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Investable Ideas

Municipal bonds: More than just tax-exempt income

Attractive yields may make municipal bonds a compelling standalone opportunity or addition to a broader investment portfolio. Their tax-exempt status certainly enhances their relative appeal, but even before taxes, municipal bonds have the potential to offer attractive opportunities for income and capital appreciation. Municipal bonds may also serve as diversifiers in an overall investment portfolio because of their low correlation to other major asset classes.

Four reasons to consider an investment in municipal bonds

1. **Tax advantage.** Municipals have the potential to offer a broad range of investment options that are exempt from federal income tax and can be exempt from state and local income taxes.
2. **Diversification potential.** In our view, diversification can potentially increase opportunities for growth and reduce overall portfolio volatility. Because municipal bonds historically have had very low correlation to other asset classes, including equities and Treasuries, they can be effective portfolio diversifiers. Of course, diversification does not ensure a profit or eliminate the risk of loss.

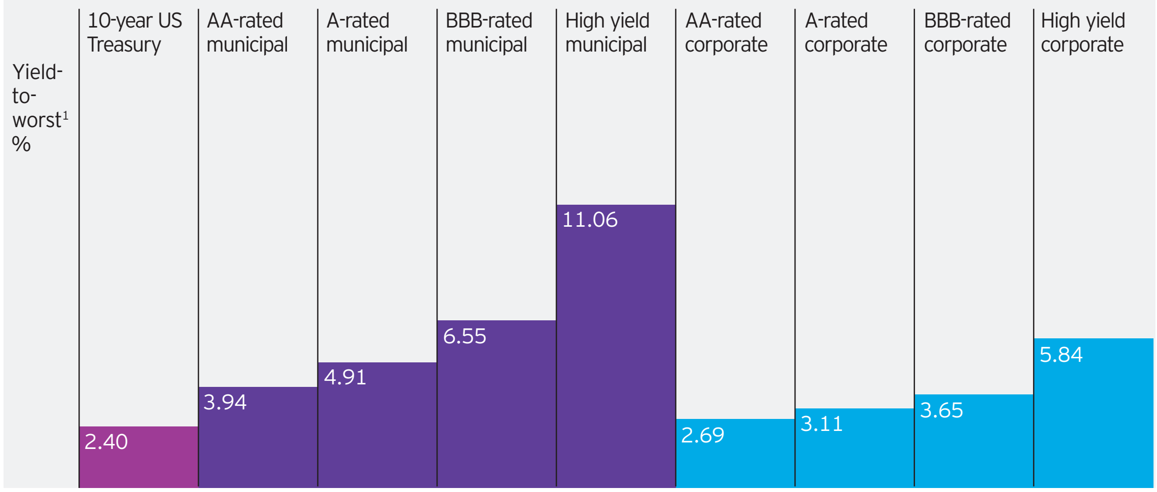
Municipal bonds have historically had low correlation to other asset classes
10-year correlations of municipal bonds to other asset classes

		1	2	3	4	5	6	7	8	9	10
1	Bloomberg Barclays Municipal Bond Index	1.00	0.67	0.55	0.56	0.33	0.35	0.08	0.15	0.14	0.01
2	Bloomberg Barclays High Yield Municipal Bond Index	0.67	1.00	0.25	0.38	0.46	0.00	0.25	0.32	0.26	0.15
3	Bloomberg Barclays US Aggregate Bond Index	0.55	0.25	1.00	0.80	0.23	0.87	0.03	0.18	0.13	-0.06
4	Bloomberg Barclays US Corporate IG Index	0.56	0.38	0.80	1.00	0.62	0.45	0.35	0.51	0.49	0.26
5	Bloomberg Barclays US Corporate HY Index	0.33	0.46	0.23	0.62	1.00	-0.23	0.73	0.76	0.77	0.70
6	Bloomberg Barclays US Government Bond Index	0.35	0.00	0.87	0.45	-0.23	1.00	-0.30	-0.18	-0.23	-0.36
7	S&P 500 Index	0.08	0.25	0.03	0.35	0.73	-0.30	1.00	0.79	0.89	0.92
8	MSCI Emerging Markets Index	0.15	0.32	0.18	0.51	0.76	-0.18	0.79	1.00	0.88	0.71
9	MSCI EAFE Index	0.14	0.26	0.13	0.49	0.77	-0.23	0.89	0.88	1.00	0.79
10	Russell 2000 Index	0.01	0.15	-0.06	0.26	0.70	-0.36	0.92	0.71	0.79	1.00

Source: Morningstar, for the period April 2007 to March 2017. An investment cannot be made directly in an index. Past performance is no guarantee of future results.

3. **Attractive yields on an after-tax basis.** As shown below, yields on municipal bonds, particularly high yield, are attractive relative to other fixed income asset classes.

Municipal bonds offer attractive taxable-equivalent yields compared to their taxable counterparts
Tax equivalent yields at 43.4% for selected fixed income bond indexes



Source: Barclays, as of March 31, 2017. AA-rated municipal is represented by the Bloomberg Barclays Municipal Bond AA Index; A-rated municipal by the Bloomberg Barclays Municipal Bond A Index; BBB-rated municipal by the Bloomberg Barclays Municipal Bond BBB Index; high yield municipal by the Bloomberg Barclays High Yield Municipal Bond Index; AA-rated corporate by the Bloomberg Barclays US Corporate Bond AA Index; A-rated corporate by the Bloomberg Barclays US Corporate Bond A Index; BBB-rated corporate the Bloomberg Barclays US Corporate Bond BBB Index; and high yield corporate by the Bloomberg Barclays US Corporate High Yield Index. An investment cannot be made directly in an index. Past performance cannot guarantee future results.

1 (39.6% federal tax rate + 3.8% NIIT). 2016 top marginal tax rate for single taxpayers with more than $400,000 in taxable income or couples with $450,000 or more. NIIT is the Net Investment Income Tax of 3.8% on investment income for single taxpayers with more than $200,000 in taxable income or couples with $250,000 or more.

4. **Relatively lower default risk.** Contrary to popular belief, the vast majority of municipal bond issuers remain creditworthy, and municipal default rates have remained relatively low, especially when compared with US corporate bonds. As shown in the chart below, when the credit structure decreases, the odds of a default rise. However, the percentages have been much higher for investment-grade corporates compared with municipals. Since 1970, there has never been an Aaa-rated municipal bond default. Similarly, in the same time frame, only 0.02% have defaulted with an Aa-rating. By contrast, Aa-rated corporate bonds have had a 0.81% default rate since 1970.[1]

Municipal default rates have remained relatively low, especially when compared with US corporate bonds
10-year average cumulative default rates, 1970-2015

	Municipal bonds %	Corporate bonds %
Aaa	0.00	0.40
Aa	0.02	0.81
A	0.07	2.31
Baa	0.38	4.03
Ba	4.24	16.45
B	17.88	36.28
Caa – C	26.03	48.03
All Moody's investment grade	0.09	2.45
All Moody's high yield	8.18	29.42
All Moody's rated securities	0.15	10.16

All rated municipal bonds have a lower 10-year cumulative default rate than Aaa-rated corporate bonds

Source: Moody's Investor Services ("Moody's"), as of May 2016.
Past default rates are no assurance of future default rates. The data presented is the most recent data available from the various bond rating agencies. 2016 data may increase cumulative default rates from both municipal and corporate bonds. A credit rating is an assessment provided by a nationally recognized statistical rating organization (NRSRO) of the creditworthiness of an issuer with respect to debt obligations, including specific securities, money market instruments or other debts. Ratings are measured on a scale that generally ranges from Aaa (highest) to C (lowest); ratings are subject to change without notice. For more information on rating methodologies, please visit www.moodys.com and select 'Rating Methodologies' under Research and Ratings on the homepage.

Building a municipal bond strategy with Invesco

The Invesco Municipal Bond team's management philosophy is based on the belief that creating long-term value through comprehensive forward-looking research is the key to providing clients with investment strategies that are both consistent and successful.

Our position among the top 10 municipal managers by assets[2] allows us the ability to access preferred market opportunities and gain valuable market insight. Our team has established relationships with more than 120 national and regional tax-exempt debt dealers. These established relationships, as well as our size, allow us to achieve superior execution in daily transactions. Our ability to aggregate trades across multiple funds allows us to obtain lower, institutional pricing, which can contribute to fund performance. This value-oriented combination of proprietary research and integrated risk controls allows us to create highly diversified portfolios that aim to maximize risk-adjusted returns.

1 Moody's "US Municipal Bond Defaults and Recoveries, 1970-2015" as of May 2016
2 Alpha Strategic Insight Simfund/MF Desktop, based on assets under management as of March 31, 2017

Explore High-Conviction Investing with Invesco

NOT FDIC INSURED | MAY LOSE VALUE | NO BANK GUARANTEE

Before investing, investors should carefully read the prospectus and/or summary prospectus and carefully consider the investment objectives, risks, charges and expenses. For this and more complete information about the fund(s), investors should ask their advisors for a prospectus/summary prospectus or visit invesco.com/fundprospectus.

Income may be subject to state and local taxes and to the alternative minimum tax (AMT).

The opinions expressed are those of the portfolio managers, are based on current market conditions and are subject to change without notice. There is no guarantee the outlooks mentioned will come to pass. These opinions may differ from those of other Invesco investment professionals.

Municipal securities are subject to the risk that legislative or economic conditions could affect an issuer's ability to make payments of principal and/ or interest. Municipal bonds are issued by state and local government agencies to finance public projects and services. They typically pay interest that is not subject to federal regular income tax or state and local income taxes in their state of issuance. Because of their tax benefits, municipal bonds usually offer lower pretax yields than similar taxable bonds.

High yield bonds invest in noninvestment-grade bonds and are therefore subject to greater volatility than investment-grade bonds. Securities which are in the medium- and lower-grade categories generally offer higher yields than are offered by higher-grade securities of similar maturity, but they also generally involve more volatility and greater risks, such as greater credit, market, liquidity, management, and regulatory risks.

Fixed income investments are subject to credit risk of the issuer and the effects of changing interest rates. Interest rate risk refers to the risk that bond prices generally fall as interest rates rise and vice versa. An issuer may be unable to meet interest and/or principal payments, thereby causing its instruments to decrease in value and lowering the issuer's credit rating.

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Bloomberg Barclays High Yield Municipal Bond Index is an unmanaged index considered representative of noninvestment grade bonds. The **Bloomberg Barclays Municipal Bond Index** is an unmanaged index considered representative of the tax-exempt bond market. **Bloomberg Barclays Municipal A Bond Index** is an unmanaged index considered representative of the tax-exempt bond market where the securities included are A-rated. **Bloomberg Barclays Municipal AA Bond Index** is an unmanaged index considered representative of the tax-exempt bond market where the securities included are AA-rated. **Bloomberg Barclays Municipal Bond BBB Index** is an unmanaged index considered representative of the tax-exempt bond market where the securities included are BBB-rated. **Bloomberg Barclays Municipal Bond Index** is an unmanaged index considered representative of the tax-exempt bond market. **Bloomberg Barclays Municipal High Yield Bond Index** measures the non-investment grade and nonrated US dollar-denominated, fixed-rate, tax-exempt bond market within the 50 United States and four other qualifying regions (Washington D.C., Puerto Rico, Guam and the Virgin Islands). **Bloomberg Barclays US Aggregate Bond Index** is an unmanaged index considered representative of the US investment-grade, fixed-rate bond market. The **S&P 500 Index** is an unmanaged index considered representative of the US stock market. The **MSCI EAFE Index** is an unmanaged index considered representative of stocks of Europe, Australasia and the Far East. The index is computed using the net return, which withholds applicable taxes for non-resident investors. **Bloomberg Barclays US Corporate Bond A Index** consists of publicly issued US corporate and specified foreign debentures where the securities included are A-rated. **Bloomberg Barclays US Corporate Bond AA Index** consists of publicly issued US corporate and specified foreign debentures where the securities included are AA-rated. **Bloomberg Barclays US Corporate Bond BBB Index** consists of publicly issued US corporate and specified foreign debentures where the securities included are BBB-rated. **Bloomberg Barclays US Corporate High Yield Index** is an unmanaged index that covers the US dollar-denominated, non-investment grade, fixed-rate, taxable corporate bond market. **Bloomberg Barclays US Corporate Investment Grade Index** is an unmanaged index considered representative of publicly issued, fixed-rate, nonconvertible, investment-grade debt securities. **Bloomberg Barclays US Government Bond Index** is an index that measures the performance of all public US government obligations with remaining maturities of one year or more. **MSCI Emerging Markets Index** is an unmanaged index considered representative of stocks of developing countries. The index is computed using the net return, which withholds applicable taxes for non-resident investors. **Russell 2000 Index** is an unmanaged index considered representative of small-cap stocks. The Russell 2000 Index is a trademark/service mark of the Frank Russell Co. Russell® is a trademark of the Frank Russell Co. Past performance is no guarantee of future results. An investment cannot be made directly in an index. **Correlation** indicates the degree to which two investments have historically moved in the same direction and magnitude. **Yield-to-worst** is the lowest potential yield that can be received on a bond without the issuer actually defaulting.