Infrastructure Debt: 
*Pipeline to yield, diversification and lower risk*

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Institutional investors understand that infrastructure is a distinct asset class offering powerful diversification benefits. But they often overlook the primary source of funding for U.S. public infrastructure—municipal bonds. These public debt securities historically have offered attractive yields, high credit quality, and very low default rates, compared to similarly-rated corporate bonds. Muni bonds’ particular risk-return profile can serve as a diversifying complement to corporate bonds and sovereign debt, with potential to increase portfolio risk-adjusted returns. Municipal bonds’ dominant characteristics—a combination of yield, low volatility, and long duration—can play a valuable role in asset-liability matching for pension and insurance portfolios.

Institutional investors in Europe and Japan have discovered that muni bonds are an alternative to corporate and sovereign debt, offering higher yields and similar credit quality. Financial institutions also can benefit from muni bonds’ favorable balance sheet treatment with lower or zero capital reserve requirements, compared to other asset classes.

**WHY INFRASTRUCTURE?**

*Infrastructure investments—public and private, equity and debt—offer the potential to increase portfolio risk-adjusted returns when combined with traditional stocks and bonds.*

**Consider:**

- Investment opportunity is expanding with strong global demand for new infrastructure in emerging markets and for replacement in developed markets.
- Infrastructure is a separate asset class with strong diversification benefits because its assets are often regulated monopolies or quasi-monopolies providing essential public services.
- Infrastructure is less sensitive to economic cycles due to its higher, more stable income yield often guaranteed by long-term government contracts.
MUNI BONDS FOR INFRASTRUCTURE EXPOSURE

Municipal bonds are a prime source of exposure, funding more than 75% of U.S. public infrastructure. They represent a massive, $3.8 trillion market, with 50,000-plus state and local governments issuing $400 billion in bonds annually.

ATTRACTIVE YIELDS AND LOWER DEFAULT RATES

Municipal bonds typically have offered yields comparable to or higher than similarly-rated U.S. corporate debt (Exhibit 1). Comparing average yield-to-worst for A-rated long-term bonds, the municipal yield of 4.17% exceeded the corporate yield of 3.95% by 22 basis points, as of June 30, 2017. Exhibit 1 shows that since the 2008–2009 global financial crisis, municipal bonds have provided higher yields than corporate bonds, despite their lower default risk.

Muni bonds offer exposure to diverse sectors not available through corporate, Treasury or agency bonds. They include transportation, such as airports, transit systems, toll roads, bridges and tunnels; public services, such as water and sewer facilities; hospitals and health care; and public buildings, such as schools, police and fire stations.

Exhibit 1: Municipal bonds have generally offered higher yields than similarly-rated corporate debt

Yields on taxable municipal bonds vs. U.S. corporate bonds

Source: Bloomberg Barclays Capital from 1/31/2006 - 6/30/2017. The following indexes are represented: Bloomberg Barclays U.S. Corporate Investment Grade Bond Index (corporate bonds); Bloomberg Barclays Capital Taxable Municipal Bond Index (taxable municipal bonds). It is not possible to invest in an index. Performance for indexes does not reflect investment fees or transaction costs.

Municipal bonds also offer a superior credit profile with less sensitivity to economic cycles. Payments to bondholders are backed by taxes authorized to cover debt service or by revenue for essential services that are monopolies, such as water and sewer. As a result, historical default rates have been a small fraction of corporate rates—0.09% versus 2.38%—for investment grade, based on average 10-year cumulative default rates for the period 1970–2016 (Exhibit 2). Muni bonds combine higher average credit quality—most are rated AA—and lower default rates for similarly-rated bonds, compared to corporate bonds.
Municipal bonds had lower volatility measured by standard deviation than other major asset classes over the three-, five-, and 10-year periods ended June 30, 2017 (Exhibit 3, upper). They were even less volatile than U.S. Treasury bonds with maturities of 10 years or more. Low volatility contributed to their relatively attractive risk-adjusted returns measured by Sharpe Ratio (Exhibit 3, lower). Muni bonds are less volatile partly because their risk exposure is location-specific and less influenced by broader market volatility and macro events, compared to other bonds. As a result, they have tended to capture less of the market’s downside during periods of high volatility.
INVESTING IN AN INEFFICIENT MARKET PUTS A PREMIUM ON RESEARCH

The municipal bond market’s size and diversity of issuers, most not covered by sell-side research, make this over-the-counter market relatively inefficient—creating attractive investment opportunities. For example, yields can range from 1.5% to 4.5% for 10-year bonds with the same credit rating and duration. Yield dispersion puts a premium on credit research to uncover relative value in bonds issued by smaller, lesser-known states and municipalities. Investors should look for asset managers with deep expertise in municipal bonds:

- Dedicated research teams with sector specialization to identify bonds having a more attractive risk-return profile
- Scale and reputation providing larger allocations to new issues and better access to secondary market opportunities
- Trading expertise to provide best execution and liquidity

Conclusion:

_Institutional investors seeking exposure_ to infrastructure debt for portfolio diversification should consider a dedicated allocation to U.S. municipal bonds. As a potential replacement for investment-grade corporate bonds or sovereign debt, muni bonds have offered a more attractive risk-return profile compared to most other bond categories. A combination of attractive yield, low volatility, and long duration makes them a valuable tool for matching assets and liabilities in pension and insurance portfolios.

MUNI BONDS FUND INFRASTRUCTURE FOR PUBLIC TRANSIT SYSTEM

New York City’s Metropolitan Transportation Authority (MTA)—North America’s largest transit network serving 15 million people—issued $750 million of municipal bonds at attractive yields to fund infrastructure projects. Income, credit quality, and duration characteristics are suited for matching long-dated liabilities:

- Bonds maturing in 2039 with a yield of 4.05%—103 basis points over 30-year Treasury bonds, as of June 30, 2017.
- Repayment secured through revenue from passenger fares, bridge and tunnel tolls
- Bonds are rated AA by Standard & Poor’s.
RISKS AND OTHER IMPORTANT CONSIDERATIONS
This material is presented for informational purposes only and may change in response to changing economic and market conditions. This material is not intended to be a recommendation or investment advice, does not constitute a solicitation to buy or sell securities, and is not provided in a fiduciary capacity. The information provided does not take into account the specific objectives or circumstances of any particular investor, or suggest any specific course of action. Financial professionals should independently evaluate the risks associated with products or services and exercise independent judgment with respect to their clients. Certain products and services may not be available to all entities or persons. Past performance is not indicative of future results.
Economic and market forecasts are subject to uncertainty and may change based on varying market conditions, political and economic developments.
Infrastructure-related investments involves sector risk and concentration risk, particularly greater exposure to adverse economic, regulatory, political, legal, liquidity, and environmental risks. As an asset class, real assets are less developed, more illiquid, and less transparent compared to traditional asset classes. Investments will be subject to risks generally associated with the ownership of real estate-related assets and foreign investing, including changes in economic conditions, currency values, environmental risks, the cost of and ability to obtain insurance, and risks related to leasing of properties.
Bonds and other fixed-income investments are subject to various risks including, but not limited to interest rate risk or the risk that interest rates will rise, causing bond prices to fall; and credit risk, which is the risk that an issuer will be unable to make interest and principal payments when due. An investment in any municipal portfolio should be made with an understanding of the risks involved in investing in municipal bonds, such as interest rate risk, credit risk and market risk, including the possible loss of principal. The value of the portfolio will fluctuate based on the value of the underlying securities.
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