

The Active Case for Municipal Infrastructure Revenue Bonds

By Alan Rubinfeld

In a Nutshell

- Municipal infrastructure revenue bonds occupy a unique segment of the fixed-income market, combining federally tax-exempt income with exposure to essential public infrastructure assets such as airports, toll roads, water systems, and public power projects.
- However, the health of individual issuers can vary significantly based on project revenues, usage trends, and local economic conditions. An active approach may provide greater flexibility to identify attractive opportunities and manage risks across the infrastructure revenue bond universe.
- The **Xtrackers Municipal Infrastructure Revenue Bond Active ETF (RVNU)** takes an active management approach, providing targeted access to this market and may be particularly attractive for taxable investors seeking income, diversification, and infrastructure exposure without the volatility of infrastructure equities.

Introduction

There is an old saying that "America was built by bonds." While the phrase may be difficult to verify, the importance of municipal bonds to the nation's development is undeniable. For decades, municipal issuers have relied on bond financing to construct and maintain critical public infrastructure. Revenue bonds have been particularly important, providing funding for airports, toll roads, water systems, electric utilities, and other essential assets that support economic activity while generating the cash flows used to repay investors.

What are Revenue Bonds?

Revenue bonds are municipal bonds issued to finance specific projects and are repaid from the revenue generated by those projects rather than from general tax collections. Revenue bonds dominate municipal new issuance – roughly 60-65% of annual supply since 2006.¹ Common examples include:

- Airports
- Water and sewer systems
- Toll roads and bridges
- Public power systems
- Transportation infrastructure

¹ Source: Bloomberg

This differs from General Obligation (GO) bonds, which are backed by the taxing authority and general credit of a municipality. Revenue bonds are effectively tied to the economic viability and cash flows of the underlying project, providing a direct link between an infrastructure asset and the income stream supporting bondholders.

The Revenue Bond Advantage

- **Tax-Exempt Income:** Interest from most municipal revenue bonds is exempt from federal income taxes and often state and local taxes, potentially resulting in attractive tax-equivalent yields compared with many taxable bond alternatives, while maintaining a lower volatility profile. (Figure 1)
- **Exposure to Essential Infrastructure:** Revenue bonds finance assets that are often critical to economic activity and public services, including transportation, utilities, and water systems. These projects frequently enjoy stable demand characteristics.
- **Diversification Benefits:** Municipal bonds provide meaningful diversification advantages relative to many other fixed-income segments and risk assets. Because municipal infrastructure revenue bonds finance essential, non-discretionary services, their revenue streams are generally insensitive to equity market volatility and corporate earnings cycles. Thus, these bonds may serve as an effective diversifier within multi asset portfolios.
- **Low Default Rates:** Municipal revenue bonds have historically exhibited exceptionally low default rates, particularly in essential-service sectors such as water, sewer, and public power. Compared with global corporate bonds, the municipal asset class has demonstrated markedly lower default rates, a distinction that becomes even more pronounced at longer maturities and within lower credit quality segments.² (Figure 2)

² Source: DWS

Figure 1: Volatility/return of various fixed income segments (10-year period as of 6/30/26)

Source: Morningstar as of 6/30/26. Performance is historical and does not guarantee future results. Volatility is measured by standard deviation, which depicts how widely an investment's returns vary from the investment's average return over a certain period. Tax-equivalent yield is the pretax yield that a taxable bond needs to possess for its yield to be equal to that of a tax-free municipal bond. Asset-class representation is as follows: mortgage-backed securities, Bloomberg U.S. Mortgage Backed Securities Index; municipal bonds, Bloomberg Municipal Bond Index; investment-grade bonds, Bloomberg U.S. Aggregate Bond Index; high-yield corporates, Bloomberg U.S. Corporate High Yield Index; 10-year U.S. Treasury, FTSE Treasury Benchmark 10-Year Index; 5-year U.S. Treasury, FTSE Treasury Benchmark 5-Year Index; emerging markets, Bloomberg Emerging Market Aggregate Bond Index; credit (A-rated), Bloomberg U.S. Credit A-Rated Index; long muni, Bloomberg Municipal Long 22+ Year Index; long U.S. corporates, Bloomberg Long U.S. Corporate Index; 30-Year U.S. Treasuries, Bloomberg U.S. Treasury Bellwether 30-Year Index; Taxable munis, Bloomberg Taxable Municipal index.

*Bloomberg Municipal Bond Index's return was adjusted for the 40.8% federal income tax rate and 3.8% Medicare surtax. See page 20 for index definitions. This illustration does not represent the performance of any DWS product, is for informational purposes only and should not be considered tax advice.

Figure 2: Historic default rates (in %) as of 8/4/2025

Rating	Year 1	Year 5		Year 10		Year 20		Global Credit
	Municipals	Global Credit	Municipals	Global Credit	Municipals	Global Credit	Municipals	
Aaa	0.00	0.00	0.00	0.08	0.00	0.36	0.00	0.74
Aa	0.00	0.02	0.01	0.29	0.02	0.76	0.04	2.01
A	0.00	0.05	0.03	0.71	0.10	2.03	0.25	5.15
Baa	0.03	0.15	0.46	1.43	1.09	3.61	1.87	8.99
Ba	0.23	0.85	1.93	7.62	3.49	15.25	6.09	27.68
B	2.68	3.23	11.9	20.58	17.07	34.31	19.66	49.55
Caa-C	9.05	9.92	20.62	35.24	25.59	51.44	26.57	60.21
Investment Grade	0.00	0.08	0.04	0.86	0.10	2.24	0.18	5.40
Speculative Grade	1.25	4.13	4.81	18.98	7.14	29.74	9.63	42.01
All Rated	0.02	1.59	0.08	6.92	0.16	10.57	0.26	15.27

Source: Moody's Rating, as of 08/04/2025; For illustrative purposes only. Past performance does not guarantee future returns

*Yield of MMD AAA; Based on 40.8% tax rate; **Asset-class representation is as follows: Municipal bonds, Bloomberg Municipal Bond Index; investment-grade corporates, Bloomberg U.S. Corporate Investment Grade Index; intermediate-term bonds, Bloomberg U.S. Aggregate 7-10 years Index; high-yield corporates, Bloomberg U.S. Corporate High Yield Index; 10-year U.S. treasury, FTSE Treasury Benchmark 10 Year Index; U.S. equities, S&P 500 Index. Correlation refers to how securities perform in relation to one another. A 1.0 correlation indicates that two security types move in exactly the same direction. A -1.0 correlation indicates movement in exactly opposite directions. A zero correlation implies no relation in the movements. The values of equity investments are more volatile than those of other securities. Fixed-income investments are subject to interest-rate risk, and their value will decline as interest rates rise.

Past performance is historical and does not guarantee future results. For illustrative purposes only. It is not possible to invest directly in an index.

Potential Disadvantages

- Project-Specific Credit Risk:** Unlike GO bonds, repayment depends on project revenues. If a toll road, airport, or utility system experiences weaker-than-expected usage or financial stress, bondholders may face greater risk.
- Interest-Rate Sensitivity:** Infrastructure revenue bonds often have longer maturities and durations than broad municipal bond portfolios, making them more sensitive to rising interest rates.
- Sector Concentration:** Although diversified across issuers, revenue-bond portfolios are more concentrated in infrastructure sectors than broad municipal bond indexes.

Where Do Revenue Bonds Fit in an Asset Allocation Strategy?

- Revenue bonds can fill several roles:
- Taxable Fixed Income Allocation:** Tax-exempt income may improve after-tax returns for investors in higher tax brackets, particularly when held in taxable accounts.
 - Real Assets Exposure:** Revenue bonds provide indirect exposure to infrastructure assets without taking on the equity market volatility associated with listed infrastructure stocks.
 - Income Generation:** Monthly distributions combined with municipal tax benefits can make revenue bonds attractive for investors seeking income.
 - Diversifier Across Asset Classes:** Revenue bonds may complement Treasuries, investment-grade corporates, and broad municipal bond allocations, as well as providing diversification benefits to U.S. infrastructure equity by providing low correlated exposure to a distinct source of risk and return. (Figure 3)

Figure 3: 5-year monthly return correlations across various asset classes*

	US Infrastructure Equity	S&P 500	Muni Bonds	US IG Credit	US Agg 7-10 Year	US High Yield	10Y Treasury
Municipal Infrastructure Revenue Bonds	0.51	0.65	0.97	0.90	0.87	0.77	0.83

Source: Bloomberg, as of 07/08/2026; For illustrative purposes only. Past performance does not guarantee future returns. You cannot invest directly in an index.

Why Might an Active Strategy Be Preferred?

- Municipal Bonds Are an Inefficient Market:** Unlike equities, municipal bonds trade largely over-the-counter and often have limited analyst coverage. This can create opportunities for skilled managers to identify mispriced securities.
- Credit Analysis Matters:** Revenue bonds require detailed evaluation of factors such as traffic patterns, utility demand, debt coverage ratios, project economics, and revenue stability. Active managers can potentially avoid deteriorating credits before they become market concerns.
- Greater Flexibility:** Rather than being constrained by index rules, an active strategy can adjust duration, shift sector exposure, rotate among infrastructure segments, and seek better risk-adjusted opportunities.

Risk Management: Active managers can reduce exposure to sectors facing idiosyncratic risks while increasing allocations to stronger infrastructure subsectors.

RVNU: An Active Approach to Municipal Infrastructure Investing

The **Xtrackers Municipal Infrastructure Revenue Bond Active ETF (RVNU)** provides exposure to municipal infrastructure revenue bonds backed by dedicated cash flows from essential public services such as transportation, utilities, and water systems, offering access to stable, long-term income linked to critical infrastructure assets.

Pure-Play Infrastructure Exposure: RVNU is the only ETF that focuses exclusively on municipal infrastructure revenue.

High Credit Quality: RVNU primarily invests in investment grade municipal securities, while retaining flexibility to allocate to other credit opportunities where attractive risk-adjusted returns are identified.

Attractive Tax-Efficient Income: The portfolio provides federally tax-exempt income and has historically offered compelling tax-equivalent yields for taxable investors.

Competitive Cost Structure: RVNU's expense ratio is a competitive 0.15%, which compares favorably to competing specialized municipal bond ETFs.

Potential Beneficiary of Lower Interest Rates: Given its longer-duration profile, RVNU may benefit more than shorter-duration bond funds in environments where interest rates decline.

A Cohesive Investment Process

Research-Driven Alpha Potential

- A dedicated in-house research team provides actionable investment insights that can be translated directly into portfolio decisions.
- Combining top-down macroeconomic analysis with bottom-up credit research may help identify attractive revenue bond issuers and sectors positioned to outperform.
- Ongoing credit surveillance helps manage risk while seeking to preserve income and capital.

Portfolio Construction Advantages

- Active portfolio construction allows managers to express high-conviction ideas while remaining aligned with overall investment objectives.
- Relative value analysis is applied at both the security and portfolio level, helping balance income opportunities with risk considerations.
- Flexibility to adjust exposures as market conditions change may help improve risk-adjusted returns over time.

The Trading Edge

- The municipal market's fragmented nature can create pricing inefficiencies that skilled traders may be able to exploit.
- Active trading seeks to capitalize on relative value opportunities across sectors and issuers.

- Disciplined trade execution can enhance returns and reduce transaction costs, an often overlooked contributor to performance.

The Xtrackers Active Management Team

Led by Mathew Caggiano, CFA, and Chad Farrington, CFA, DWS offers one of the industry's most experienced municipal bond portfolio management teams, consisting of 5 portfolio managers with an average of 22 years of experience in municipals, supported by 3 dedicated credit research analysts averaging 18 years of experience, and 2 traders. The team manages approximately \$7.0 billion in dedicated municipal bond strategies.

Summary

Municipal infrastructure revenue bonds occupy a distinctive niche within the fixed-income universe, offering federally tax-exempt income alongside exposure to essential public assets such as airports, toll roads, water systems, and public power projects. Because the financial health of individual issuers can vary significantly, active management may be particularly valuable in identifying attractive opportunities and managing credit risks across this complex and fragmented market.

The **Xtrackers Municipal Infrastructure Revenue Bond Active ETF (RVNU)** provides actively managed exposure to this specialized asset class. By combining proprietary research, active portfolio construction, and disciplined trading, RVNU seeks to uncover value, manage risk, and deliver tax-efficient income linked to critical infrastructure assets, making it a prudent option for investors seeking diversification and long-term income potential.

Glossary

After-Tax Yield: The return on an investment after accounting for applicable taxes.

Alpha: The excess return of an investment against a benchmark.

Basis Points (bps): A unit of measurement equal to 0.01%, used to describe yield differences.

Benchmark: A standard or index used to measure investment performance.

Bloomberg Municipal Bond Index: Benchmark index for the USD-denominated long-term tax-exempt investment-grade municipal bond market in the United States.

Bloomberg U.S. Aggregate 7-10 years Index: An index that measures the performance of U.S. Treasury securities with a remaining maturity of at least seven years and less than 10 years.

Bloomberg U.S. Corporate High Yield Index: A benchmark that tracks the performance of lower-rated U.S. corporate bonds, often called "high-yield" or "junk" bonds, which typically offer higher income potential in exchange for higher credit risk.

Bloomberg U.S. Corporate Investment Grade Index: An index that tracks the performance of the investment-grade, fixed-rate, taxable corporate bond market.

Credit Risk: The probability of a borrower defaulting on debt obligations. Lenders risk not receiving the principal and interest component of the debt.

Debt Coverage: The ability of an entity – such as a business, property, or individual – to generate enough cash flow to meet its current debt obligations.

Default: Failure of a bond issuer to make interest or principal payments.

Diversification: A risk management strategy that involves spreading investments across different asset classes, sectors, industries, geographies, or investment styles to reduce the impact of poor performance in any single investment.

Duration: A measure of how the price of a fixed-income security responds to changes in interest rates.

FTSE Treasury Benchmark 10 Year Index: A fixed-income benchmark that tracks the performance of U.S. Treasury bonds with a maturity of approximately 10 years.

General Obligation Bond (GO): A type of municipal bond issued by a state, county, city, or other local government entity. It is backed by the issuer's full faith, credit, and taxing power.

Income Stream: Regular payments received from an investment, such as bond interest.

Interest Rate Sensitivity: The extent to which the price of a financial instrument—especially fixed-income securities—changes in response to shifts in market interest rates.

Investment Grade: Bonds considered to have a relatively low risk of default based on credit quality.

Issuer: The entity (such as a government or utility provider) that issues a bond to raise funding.

Long-Term Income: Income generated over an extended investment horizon.

Real Assets: Tangible, physical investments whose value comes from their intrinsic properties and ability to generate goods or services.

Risk-Adjusted Return: The return of an investment considering the level of risk taken.

S&P 500 Index: An index that tracks the performance of 500 leading U.S. companies and is widely regarded as one of the best measures of the U.S. large-cap equity market. The index covers approximately 80% of the available U.S. stock market capitalization.

Sector Concentration: Refers to the degree to which a portfolio, business, or investment strategy is overrepresented in a single industry or sector.

Spread: The difference in yield between two types of bonds (e.g., revenue vs general obligation bonds).

Taxable Alternative: An investment whose income is subject to taxes (e.g., corporate bonds).

Tax-Advantaged: An investment that benefits from favorable tax treatment.

Tax-Exempt: Income that is not subject to U.S. federal income tax (common for municipal bonds).

Ticker: A short code used to identify a traded investment (e.g., RVNU).

Important Disclosures

Fund Risks: Because Exchange Traded Funds (ETFs) trade on a securities exchange, their shares may trade at a premium or discount to their net asset value. ETFs also incur fees and expenses so they may not fully match the performance of the indexes they are designed to track. Investing involves risk, including the possible loss of principal. Stocks may decline in value. An investment in the fund should be considered only as a supplement to a complete investment program for those investors willing to accept the risks associated with the fund. Please read the prospectus for more information.

Effective August 4, 2026, the fund converted from a passively managed ETF that tracks the Solactive Municipal Infrastructure Revenue Bond Index to an actively managed ETF that does not track an index. On the effective date, the Fund's investment objective changed from seeking to track the performance of the Solactive Municipal Infrastructure Revenue Bond Index to seeking to provide income exempt from regular federal income tax. To reflect its new actively managed approach, the fund is renamed Xtrackers Municipal Infrastructure Revenue Bond Active ETF, while its ticker, RVNU, will remain unchanged. The Fund will continue to invest in municipal infrastructure revenue bonds, but its investments will be actively managed by its portfolio managers taking into account various factors. pw

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Bond investments are subject to interest-rate, credit, liquidity and market risks to varying degrees. When interest rates rise, bond prices generally fall. Credit risk refers to the ability of an issuer to make timely payments of principal and interest. Municipal securities are subject to the risk that litigation, legislation or other political events, local business or economic conditions or the bankruptcy of the issuer could have a significant effect on an issuer's ability to make payments of principal and/or interest. The market for municipal bonds may be less liquid than for taxable bonds and there may be less information available on the financial condition of issuers of municipal securities than for public corporations. Income from municipal bonds may be subject to state and local taxes and at times the alternative minimum tax. Active securities trading could raise transaction costs and could result in increased taxable distributions to shareholders at higher federal income tax rates. An investment in this fund should be considered only as a supplement to a complete investment program for those investors willing to accept the risks associated with the fund. Please read the prospectus for more information.

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