

## Municipals: Outperforming corporate fixed income with lower default risk

Historically, municipals have experienced fewer defaults than corporates across the credit spectrum. Defaults also highlight a significant contrast between the high yield and investment grade markets.

If we examine the issuer default history of Moody's-rated debt going back to 1970, which shows a significant increased risk of default for investors in BBB-rated and below-investment-grade taxable issues versus comparably rated tax-exempt issues, we see a much stronger credit profile for municipal bonds.

### Municipal rated debt vs. corporate rated debt

10-year average cumulative issuer-weighted default rates

#### Moody's-rated debt only (1970-2022)

|                        | Municipal rated debt | Corporate rated debt |
|------------------------|----------------------|----------------------|
| AAA                    | 0.00%                | 0.34%                |
| AA                     | 0.02%                | 0.75%                |
| A                      | 0.10%                | 1.90%                |
| BBB                    | 1.05%                | 3.64%                |
| Below investment grade | 6.84%                | 29.81%               |

Source: Moody's Investors Service, US Municipal Bond Defaults and Recoveries, 1970-2022.  
 Chart is for illustrative purposes only.



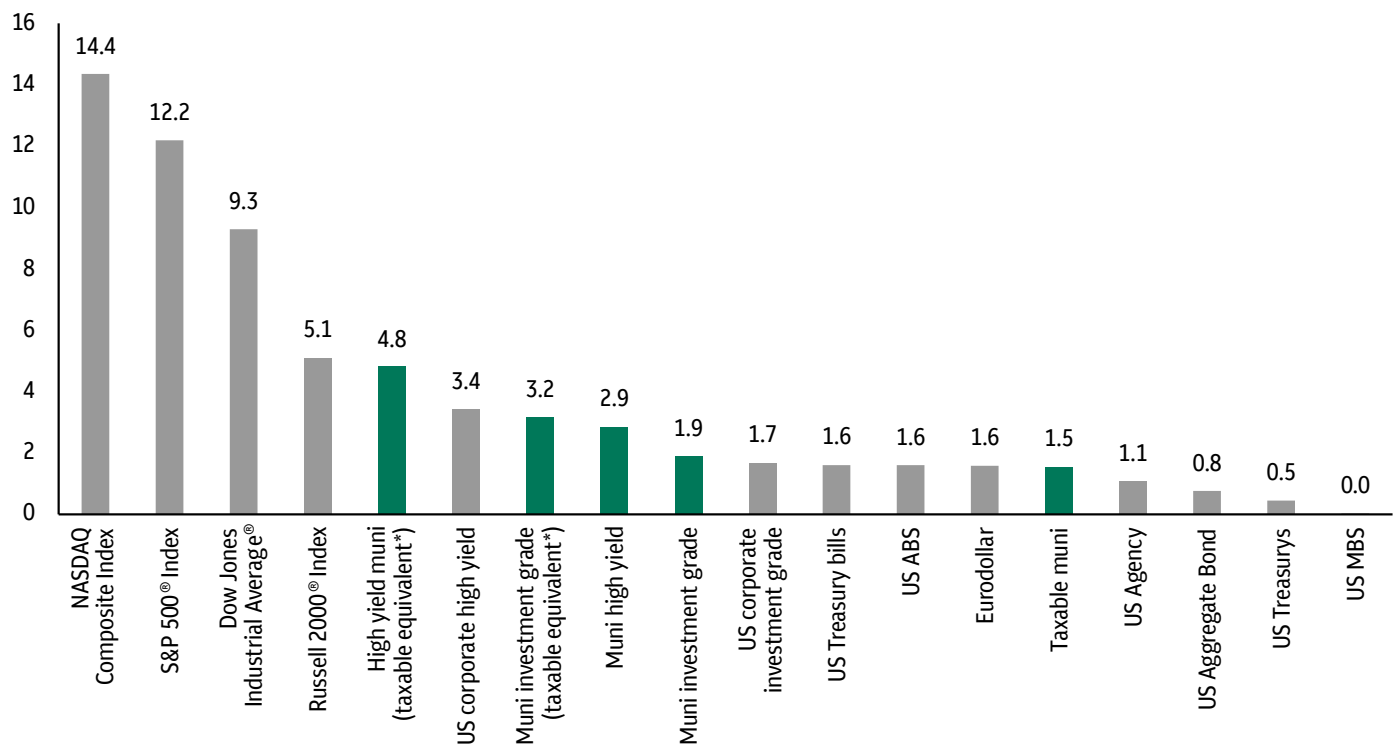
### What this means for investors

We continue to advocate that investors add to municipal allocations to take advantage of the higher-yielding environment we have seen in the municipal market.

In our view, low municipal default rates continue to demonstrate the inherent credit strength of the asset class. Over the past five years, municipals have outperformed other fixed income asset classes, with lower inherent risk. Based on our analysis, the municipal below-investment-grade, or high yield, category is the strongest-performing asset class in fixed income, and has done so with lower default risk.

## Average annual total returns (%)

5 years ended July 31, 2023



Source: Morningstar Direct, July 31, 2023.

\*Taxable-equivalent return. This is the return that is required on a taxable investment to make it equal to the return on a tax-exempt investment. Assumes 40.8% tax bracket (37% federal tax bracket + 3.8% Medicare tax).

Chart is for illustrative purposes only.

Fixed income asset classes are represented by the following indices: **High yield municipal** - Bloomberg High-Yield Municipal Bond Index; **Investment grade (IG) municipal** - Bloomberg Municipal Bond Index; **US corporate high yield** - Bloomberg US Corporate High-Yield Index; **US corporate investment grade** - Bloomberg US Corporate Bond Index; **US Treasury bills** - Bloomberg US Treasury Bills Index; **US ABS** - Bloomberg Asset-Backed Securities (ABS) Index; **Eurodollar** - Bloomberg Eurodollar Index; **Taxable municipal** - Bloomberg Taxable Municipal Bond Index; **US Agency** - Bloomberg US Agency Index; **US Aggregate Bond** - Bloomberg US Aggregate Index; **US Treasuries** - Bloomberg US Treasury Index; **US MBS** - Bloomberg US Mortgage-Backed Securities (MBS) Index.

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**Investing involves risk, including the possible loss of principal.**

**Past performance does not guarantee future results.**

Nothing presented should be construed as a recommendation to purchase or sell any security or follow any investment technique or strategy.

The views expressed represent the investment team's assessment of the market environment as of July 2023, and should not be considered a recommendation to buy, hold, or sell any security, and should not be relied on as research or investment advice. Views are subject to change without notice.

Market risk is the risk that all or a majority of the securities in a certain market – like the stock market or bond market – will decline in value because of factors such as adverse political or economic conditions, future expectations, investor confidence, or heavy institutional selling.

Fixed income securities and bond funds can lose value, and investors can lose principal as interest rates rise. They also may be affected by economic conditions that hinder an issuer's ability to make interest and principal payments on its debt. This includes prepayment risk, the risk that the principal of a bond that is held by a portfolio will be prepaid prior to maturity at the time when interest rates are lower than what the bond was paying. A portfolio may then have to reinvest that money at a lower interest rate.

Investments may not receive payment of principal, interest, and other amounts due in connection with bank loans and other direct indebtedness because they primarily depend on the financial conditions of the borrower and lending institution.

Index performance returns do not reflect any management fees, transaction costs, or expenses. Indices are unmanaged and one cannot invest directly in an index.

The **Bloomberg US Agency Index** is composed of publicly issued debt of US government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the US government. The largest issuers are Fannie Mae, Freddie Mac, and the Federal Home Loan Bank System (FHLB).

The **Bloomberg Asset-Backed Securities (ABS) Index** measures the performance of the ABS component of the Bloomberg US Aggregate Index.

The **Bloomberg Eurodollar Index** contains US dollar-denominated securities that are registered outside the US (except for global issues that can be SEC-registered).

The **Bloomberg High-Yield Municipal Bond Index** is composed of US dollar-denominated, non-investment-grade, tax-exempt bonds for which the middle rating among Moody's Investors Service, Inc., Fitch, Inc., and Standard & Poor's is Ba1/BB+/BB+ or below.

The **Bloomberg Municipal Bond Index** measures the total return performance of the long-term, investment grade tax-exempt bond market.

The **Bloomberg Taxable Municipal Bond Index** is a rules-based, market-value-weighted index engineered for the taxable municipal bond market.

The **Bloomberg US Aggregate Index** is a broad-based benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market.

The **Bloomberg US Corporate High-Yield Index** is composed of US dollar-denominated, non-investment grade corporate bonds for which the middle rating among Moody's Investors Service, Inc., Fitch, Inc., and Standard & Poor's is Ba1/BB+/BB+ or below.

The **Bloomberg US Corporate Bond Index** is composed of US dollar-denominated, investment grade corporate bonds that are US Securities and Exchange Commission (SEC)-registered or 144A with registration rights, and issued by industrial, utility, and financial companies. All bonds in the index have at least one year to maturity.

The **Bloomberg US Mortgage-Backed Securities (MBS) Index** measures the performance of agency mortgage-backed pass-through securities (both fixed-rate and hybrid adjustable-rate mortgage) issued by the Federal National Mortgage Association (Fannie Mae), Federal Home Loan Mortgage Association (Freddie Mac), and Government National Mortgage Association (Ginnie Mae).

The **Bloomberg US Treasury Index** measures the performance of US Treasury bonds and notes that have at least one year to maturity.

The **Bloomberg US Treasury Bills Index** measures the performance of US Treasury bills that are not US Aggregate-eligible and have a maturity between 1 and 12 months.

The **Dow Jones Industrial Average** is an often-quoted market indicator that comprises 30 widely held US blue-chip stocks.

The **NASDAQ Composite Index** is a broad-based, market capitalization weighted index that measures all Nasdaq US-, and international-based common type stocks listed on the NASDAQ Stock Market and includes more than 2,500 securities.

The **Russell 2000 Index** measures the performance of the small-cap segment of the US equity universe. The Russell 2000 Index is a subset of the Russell 3000® Index, representing approximately 10% of the total market capitalization of that index.

The **S&P 500 Index** measures the performance of 500 mostly large-cap stocks weighted by market value, and is often used to represent performance of the US stock market.

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