Poor's or Moody's at the level of BB (considered speculative for taxable bonds) and below.

Primary Index: LB US Aggregate Secondary Index: ML US HY Master II

#### Multisector Bond, MU

Multisector bond portfolios seek income by diversifying their assets among several fixed-income sectors, usually U.S. government obligations, U.S. corporate bonds, foreign bonds, and high-yield U.S. debt securities. These portfolios typically hold 35% to 65% of bond assets in securities that are not rated or are rated by a major agency such as Standard & Poor's or Moody's at the level of BB (considered speculative for taxable bonds) and below.

Primary Index: LB US Aggregate Secondary Index: LB US Universal

#### World Bond, IB

World bond portfolios invest 40% or more of their assets in foreign bonds. Some world bond portfolios follow a conservative approach, favoring high-quality bonds from developed markets. Others are more adventurous, and own some lower-quality bonds from developed or emerging markets. Some portfolios invest exclusively outside the U.S., while others regularly invest in both U.S. and non-U.S. bonds.

Primary Index: LB US Aggregate Secondary Index: Citi WGBI NonUSD USD



# Taxable Bond (continued)

#### **Emerging Markets Bond, EB**

Emerging-markets bond portfolios invest more than 65% of their assets in foreign bonds from developing countries. The largest portion of the emerging-markets bond market comes from Latin America, followed by Eastern Europe. Africa, the Middle East, and Asia make up the rest.

Primary Index: LB US Aggregate Secondary Index: Citi ESBI Capped Brady



# Municipal Bond

#### Muni National Long, ML

Muni national long portfolios invest in bonds issued by various state and local governments to fund public projects. The income from these bonds is generally free from federal taxes. To lower risk, these portfolios spread their assets across many states and sectors. These portfolios have durations of more than seven years (or, if duration is unavailable, average maturities of more than 12 years).

Primary Index: LB Municipal Secondary Index: LB Municipal 20 Yr 17-22

#### Muni National Interm, MI

Muni national intermediate portfolios invest in bonds issued by various state and local governments to fund public projects. The income from these bonds is generally free from federal taxes. To lower risk, these portfolios spread their assets across many states and sectors. These portfolios have durations of 4.5 to seven years (or, if duration is unavailable, average maturities of five to 12 years).

Primary Index: LB Municipal Secondary Index: LB Municipal 10 Yr 8-12

#### **Muni National Short, MS**

Muni national short portfolios invest in bonds issued by various state and local governments to fund public projects. The income from these bonds is generally free from federal taxes. To lower risk, these portfolios spread their assets across many states and sectors. These portfolios have durations of less than 4.5 years (or, if duration is unavailable, average maturities of less than five years).

Primary Index: LB Municipal Secondary Index: LB Municipal 3 Yr 2-4

#### High Yield Muni, HM

High-yield muni portfolios invest at least 50% of assets in high-income municipal securities that are not rated or that are rated by a major agency such as Standard & Poor's or Moody's at the level of BBB (considered speculative in the municipal industry) and below.

Primary Index: LB Municipal Secondary Index: LB Municipal 10 Yr 8-12



# Municipal Bond (continued)

#### Muni Single State Long, SL

Muni single-state long portfolios invest in bonds issued by state and local governments to fund public projects. The income from such bonds is generally free from federal taxes and from state taxes in the issuing state. To get the state-tax benefit, these portfolios buy bonds from only one state. These portfolios have durations of more than seven years (or, if duration is unavailable, average maturities of more than 12 years).

Primary Index: LB Municipal Secondary Index: LB Municipal 20 Yr 17-22

#### Muni Single State Interm, SI

Muni single-state intermediate portfolios invest in bonds issued by state and local governments to fund public projects. The income from such bonds is generally free from federal taxes and from state taxes in the issuing state. To get the state-tax benefit, these portfolios buy bonds from only one state. These portfolios have durations of 4.5 to seven years (or, if duration is unavailable, average maturities of five to 12 years).

Primary Index: LB Municipal Secondary Index: LB Municipal 10 Yr 8-12

#### Muni Single State Short, SS

Muni single-state short portfolios invest in bonds issued by state and local governments to fund public projects. The income from such bonds is generally free from federal taxes and from state taxes in the issuing state. To get the state-tax benefit, these portfolios buy bonds from only one state. These portfolios have durations of less than 4.5 years (or, if duration is unavailable, average maturities of less than five years).

Primary Index: LB Municipal Secondary Index: LB Municipal 3 Yr 2-4

#### Muni California Long, MC

Muni California long portfolios invest at least 80% of assets in California municipal debt. Because the income from these bonds is generally free from federal taxes and California state taxes, these portfolios are most appealing to residents of California. These portfolios have durations of more than seven years (or, if duration is unavailable, average maturities of more than 12 years).

Primary Index: LB Municipal Secondary Index: LB Municipal California Exempt



# Municipal Bond (continued)

#### Muni California Int/Sh, MF

Muni California intermediate/short portfolios invest at least 80% of assets in California municipal debt. Because the income from these bonds is generally free from federal taxes and California state taxes, these portfolios are most appealing to residents of California. These portfolios have durations of less than seven years (or, if duration is unavailable, average maturities of less than 12 years).

Primary Index: LB Municipal Secondary Index: LB Municipal California Exempt

#### Muni Massachusetts, MT

Muni Massachusetts portfolios invest at least 80% of assets in Massachusetts municipal debt and can include long-, intermediate-, and short-duration portfolios. Because the income from these bonds is generally free from federal taxes and Massachusetts state taxes, these portfolios are most appealing to residents of Massachusetts.

Primary Index: LB Municipal Secondary Index: LB Municipal 10 Yr 8-12

#### Muni Minnesota, SM

Muni Minnesota portfolios invest at least 80% of assets in Minnesota municipal debt and can include long-, intermediate-, and short- duration portfolios. Because the income from these bonds is generally free from federal taxes and Minnesota state taxes, these portfolios are most appealing to residents of Minnesota.

Primary Index: LB Municipal Secondary Index: LB Municipal 10 Yr 8-12

#### Muni New Jersey, MJ

Muni New Jersey portfolios invest at least 80% of assets in New Jersey municipal debt and can include long-, intermediate-, and short-duration portfolios. Because the income from these bonds is generally free from federal taxes and New Jersey state taxes, these portfolios are most appealing to residents of New Jersey.

Primary Index: LB Municipal Secondary Index: LB Municipal 10 Yr 8-12

#### Muni New York Long, MY

Muni New York long portfolios invest at least 80% of assets in New York municipal debt. Because the income from these bonds is generally free from federal taxes and New York state taxes, these portfolios are most appealing to residents of New York. These portfolios have durations of more than seven years (or, if duration is unavailable, average maturities of more than 12 years).

Primary Index: LB Municipal Secondary Index: LB Municipal New York Exempt



# Municipal Bond (continued)

#### Muni New York Int/Sh, MN

Muni New York intermediate/short portfolios invest at least 80% of assets in New York municipal debt. Because the income from these bonds is generally free from federal taxes and New York state taxes, these portfolios are most appealing to residents of New York. These portfolios have durations of less than seven years (or, if duration is unavailable, average maturities of less than 12 years).

Primary Index: LB Municipal Secondary Index: LB Municipal New York Exempt

#### Muni Ohio, MO

Muni Ohio portfolios invest at least 80% of assets in Ohio municipal debt and can include long-, intermediate-, and short-duration portfolios. Because the income from these bonds is generally free from federal taxes and Ohio state taxes, these portfolios are most appealing to residents of Ohio.

Primary Index: LB Municipal Secondary Index: LB Municipal 10 Yr 8-12

#### Muni Pennsylvania, MP

Muni Pennsylvania portfolios invest at least 80% of assets in Pennsylvania municipal debt and can include long-, intermediate-, and short-duration portfolios. Because the income from these bonds is generally free from federal taxes and Pennsylvania state taxes, these portfolios are most appealing to residents of Pennsylvania.

Primary Index: LB Municipal Secondary Index: LB Municipal 10 Yr 8-12



# Money Market

#### **Taxable Money Market, TM**

These portfolios invest in short-term money market securities in order to provide a level of current income that is consistent with the preservation of capital.

#### Tax-Free Money Market, TF

These portfolios invest in short-term municipal money market securities that are often exempt from some federal and state taxes. These funds provide current income and aim to preserve capital.

