MacKay Municipal Managers™

Thriving Late-Cycle—Municipal Bonds

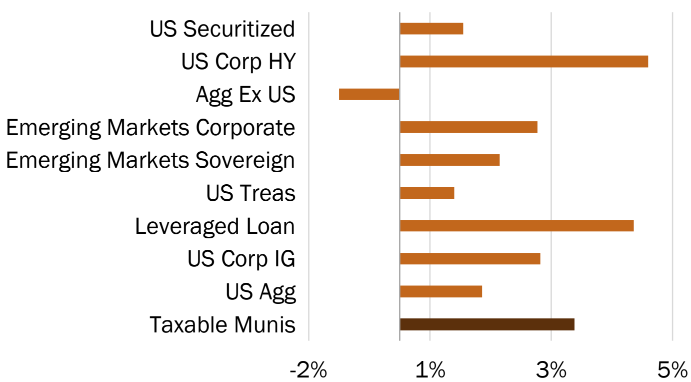
JUNE 2023

As we approach a slower period of economic growth in the U.S. economy, we believe taxable municipals will draw investor interest as a safe haven asset class. We believe the high credit quality, diversification, and resiliency of the cash flows used to repay debt service will resonate with investors across the globe.

Domestic retail investors have long dominated the US municipal bond market, but over the last decade, institutional interest in the sector has soared, particularly outside of the United States. Over the last 10 years, municipal bonds have performed well (see Figure 1 below). Consequently, the taxable municipal sector's 2.9% annualized total return for the period handily outperformed the 2.3% return on US corporate investment-grade bonds.

But strong returns are just one reason why investors have ventured into the asset class. Taxable municipal bonds are also garnering interest due to their high quality ratings, inefficient pricing, low correlations, diversification to other asset classes and potential for liability matching.

FIGURE 1: 10 YEAR ANNUALIZED TOTAL RETURN



Data as of March 29, 2013 – March 31, 2023. US Securitized: Bloomberg US Securitized Index; US Corp HY: Bloomberg US Corporate High Yield Total Return Index; Agg Ex US: Bloomberg Global Aggregate ex USD Total Return Index; EM Corp, Emerging Markets Corporate: ICE BofA Emerging Markets Corporate Index; EM Sovereign, Emerging Markets Sovereign: Bloomberg Emerging Markets USD Sovereign Bond Index; US Treas: Bloomberg US Treasury Total Return Unhedged USD Index; Leveraged Loan: Credit Suisse Leveraged Loan Index; US Corp IG: ICE BofA US Corporate Index; US Agg: Bloomberg US Aggregate Bond Index; Taxable Munis: Bloomberg Taxable Municipal Bond Index. **It is not possible to invest directly into an index. Past performance is not indicative of future results.** Please see Index Descriptions at the end of this document.

Source: Bloomberg, ICE Data

Investors have learned that taxable munis offer higher yield spreads and total return potential due to inefficient pricing in a fragmented market. Diversification benefits and the possibility of lower capital charges have resulted in foreign demand for taxable munis more than doubling from $51 billion in 2008 to over $113 billion as of June 30, 2022.[1]

Today, many institutional investors see taxable municipals as an attractive diversifier for their fixed income portfolio. Many of these investors welcome the historically higher credit quality and ratings of municipals versus other fixed income sectors.

Pricing Inefficiency Creates Opportunity

The municipal bond market is highly fragmented with some 56,000 issuers versus the corporate bond market where the corporate credit index includes less than 8,000. The Treasury market is huge, with over $15 trillion in value, but the index includes just 270 issues.[2]

In the municipal bond market, market fragmentation, limited sell-side research and the prevalence of buy and hold investors often leads to inefficient pricing. Pricing inefficiencies create opportunity for investors with an edge in credit research and trading to seek greater yield and total return potential than the sector's typical buy-and-hold investors reap.

Competitive Yields and Long Duration

Many investors have sought to enhance yields by increasing corporate or emerging-market credit risk. Additionally, even in today's rising rate environment, taxable municipal bonds have still maintained their yield advantage. In December 2022, yields on

1. Source: Federal Reserve Z.1 Statistical Release, Q2 2022 Report
2. Source: Bloomberg

double-A (AA) rated taxable municipal bond of eight years or longer were 43 bps higher than yields on comparable AA corporates. (Source: Bloomberg, ICE Data) And, if corporate and municipal spreads are to continue rising as they did in 2022, history suggests that taxable municipals will have an advantage. During months where AA corporate spreads widened over the last ten years according to Bank of America indices, taxable municipal spreads have outperformed 79% of the time. In our opinion, this is because taxable municipals are so often bought by investors employing buy-and-hold strategies, giving their spreads lower betas than corporate counterparts, and also because investors are inclined to seek the financial stability of governments when credit conditions show signs of deteriorating.

Duration is another key driver of growth. Because capital projects financed with taxable municipal bonds generally last for decades, they are typically financed with longer maturing bonds. Over 40% of outstanding taxable municipals bonds have maturities of 10 to 20 years; another 22% are even longer.[3]

Low Correlations and Broad Diversification

Municipal bonds also provide significant risk management benefits. An allocation to municipal bonds may help manage fixed-income portfolio volatility because municipal bond returns generally have a low correlation to other fixed-income instruments.

The taxable municipal market has far fewer issuers than the tax-exempt market, but is well-diversified in purpose. They fund toll roads, bridges, light rail lines, airports, university and government buildings, water and sewer systems, fiber-optic telecom lines and electric supply and distribution systems. The issuers are also diversified by region, credit rating and security structure (e.g., callable vs non-callable bonds).

High Quality Asset Class and Stable Return Potential

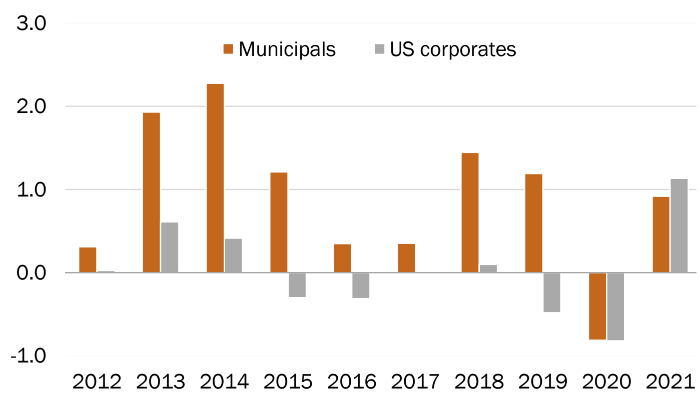
The relative high-quality nature of municipal bonds is also attractive for risk-conscious investors and insurers seeking to meet their capital requirements most efficiently. Approximately 60% of US municipal bonds outstanding are A rated or better; only a tiny portion are below investment-grade. In contrast, only about 7% of the global corporate bond market is double-A rated.

Historically, municipal bond ratings have been far more stable than corporate bond ratings, according to Moody's. Why should this be? Some corporations are vulnerable to event risks, such as leveraged buyouts, that rarely affect municipal bonds. More generally, corporations have fewer options to cover their debt in times of stress. Municipal bond issuers have more latitude to generate funding. Generating additional revenues in the corporate world usually requires incurring additional expenses. Many municipal issuers, on the other hand, are natural monopolies and can therefore increase revenues by simply raising service charges or tax rates, without adding expenses. When revenue growth starts to weaken, this provides more stability to municipal credit and, consequently, municipal ratings.

A look at historical default rates also demonstrates the resiliency of the municipal bond asset class. In fact, the average five-year municipal default rate since 2012 is 0.1%, up just slightly from the historical average of 0.08%, which dates back to 1970; meanwhile the average five-year global corporate default rate was 7.2% since 2012, up 40 basis points from its historical average of 6.8% since 1970.[4]

The difference in credit quality becomes more glaring during periods of fundamental weakening. S&P downgrades of US corporates outpaced upgrades in five of the ten years leading up to 2021. For municipals over that period, it happened just once, in 2020 (see Figure 2 below). This could prove vital in the current environment—year-over-year revenue growth among S&P 500 companies was 4% in Q1 of 2023, down from 13.5% in Q1 of 2022 and less than the current inflation rate. As a result, downgrades of US corporates have outpaced upgrades so far in 2023, according to Bloomberg.

FIGURE 2: S&P UPGRADE/DOWNGRADE RATIO



Over the next three years, we believe debt profiles among corporates could contribute to more fundamental weakness. 24% of IG corporate bonds are set to mature by the end of 2025, and issuers will have to pay a 2-3% incremental funding costs to refinance them in this yield environment according to Morgan Stanley Research. Meanwhile, only 12% of outstanding taxable municipals will mature during this period.(Source: Bloomberg).

Source: S&P Reports - "Default, Transition, and Recovery: 2021 Annual U.S. Corporate Default And Rating Transition Study" & "Default, Transition, and Recovery: 2022 Annual U.S. Public Finance Default And Rating Transition Study"

3. Source: Bloomberg, Bloomberg Municipal Index – Taxable Bonds
4. Source: Moody's, US municipal bond defaults and recoveries, 1970-2021, data report, 21 April 2022

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Infrastructure Issuance and Opportunities

We expect strong issuance of taxable municipal bonds in the future. After decades of neglect, US infrastructure earned a C- on The American Society of Civil Engineers (ASCE)'s 2021 Infrastructure Report Card. Bringing US infrastructure to a state of good repair would cost $5.9 trillion, the ASCE estimates. Although the federal government and some states have stepped up infrastructure investments in recent years, only 55% of the funds needed have been committed. Another $2.6 trillion in funding is needed over the next 10 years.

The 2021 passage of the $1.2 trillion Infrastructure Investment and Jobs Act (IIJA) provides federal grant funding for much needed infrastructure programs. These funds are available for various projects through 2022 to 2026.

Munis—A Natural Fit for Sustainable Investing

While many investors have been focusing on the corporate bond and equity markets for their ESG investment strategies, we believe that the municipal bond market is a natural fit for this. As the primary funding source for US infrastructure projects, many of these projects address environmental and social considerations and are also aligned with the sustainable development goals, including conservation projects for water and wastewater systems, wind farms, public and affordable housing.

Making a Strategic Allocation to US Munis

In conclusion, the addition of taxable municipal bonds help improve the risk/return profile of a diversified fixed income portfolio. Lower correlations, incremental yield potential and the potential to generate alpha in a highly fragmented asset class all contribute positively to a portfolio's risk/return trade off. Over the last ten years, an allocation to taxable municipal bonds has improved the return per unit of risk on a portfolio of diversified US bonds.[6]

We believe taxable-bond yields remain competitive and credit quality remains high. There are good fundamental reasons that we believe will allow credit ratings to remain relatively stable, and correlations to other fixed income sectors to remain low.

5. Source: Bloomberg
6 Source: eVestment

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Past performance is not indicative of future results.

DEFINITIONS

ALPHA—Alpha measures the portfolio's risk adjusted performance and is expressed as an annualized percentage. Alpha is the return generated in excess of the benchmark, also commonly referred to as beta, and is generally considered to be a measure of manager skill.

BETA—Beta is a measure of historical volatility relative to an appropriate index based on its investment objective. A beta greater than 1.00 indicates volatility greater than the benchmark.

CORRELATION—Correlation shows the strength of a relationship between two variables and is expressed numerically by the correlation coefficient. The correlation coefficient's values range between -1.0 and 1.0. A perfect positive correlation means that the correlation coefficient is exactly 1. This implies that as one security moves, either up or down, the other security moves in lockstep, in the same direction. A perfect negative correlation means that two assets move in opposite directions, while a zero correlation implies no linear relationship at all.

DURATION—Modified duration measures the change in the value of a bond in response to a change in 100-basis-point (1%) change in interest rates. The modified duration to worst calculation is based on either the final maturity date or a call date within the bond's call schedule and uses the worst duration for each bond. This calculation does not adjust for changes in projected cashflows as a result of yield changes.

COMPARISONS TO AN INDEX

Comparisons to a financial index are provided for illustrative purposes only. Comparisons to an index are subject to limitations because portfolio holdings, volatility and other portfolio characteristics may differ materially from the index. Unlike an index, portfolios are actively managed and may also include derivatives. There is no guarantee that any of the securities in an index are contained in any managed portfolio. The performance of an index may assume reinvestment of dividends and income, or follow other index-specific methodologies and criteria, but does not reflect the impact of fees, applicable taxes or trading costs which, unlike an index, may reduce the returns of a managed portfolio. Investors cannot invest in an index. Because of these differences, the performance of an index should not be relied upon as an accurate measure of comparison.

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The following indices may be referred to in this document:

ICE BOFA U.S. HIGH YIELD INDEX

ICE BofA U.S. High Yield Index tracks the performance of U.S. dollar denominated below investment grade corporate debt publicly issued in the U.S. domestic market. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of $250 million. In addition, qualifying securities must have risk exposure to countries that are members of the FX-G10, Western Europe or territories of the U.S. and Western Europe. The FX-G10 includes all Euro members, the U.S., Japan, the U.K., Canada, Australia, New Zealand, Switzerland, Norway and Sweden. Original issue zero coupon bonds, 144a securities (both with and without registration rights), and pay-in-kind securities (including toggle notes) are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Contingent capital securities ("cocos") are excluded, but capital securities where conversion can be mandated by a regulatory authority, but which have no specified trigger, are included. Other hybrid capital securities, such as those issues that potentially convert into preference shares, those with both cumulative and non-cumulative coupon deferral provisions, and those with alternative coupon satisfaction mechanisms, are also included in the index. Securities issued or marketed primarily to retail investors, equity-linked securities, securities in legal default, hybrid securitized corporates, eurodollar bonds (USD securities not issued in the U.S. domestic market), taxable and tax-exempt U.S. municipal securities and DRD-eligible securities are excluded from the index. Index constituents are market capitalization weighted. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index.

ICE BOFA TAXABLE MUNICIPAL INDEX

ICE BofA U.S. Taxable Municipal Securities Index tracks the performance of U.S. dollar denominated investment grade taxable municipal securities publicly issued in the U.S. domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch). In addition, qualifying securities must have at least one-year remaining term to final maturity, at least 18 months to maturity at point of issuance, a fixed coupon schedule and a minimum amount outstanding of $250 million. Callable perpetual securities qualify provided they are at least one year from the first call date. Fixed-to-floating rate securities also qualify provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Original issue zero coupon bonds and ""global"" securities (debt issued simultaneously in the eurobond and U.S. domestic markets) qualify for inclusion in the Index. Tax-exempt U.S. municipal, 144a and securities in legal default are excluded from the Index. Index constituents are market capitalization weighted. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index.

BLOOMBERG MUNICIPAL HIGH YIELD INDEX

An unmanaged index of municipal bonds with the following characteristics: fixed coupon rate, credit rating of Ba1 or lower or non-rated using the middle rating of Moody's, S&P, and Fitch, outstanding par value of at least $3 million, and issued as part of a transaction of at least $20 million. In addition, the bonds must have a dated-date after December 31, 1990 and must be at least one year from their maturity date.

ICE BOFA EMERGING MARKETS BBB & LOWER SOVEREIGN

ICE BofA BBB & Lower Sovereign USD External Debt Index tracks the performance of U.S. dollar denominated emerging market and cross-over sovereign debt publicly issued in the eurobond or U.S. domestic market. Qualifying countries must have a BBB1 or lower foreign currency long-term sovereign debt rating (based on an average of Moody's, S&P and Fitch). Countries that are not rated, or that are rated "D" or "SD" by one or several rating agencies qualify for inclusion in the index but individual non-performing securities are removed. Qualifying securities must have at least one year remaining term to final maturity, at least 18 months to maturity at point of issuance, a fixed or floating coupon and a minimum amount outstanding of $250 million. Local currency debt is excluded from the Index. Index constituents are market capitalization weighted. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index.

ICE BOFA EMERGING MARKETS CORPORATE PLUS INDEX

ICE BofA Emerging Markets Corporate Plus Index tracks the performance of U.S. dollar and euro denominated emerging markets non-sovereign debt publicly issued in the major domestic and eurobond markets. In order to qualify for inclusion in the Index an issuer must have risk exposure to countries other than members of the FX G10, all Western European countries, and territories of the U.S. and Western European countries. The FX-G10 includes all Euro members, the U.S., Japan, the U.K., Canada, Australia, New Zealand, Switzerland, Norway and Sweden. Individual securities of qualifying issuers must be denominated in U.S. dollars or euro, must have at least one year remaining term to final maturity, at least 18 months to final maturity at point of issuance, and a fixed coupon. In addition, bonds of qualifying issuers must have at least 250 million (EUR or USD) in outstanding face value. The index includes corporate and quasigovernment debt of qualifying countries, but excludes sovereign and supranational debt. Original issue zero coupon bonds, ""global"" securities (debt issued simultaneously in the eurobond and U.S. domestic bond markets), 144a securities and pay-in-kind securities, including toggle notes, qualify for inclusion in the Index. Contingent capital securities ("cocos") are excluded, but capital securities where conversion can be mandated by a regulatory authority, but which have no specified trigger, are included. Other hybrid capital securities, such as those issues that potentially convert into preference shares, those with both cumulative and non-cumulative coupon deferral provisions, and those with alternative coupon satisfaction mechanisms, are also included in the index. Callable perpetual securities qualify provided they are at least one year from the first call date. Fixed-to-floating rate securities also qualify provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Central bank issued, equity-linked and legally defaulted securities are excluded from the index. Index constituents are market capitalization weighted. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index.

BLOOMBERG U.S. CORPORATE INVESTMENT GRADE INDEX

The Bloomberg U.S. Corporate Bond Index measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD denominated securities publicly issued by U.S. and non-U.S. industrial, utility and financial issuers.

S&P/LSTA LEVERAGED LOAN INDEX

The S&P/LSTA Leveraged Loan Index (the Index) is a market value-weighted index designed to measure the performance of the U.S. leveraged loan market based upon market weightings, spreads and interest payments.

BLOOMBERG MUNICIPAL BOND INDEX

A rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. To be included in the index, bonds must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following agencies: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment-grade. They must have an outstanding par value of at least $7 million and be issued as part of a transaction of at least $75 million. The bonds must be fixed rate, have a date-date after December 31, 1990, and must be at least one year from their maturity date. Remarketed issues, taxable municipal bonds, bonds with floating rates, and derivatives, are excluded from the benchmark. The index has four main sectors: general obligation bonds, revenue bonds, insured bonds (including all insured bonds with a Aaa/AAA rating), and prerefunded bonds. Most of the index has historical data to January 1980. In addition, sub-indices have been created based on maturity, state, sector, quality, and revenue source, with inception dates later than January 1980.

BLOOMBERG U.S. AGGREGATE BOND INDEX

The Bloomberg U.S. Aggregate Index represents securities that are SEC-registered, taxable, and dollar denominated. Must have at least one year to final maturity regardless of call features. Must have at least $300 million par amount outstanding. Must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody's, S&P, Fitch. Must be dollar-denominated and non-convertible.

BLOOMBERG U.S. SECURITIZED MBS/ABS/CMBS INDEX

The Bloomberg Securitized MBS/ABS/CMBs Index tracks agency mortgage backed pass-through securities (both fixed-rate and hybrid ARM) guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC); investment grade debt asset backed securities; and investment grade commercial mortgage backed securities. The index is constructed by grouping individual pools into aggregates or generics based on program, coupon, and vintage.

BLOOMBERG U.S. TREASURY INDEX

Public obligations of the U.S. Treasury with a remaining maturity of one year or more. Must be a U.S. Treasury security. Must have at least $300 million par amount outstanding. Must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody's, S&P, Fitch. Must be fixed rate. Must be dollar-denominated and non-convertible.

BLOOMBERG GLOBAL AGGREGATE EX USD INDEX

The Bloomberg Global Aggregate ex USD Index is a measure of global investment grade debt from 24 local currency markets. This multi- currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers. Bond issued in USD are excluded.

ICE BOFA U.S. TREASURY INDEX

ICE BofA U.S. Treasury Index tracks the performance of U.S. dollar denominated sovereign debt publicly issued by the U.S. government in its domestic market. Qualifying securities must have at least one year remaining term to final maturity, a fixed coupon schedule and a minimum amount outstanding of $1 billion. Qualifying securities must have at least 18 months to final maturity at the time of issuance. Callable perpetual securities qualify provided they are at least one year from the first call date. Fixed-to-floating rate securities also qualify provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Bills, inflation-linked debt and strips are excluded from the Index; however, original issue zero coupon bonds are included in the index and the amounts outstanding of qualifying coupon securities are not reduced by any portions that have been stripped. Securities issued or marketed primarily to retail investors do not qualify for inclusion in the index. Index constituents are market capitalization weighted. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index.

ICE BOFA AA U.S. CORPORATE INDEX

ICE BofA U.S. Corporate Index tracks the performance of U.S. dollar denominated investment grade corporate debt publicly issued in the U.S. domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of $250 million. Original issue zero coupon bonds, 144a securities (with and without registration rights), and pay-in-kind securities (including toggle notes) are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Contingent capital securities ("cocos") are excluded, but capital securities where conversion can be mandated by a regulatory authority, but which have no specified trigger, are included. Other hybrid capital securities, such as those issues that potentially convert into preference shares, those with both cumulative and non-cumulative coupon deferral provisions, and those with alternative coupon satisfaction mechanisms, are also included in the index. Equity-linked securities, securities in legal default, hybrid securitized corporates, euro dollar bonds (USD securities not issued in the U.S. domestic market), taxable and tax-exempt U.S. municipal securities and DRD-eligible securities are excluded from the index. Index constituents are market capitalization weighted. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index.

ICE BOFA BROAD U.S. TAXABLE MUNICIPAL SECURITIES INDEX

ICE BofA Broad U.S. Taxable Municipal Securities Index tracks the performance of U.S. dollar denominated debt publicly issued by U.S. states and territories, and their political subdivisions, in the U.S. domestic market. Qualifying securities must be subject to U.S. federal taxes and must have at least 18 months to maturity at point of issuance, at least one year remaining term to final maturity to enter the index and one month remaining term to final maturity to remain in the index, a fixed coupon schedule (including zero coupon bonds) and an investment grade rating (based on an average of Moody's, S&P and Fitch). The call date on which a pre-refunded bond will be redeemed is used for purposes of determining qualification with respect to final maturity requirements. Minimum size requirements vary based on the initial term to final maturity at time of issuance. Securities with an initial term to final maturity greater than or equal to one year and less than five years must have a current amount outstanding of at least $10 million. Securities with an initial term to final maturity greater than or equal to five years and less than ten years must have a current amount outstanding of at least $15 million. Securities with an initial term to final maturity of ten years or more must have a current amount outstanding of at least $25 million. "Direct pay" Build America Bonds (i.e., a direct federal subsidy is paid to the issuer) qualify for inclusion in the index, but "tax-credit" Build America Bonds (i.e., where the investor receives a tax credit on the interest payments) do not. Local bonds issued by U.S. territories within their jurisdictions that are tax exempt within the U.S. territory but not elsewhere are excluded from the Index. All 144a securities, both with and without registration rights, and securities in legal default are excluded from the Index. Index constituents are market capitalization weighted. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index.

ICE BOFA U.S. MUNICIPAL SECURITIES INDEX

ICE BofA U.S. Municipal Securities Index tracks the performance of U.S. dollar denominated investment grade tax exempt debt publicly issued by U.S. states and territories, and their political subdivisions, in the U.S. domestic market. Qualifying securities must have at least one year remaining term to final maturity, at least 18 months to final maturity at the time of issuance, a fixed coupon schedule and an investment grade rating (based on an average of Moody's, S&P and Fitch). Minimum size requirements vary based on the initial term to final maturity at time of issuance. Securities with an initial term to final maturity greater than or equal to one year and less than five years must have a current amount outstanding of at least $10 million. Securities with an initial term to final maturity greater than or equal to five years and less than ten years must have a current amount outstanding of at least $15 million. Securities with an initial term to final maturity of ten years or more must have a current amount outstanding of at least $25 million. The call date on which a pre-refunded bond will be redeemed is used for purposes of determining qualification with respect to final maturity requirements. Original issue zero coupon bonds are included in the Index. Taxable municipal securities, 144a securities and securities in legal default are excluded from the Index. Index constituents are market capitalization weighted. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index.

BLOOMBERG U.S. HIGH YIELD INDEX

Covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included.

BLOOMBERG PAN-EUROPEAN AGGREGATE INDEX

Covers eligible investment grade securities from the entire European continent. The primary component is the Bloomberg Euro-Aggregate Index. In addition, the Bloomberg Pan-European Aggregate Index includes eligible securities denominated in British pounds (GBP), Swedish krona (SEK), Danish krone (DKK), Norwegian krone (NOK), Czech koruna (CZK), Hungarian forint (HUF), Polish zloty (PLN), Slovenian Tolar (SIT), Slovakian koruna (SKK), and Swiss franc (CHF). Apart from the currency constraint, the inclusion rules for the Pan-European Index are identical to those of the Bloomberg Euro-Aggregate Index.

JPM GBI (WORLD) USD

The J.P. Morgan GBI series provides a comprehensive measure of local currency denominated fixed rate government debt consists of five core index products covering developed markets. The broadest series tracks 27 countries.

BLOOMBERG U.S. TAXABLE MUNICIPAL INDEX

The Bloomberg U.S. Taxable Municipal Bond Index is a rules-based, market-value-weighted index engineered for the long-term taxable bond market. To be included in the index, bonds must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies if all three rate the bond: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment-grade. They must have an outstanding par value of at least $7 million and be issued as part of a transaction of at least $75 million. The bonds must be fixed rate and must be at least one year from their maturity date. Remarketed issues (unless converted to fixed rate), bonds with floating rates, and derivatives, are excluded from the benchmark.

BLOOMBERG US TREASURY: INTERMEDIATE INDEX

The Bloomberg US Treasury: Intermediate Index measures US dollar-denominated, fixed-rate, nominal debt issued by the US Treasury with maturities of 1 to 9.9999 years to maturity.

BLOOMBERG U.S. CREDIT INDEX

Publicly issued U.S. corporate and specified foreign debentures and secured notes. Must be an investment grade credit security. Must have at least one year to final maturity regardless of call features. Must have at least $300 million par amount outstanding. Must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody's, S&P, Fitch. Must be fixed rate. Must be dollar-denominated and non-convertible.

BLOOMBERG U.S. CORPORATE HIGH YIELD INDEX

The Bloomberg U.S. High Yield Index covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included. Must have at least one year to final maturity regardless of call features. Must have at least $150 million par amount outstanding. Must be rated high-yield (Ba1/BB+ or lower) by at least two of the following ratings agencies: Moody's, S&P, Fitch. Must be fixed rate, although it can carry a coupon that steps up or changes according to a predetermined schedule. Must be dollar-denominated and non-convertible. Must be publicly issued.

BLOOMBERG U.S. TAXABLE MUNICIPAL INDEX

The Bloomberg U.S. Taxable Municipal Bond Index is a rules-based, market-value-weighted index engineered for the long-term taxable bond market. To be included in the index, bonds must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies if all three rate the bond: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment-grade. They must have an outstanding par value of at least $7 million and be issued as part of a transaction of at least $75 million. The bonds must be fixed rate and must be at least one year from their maturity date. Remarketed issues (unless converted to fixed rate), bonds with floating rates, and derivatives, are excluded from the benchmark.

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ABOUT RISK

Municipal bond risks include the ability of the issuer to repay the obligation, the relative lack of information about certain issuers, and the possibility of future tax and legislative changes, which could affect the market for and value of municipal securities. Bonds subject to interest rate risk and can lose principal value when interest rates rise. Bonds are also subject to credit risk which is the possibility that the bond issuer may fail to pay interest and principal in a timely manner. Diversification cannot assure a profit or protect against loss in a declining market.

Impact investing and/or Environmental, Social and Governance (ESG) managers may take into consideration factors beyond traditional financial information to select securities, which could result in relative investment performance deviating from other strategies or broad market benchmarks, depending on whether such sectors or investments are in or out of favor in the market. Further, certain ESG strategies may limit exposures found in similar strategies or broad market benchmarks, which could also result in relative investment performance deviating. There is no assurance that employing ESG strategies will result in more favorable investment performance.

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