

Parametric Fixed Income

Tax efficiency through advanced technology



Find opportunity in fixed income

Sophisticated equity investors appreciate the importance of tax efficiency. Minimizing tax friction in the investment process is equally important in fixed income. But building an optimal solution across fragmented and inefficient bond markets is more complicated than it appears. That's where Parametric can help.

Parametric's advanced technology makes it easy to invest systematically and tax efficiently. We can help you navigate complex interest rate environments, seek to enhance after-tax returns, and customize exposures to fit your needs and goals.

Our Radius technology platform includes a **dedicated fixed income engine** that **optimizes the overall bond investing process**, transforming inefficiency into opportunity.

Invest intelligently with Radius Fixed Income

Radius Fixed Income harnesses data and quantitative tools to build portfolios with year-round active tax management and a broad range of customization options.

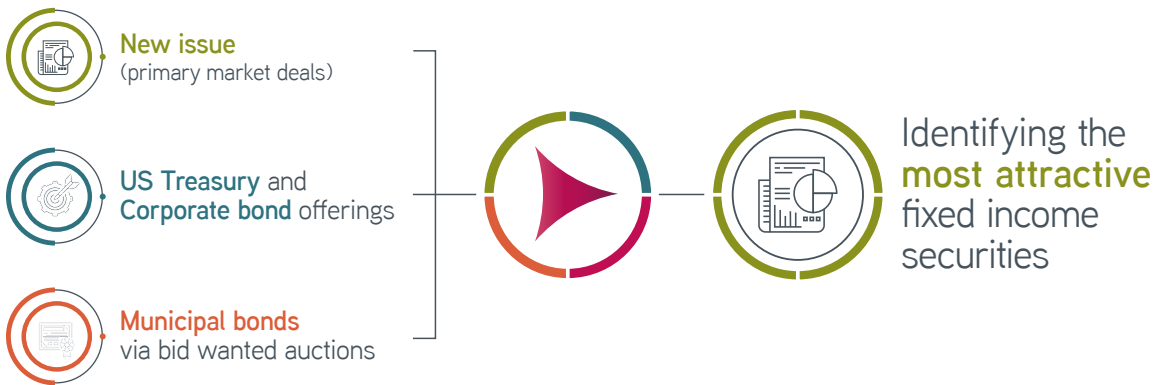
This proprietary platform aggregates key market segments into a single location, allowing managers and traders to efficiently isolate the most attractive offerings among thousands of bonds. Account transitions become easy and transparent, with fast execution and open access to our portfolio managers.

Source the best bond prices

Radius compiles thousands of line items in the secondary market, along with any new-issue securities, to populate portfolios with the most attractive bonds available across the fixed income universe.

Our team evaluates over 20,000 live auction items and 60,000 bond offerings every day. We identify mispriced bonds and select the ones best suited to your objectives. As of December 31, 2023 we followed through on more than 1.3 million trades and 2.1 million separate account allocations in 2023, for a total of \$109 billion in market value for the year. That averages out to daily volumes of more than 5,200 trades and \$436 million.¹

The power of networks



Radius seeks to drive better portfolio outcomes

Market data consolidation

- » Primary and secondary market data
- » Bids wanted and historical trade data
- » Credit and liquidity analysis

Client customization

- » Maturity and duration
- » State and sector exposure
- » Credit quality
- » Investor's tax rate
- » Strategy rules and guidelines

Radius portal

Harnessing the power of technology allows Parametric portfolio managers to:

- » Match portfolio needs with attractively priced bonds
- » Increase speed of investment
- » Efficiently execute tactical portfolio adjustments
- » Facilitate opportunistic relative value trading
- » Deliver enhanced customization
- » Systematically harvest tax losses year round

Bespoke investor portfolio



¹Source: Parametric, 12/31/2023. Values are aggregated across all fixed income SMA strategies: municipal ladders, corporate ladders, managed municipals, and municipal total-return. For illustrative purposes only. Past performance is not indicative of future results.

Harvest losses to boost your after-tax returns...

Tax-loss harvesting enables you to dynamically realize or “harvest” losses throughout the year and use them to offset capital gains elsewhere. Harvesting can help you save on taxes, keep more of what you earn, and reinvest that difference—known as tax alpha—in your portfolio. And that strengthens your ability to compound, grow your wealth and achieve your goals.

Even a small reduction in current taxes can have large consequences for wealth accumulation over time. For example, an improvement of 0.5% per year in after-tax returns can result in a wealth difference of 50% after 30 years of distributions.²

...using separately managed accounts (SMAs)

Historically a tool of ultra-high-net-worth individuals, SMAs are professionally managed portfolios where the investor owns the underlying securities rather than commingled shares. That direct ownership enables a high degree of flexibility to accommodate your goals, values, and strategies—including year-round active tax management.

Parametric’s year-round approach

Many investors harvest losses at year-end, but yields rarely peak then. Using Radius, we seek to take advantage of market movements throughout the year. This enables investors to benefit from periods of short-term volatility whenever they occur, potentially adding up to 30 bps in after-tax excess returns for fixed income portfolios.³

Increased scale and efficiency

Benefit from a streamlined tax-loss harvesting process that eliminates the need for analysis at the individual lot level.

Reduced cash exposure

Return to the market faster through access to ready replacements and targeted reinvestment at potentially higher yields.

Optimized sales timing

Receive ongoing loss-harvesting opportunities while avoiding wash-sale violations.

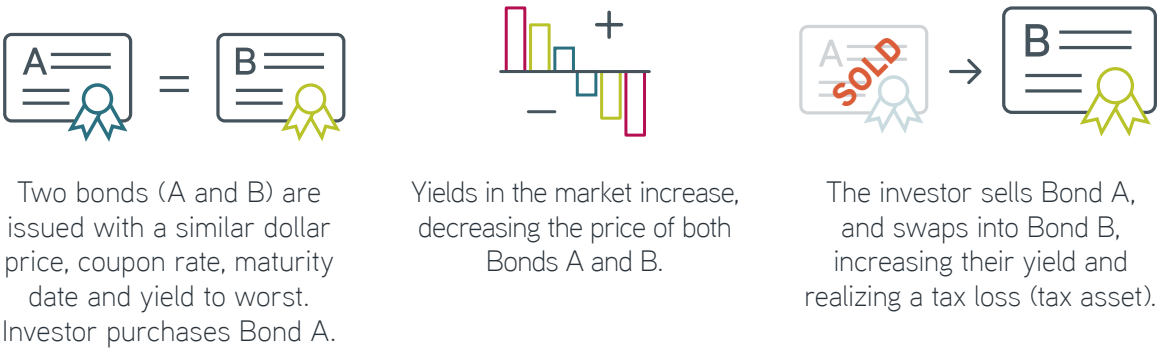
Minimized transaction costs

Improve liquidity through account aggregates to evaluate loss-harvesting opportunities.

²Morgan Stanley Global Investment Committee, *Tax Efficiency: Getting to What You Need by Keeping More of What You Earn* (New York: Morgan Stanley Investment Management, 2022).

³Andrew Kalotay, “Tax-Efficient Trading of Municipal Bonds,” *Financial Analysts Journal* 72, no. 1 (2016): 48–57. This study did not involve Parametric or its clients. There is no guarantee that a tax management strategy will result in increased after-tax returns. Results will differ based on an individual investor’s circumstances.

How tax-loss harvesting works in fixed income



In 2023⁴ we were able to save our clients \$147 million in taxes across municipals and corporates despite positive performance from fixed income indices:

\$17B	250,000	\$510M
In market value sold	Trades	In losses realized

Source: Parametric. Information as of 12/31/2023. How tax-loss harvesting works in fixed income graphic is for illustrative purposes only. The information represents how tax-loss harvesting in fixed income could work under normal market conditions.

⁴Values are aggregated across all fixed income SMA strategies: municipal ladders, corporate ladders, managed municipals, and municipal total-return. Only client positions with unverified cost basis were excluded from calculations. Loss calculation is based on the amortized book price minus the sell price, represents historical information, and should not be construed as future results. Loss information illustrates the effect to a portfolio and is not representative of, and should not be construed as, performance. There is no assurance that tax-loss harvesting will continue in the future. There is no guarantee that any specific account may engage in tax-loss harvesting.

Customize at new heights

We deliver personalized portfolios that seek to meet each investor's unique goals, values, tax circumstances, and risk considerations. Through our broad product suite and a customization engine that offers over 100 options, our dedicated team constructs precise portfolios tailored to fit you.

Objectives

Pursue steady potential income or strong total return.

Maturities

Identify maturity dates ranging from one month to 20 years out.

Geography

Find opportunities nationally and in 19 specific states.

Distributions

Plan to reinvest the proceeds of maturing bonds or receive them in cash.

Tax-aware optimization

Seek improved after-tax performance through year-round loss harvesting.

Asset classes

Select from municipal, US corporate, or Treasury bonds.

Durations

Choose short, intermediate, or long-duration strategies.

Credit ratings

Set your credit risk tolerance from AAA to BB.

Transitions

Hold on to existing fixed income securities or move them out gradually.

Responsible investing

Use one or a blend of 50 ESG screens to align your portfolio with your principles.

The Parametric difference

When you work with our fixed income team, you'll get:

Personalized portfolios From active tax management to responsible investing guidelines and more, we build portfolios for your needs.

Advanced technology Powered by Radius, our optimized portfolio construction process supports faster technology investment and relative value trading opportunity capture.

Exceptional client service You'll work with a portfolio manager who provides high-touch consultation and efficient implementation.

\$475B

Total firm AUM

\$69.7B

Fixed income AUM

84

Professionals⁵

10+

Years of average manager tenure

Winner: 2023 US Markets Choice Award

Best Buy-Side Fixed Income Trading Desk⁶

⁵Source: Parametric. Total professional count is comprised of: 30 investment professionals, 17 municipal, 17 investment grade credit analysts, 20 dedicated technology team members.

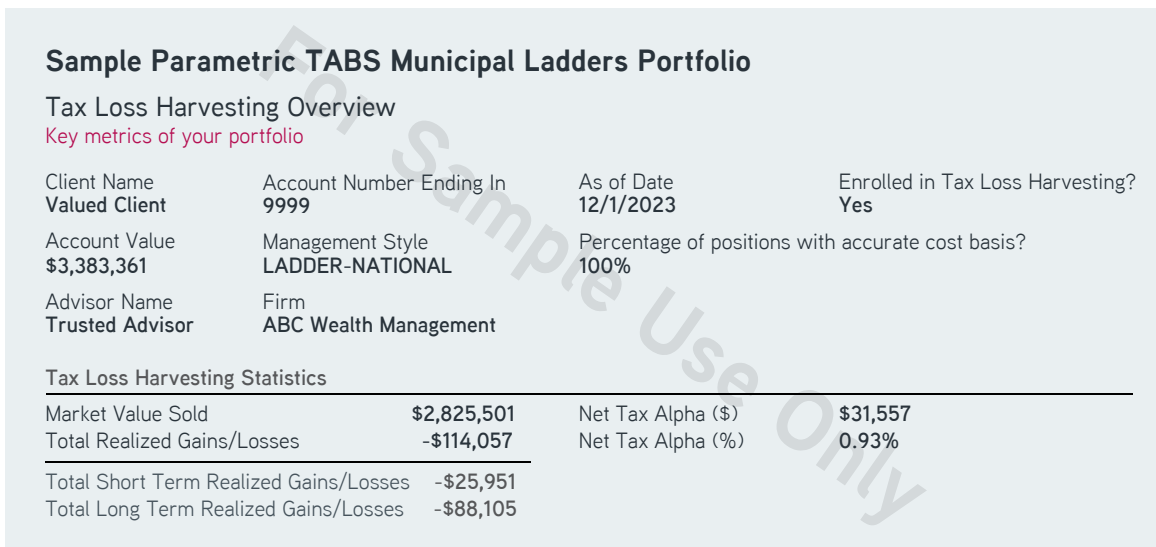
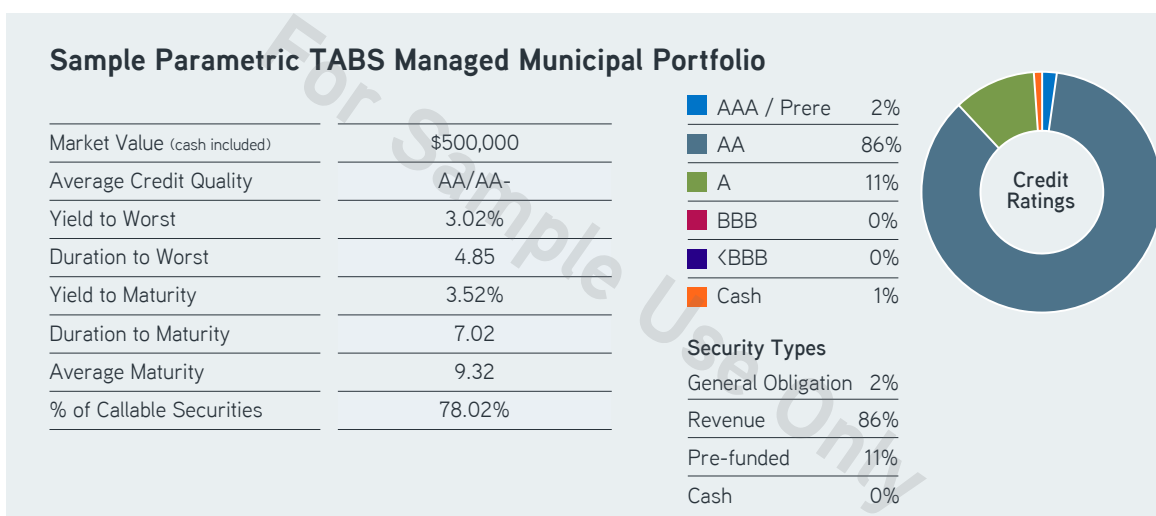
⁶Markets Media Group's annual U.S. Markets Choice Awards honor firms that are the "best of the best in capital markets trading and technology," including buy-side traders, sell-side execution desks, exchanges and trading platforms, incumbent technology providers, and emerging fintech firms. The selection methodology factored in the opinions of market participants, including colleagues, customers, and competitors. Winners were announced on May 3, 2023. For more information, visit <https://www.marketsmedia.com/2023-markets-choice-award-winners-announced/>.

Get started with Parametric

Whether funding accounts with cash, existing securities, or both, we make transitions easy and tax efficient. Send us a current portfolio, and we'll provide a comprehensive transition analysis detailing the benefits of migrating to your optimal customized fixed income exposure.

Once onboarded, Parametric's reporting makes reviewing your fixed income accounts easy. Our reports summarize tax-loss harvesting activity and measure potential tax savings, illustrating the value of active tax management and professional portfolio oversight.

Reporting that's robust, transparent, and comprehensive



Source: Parametric.

Important Disclosures: The sample portfolio statistics are provided for illustrative purposes. This report can be customized for each client upon request. The data presented above is not current and should not be relied upon to make investment decisions. The tax loss harvesting overview information is based on data from 12/31/2022 to 12/31/2023. It is not meant to be relied on for tax purposes and is provided by request for each individual client. Actual taxable information may vary and provided only as an estimate. Tax Alpha calculations are based on assumptions including Tax Alpha (\$) indicates the dollars saved calculated by taking the Total Realized Gain/Loss and multiplying by the applicable tax rate by position (short term or long-term gains). Tax Alpha (BPS) is calculated by tax alpha (\$) divided by the market value of the account. Past performance is not indicative of future results.



For more information:

Investors, please contact your financial advisor.
Advisors, please contact your dedicated representative at 800.836.2414.

About

Parametric Portfolio Associates® LLC (“Parametric”), headquartered in Seattle, is registered as an investment advisor with the US Securities and Exchange Commission under the Investment Advisers Act of 1940. Parametric is a leading global asset management firm providing investment strategies and customized exposure management directly to institutional investors and indirectly to individual investors through financial intermediaries. Parametric offers a variety of rules-based investment strategies, including alpha-seeking equity, fixed income, alternative, and options strategies. Parametric also offers implementation services, including customized equity, traditional overlay, and centralized portfolio management. Parametric is part of Morgan Stanley Investment Management, the asset management division of Morgan Stanley, and offers these capabilities through offices located in Seattle, Boston, Minneapolis, New York, and Westport, Connecticut.

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Corporate debt securities are subject to the risk of the issuer’s inability to meet principal and interest payments on the obligation and may also be subject to price volatility due to such factors as interest rate sensitivity, market perception of the creditworthiness of the issuer, and general market liquidity. When interest rates rise, the value of corporate debt securities can be expected to decline. Debt securities with longer maturities tend to be more sensitive to interest rate movements than those with shorter maturities. Company defaults can impact the level of returns generated by corporate debt securities. An unexpected default can reduce income and the capital value of a corporate debt security. Furthermore, market expectations regarding economic conditions and the likely number of corporate defaults may impact the value of corporate debt securities.

An imbalance in supply and demand in the municipal market may result in valuation uncertainties and greater volatility, less liquidity, widening credit spreads, and a lack of price transparency in the market. There generally is limited public information about municipal issuers. As interest rates rise, the value of certain income investments is likely to decline. Longer-term bonds typically are more sensitive to interest-rate changes than shorter-term bonds. Investments in income securities may be affected by changes in the creditworthiness of the issuer and are subject to the risk of nonpayment of principal and interest. The value of income securities also may decline because of real or perceived concerns about the issuer’s ability to make principal and interest payments.

There is no assurance that a separately managed account (SMA) will achieve its investment objective. SMAs are subject to market risk, which is the possibility that the market values of the securities in an account will decline and that the value of the securities may therefore be less than what you paid for them. Market values can change daily due to economic and other events (natural disasters, health crises, terrorism, conflicts, social unrest, etc.) that affect markets, countries, companies, or governments. It is difficult to predict the timing, duration, and potential adverse effects (portfolio liquidity, etc.) of events. Accordingly, you can lose money investing in an SMA.

Investment strategies that seek to enhance after-tax performance may be unable to fully realize strategic gains or harvest losses due to various factors. Market conditions may limit the ability to generate tax losses. Tax-loss harvesting involves the risks that the new investment could perform worse than the original investment and that transaction costs could offset the tax benefit. Also, a tax-managed strategy may cause a client portfolio to hold a security in order to achieve more favorable tax treatment or to sell a security in order to create tax losses. Prospective investors should consult with a tax or legal advisor before making any investment decision.

An environmental, social, and governance (ESG) investment strategy limits the types and number of investment opportunities available to the investor, and as a result, the investor’s portfolio may underperform other investment strategies that do not have an ESG focus. The ESG investment strategy may result in investments in securities or industry sectors that underperform the market as a whole or underperform other strategies that apply ESG standards. An issuer’s ESG performance or the investment advisor’s assessment of such performance may change over time, which could cause the investor to temporarily hold securities that do not comply with the investor’s responsible investment criteria. In evaluating an investment, the investment advisor is dependent upon information and data that may be incomplete, inaccurate, or unavailable, which could adversely affect the analysis of the ESG factors relevant to a particular investment. Successful application of the investor’s responsible investment strategy will depend on the investment advisor’s skill in properly identifying and analyzing material ESG issues.

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