

# Systematic Tax-Loss Harvesting in Laddered Bond Portfolios

---

**Dan Codreanu, CFA**

Director, Fixed Income Portfolio Management and Quantitative Research

**Issac Kuo, CFA, CPA**

Managing Director, Portfolio Management and Head of Quantitative Research

August 2022

When it comes to building customized laddered municipal and corporate bond portfolios, the array of options continues to broaden, particularly with the growth of ESG investing. However, one of the most frequently selected customizations remains tax-loss harvesting (TLH).

Systematic TLH is designed to provide investors with a meaningful way to enhance performance by offsetting taxes on realized gains, thereby helping investors stay more fully invested and generate larger compounded returns.

## Key takeaways

- » Year-round systematic TLH helps identify opportunities to generate capital losses and lower investors' tax bills.
- » Custom fixed income SMAs provide TLH opportunities under various interest rate scenarios in ways ETFs and mutual funds simply can't.
- » Systematic TLH is a thorough analysis of liquidity, yield, and structure on a bond-by-bond basis intended to capture losses while maintaining a portfolio's risk profile and to avoid triggering potential wash sales.

## Tax-loss harvesting: SMAs can, ETFs can't

While TLH has become mainstream for equity investors, it has remained an elusive benefit for fixed income investors. As this paper shows, systematic TLH can enhance after-tax performance in laddered separately managed accounts (SMAs). In fact, TLH is a powerful tax-mitigation feature available in SMAs that isn't available through traditional passive vehicles such as ETFs or mutual funds. Losses realized in SMAs can be used to offset the account holder's realized capital gains, whereas mutual fund and ETF losses are trapped in the fund vehicle and don't pass through to the investor.

Some asset managers offer a degree of tax management for fixed income portfolios, typically targeting TLH opportunities at year-end. However, most managers remain passive with regard to taxes while being active in their security selection.

Yet the opportunity for TLH in fixed income exists under all interest rate scenarios, whether they're rising, falling, or fluctuating. When interest rates remain flat or decline, loss-harvesting opportunities are primarily isolated and related to credit events. When interest rates rise, loss-harvesting opportunities expand, since fixed income prices in general fall when rates rise.

## How systematic tax-loss harvesting works for fixed income portfolios

Systematic TLH involves regular, year-round portfolio monitoring to identify individual tax lots of securities for which a current sell would generate a capital loss. Once the portfolio is fully invested and aligned to its target, the tax-management process can begin. This entails monitoring the holdings regularly for losses as well as undesirable changes in risk exposures. The portfolio manager then executes sell transactions to realize capital losses and acquires suitable replacement securities. This activity is even more valuable when there are realized capital gains elsewhere in the investor's overall portfolio.

The frequency of loss harvesting will fluctuate depending on the market and interest rate environment. A trade is made only if the tax benefit well exceeds the transaction costs. The systematic TLH strategy is intended to capture losses while maintaining a portfolio's risk profile in terms of criteria such as duration, yield, credit quality, and state (where applicable). All trades executed for tax-loss reasons should adhere to applicable trading procedures, including "best execution." Each trade should be executed in the context of current ladders-trading workflows, with proper price-sensitivity considerations in place.

There are significant downsides to approaching tax-loss harvesting on an ad hoc basis in response to investor requests. Investors tend to ask for TLH in December, when the holidays challenge access to liquidity; worse, rates have only been highest in December twice since 1992 (as of June 2022). Furthermore, clients holding the same CUSIPs often submit requests at different times, resulting in the sales of small positions and higher transaction costs. On the other hand, the systematic approach offers the ability to capture losses at the highest rates throughout the year, with maximum access to liquidity and programmatic execution.

The tax benefit varies based on the character of the realized capital loss (short or long term) and the account holder's combined (federal, state, and local) capital gains tax rate. Depending on the investor's goals, specific tax-management techniques for fixed income securities may include:

- » Amortizing premiums to reduce the annual taxes due on coupon payments
- » Deferring discounts until maturity, when they're recognized as ordinary income
- » Offsetting short-term gains elsewhere in the portfolio with realized short- or long-term losses in the laddered bond portfolio

## Quantifying the benefit

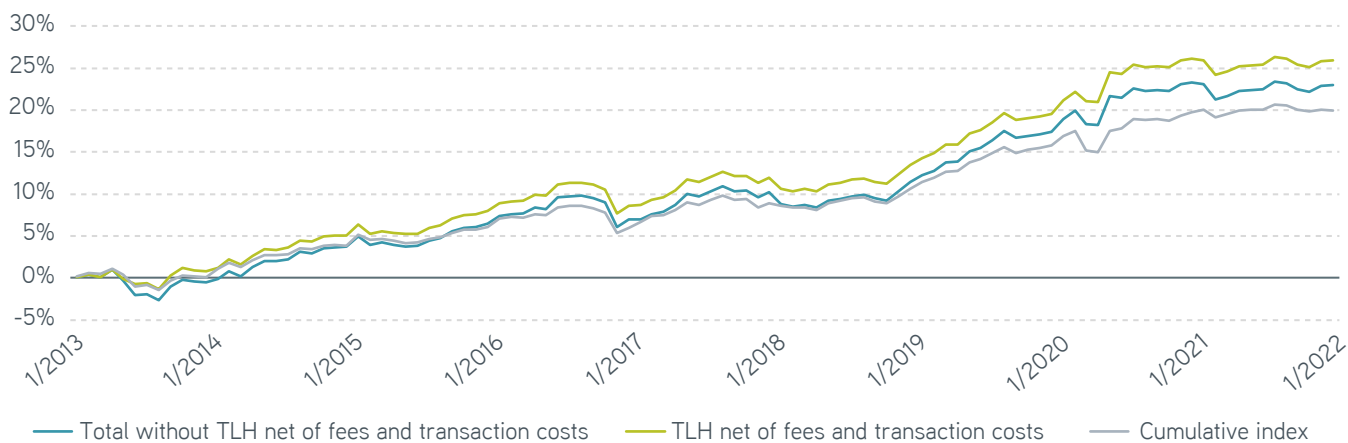
To put some numbers behind the expected alpha generated from systematic TLH, we backtested nine years of performance (2013 through 2021) using a one-to-10-year laddered municipal portfolio as an example (see figure 1), benchmarked against the Bloomberg MM Short-Intermediate 1–10 Year Index. Using the process outlined below, the portfolio generated an additional tax alpha—defined as the excess return generated through techniques that may reduce the investor’s taxable income—of 294 basis points (bps), or 33 bps annually.

We also backtested nine years of performance (2013 through 2021) using a one-to-10-year laddered corporate portfolio (see figure 2), benchmarking it against the ICE BofA 1–10 Year US Corporate Bond Index. Using the same process outlined above, the portfolios generated an additional tax alpha of 159 bps over nine years, or 18 bps annually.

## Conclusion

A systematic process for TLH helps managers efficiently identify appropriate securities and perform a thorough analysis of their liquidity, yield, and structure on a bond-by-bond basis while avoiding triggering potential wash sales. By taking this approach, investors can benefit from improved after-tax performance.

**FIGURE 1:** HYPOTHETICAL 1-TO-10-YEAR LADDERED MUNI PORTFOLIO VS. BLOOMBERG MM SHORT-INTERMEDIATE 1–10 YEAR, BACKTESTED, 1/31/2013–12/31/2021



Criteria	Assumptions
Minimum bond credit quality	AAA
Investment horizon	Nine years
Portfolio size	\$1 million
Portfolio rebalance	Daily
Turnover limit	None
Transaction costs	0.12 bps per year
Management fees	16.00 bps per year
Reinvestment	Coupon payments are reinvested in the ladder; deferred taxes are compounded at the laddered portfolio's return
Tax-loss trigger	1%–2%
Wash-sale rule	Applied at the CUSIP level
Cost basis (premium bonds)	Constant yield amortization of premium (partially offsets coupon income for after-tax performance)
Cost basis (discount bonds)	Discount recognized as income at maturity

Source: Parametric, 12/31/2021. Backtested performance is hypothetical and provided for illustrative purposes only. It does not reflect the experience of any investor and should not be relied on to make investment decisions. Performance is not intended to project any strategy offered by Parametric. Performance is presented net of estimated management fees and transaction costs and reflects the reinvestment of any earnings. Returns do not reflect additional fees that may be charged by a client's custodian or other advisor, which would reduce the returns presented. It is not possible to invest directly in an index. Indexes do not reflect the deduction of fees or expenses. All investments are subject to the risk of loss. See disclosures for additional information.

**FIGURE 2:** HYPOTHETICAL 1-TO-10-YEAR LADDERED CORPORATE PORTFOLIO VS. ICE BOFA 1-10 YEAR US CORPORATE BOND INDEX, BACKTESTED, 1/31/2013–12/31/2021



Criteria	Assumptions
Minimum bond credit quality	BBB-
Investment horizon	Nine years
Portfolio size	\$1 million
Portfolio rebalance	Daily
Turnover limit	None
Transaction costs	0.12 bps per year
Management fees	16.00 bps per year
Reinvestment	Coupon payments are reinvested in the ladder; deferred taxes are compounded at the laddered portfolio's return
Tax-loss trigger	1% to 2%
Wash-sale rule	Applied at the CUSIP level
Cost basis (premium bonds)	Constant yield amortization of premium (partially offsets coupon income for after-tax performance)
Cost basis (discount bonds)	Discount recognized as income at maturity

Source: Parametric, 12/31/2021. Backtested performance is hypothetical and provided for illustrative purposes only. It does not reflect the experience of any investor and should not be relied on to make investment decisions. Performance is not intended to project any strategy offered by Parametric. Performance is presented net of estimated management fees and transaction costs and reflects the reinvestment of any earnings. Returns do not reflect additional fees that may be charged by a client's custodian or other advisor, which would reduce the returns presented. It is not possible to invest directly in an index. Indexes do not reflect the deduction of fees or expenses. All investments are subject to the risk of loss. See disclosures for additional information.

## 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.

## Disclosures

This material is intended for investment professionals and their clients. Investors should contact their financial advisor with any questions about the strategies discussed herein.

This material may not be reproduced, in whole or in part, without the written consent of Parametric. Parametric and its affiliates are not responsible for its use by other parties.

This information is intended for informational purposes and details investment strategies and opportunities identified by Parametric. Opinions and estimates offered constitute our judgment and are subject to change without notice, as are statements of financial market trends, which are based on current market conditions. We believe the information provided here is reliable but do not warrant its accuracy or completeness. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. The views and strategies described may not be suitable for all investors. Past performance is not indicative of future results. Investing entails risks, and there can be no assurance that Parametric will achieve profits or avoid incurring losses. Parametric and Morgan Stanley do not provide legal, tax, or accounting advice or services. Clients should consult with their own tax or legal advisor prior to entering into any transaction or strategy described herein. Additional information is available on request.

Charts, graphs, and other visual presentations and text information were derived from internal, proprietary, or service vendor technology sources or may have been extracted from other firm databases. As a result, the tabulation of certain reports may not precisely match other published data. Data may have originated from various sources, including but not limited to ICE Bloomberg, MSCI/Barra, FactSet, or other systems and programs. Parametric makes no representation or endorsement concerning the accuracy or propriety of information received from any third party.

This material contains hypothetical, backtested, or model performance data, which may not be relied on for investment decisions. Hypothetical, backtested, or model performance results have many inherent limitations, some of which are described below. No representation is being made that any account will or is likely to achieve profits or losses similar to those shown. In fact, there are frequently sharp differences between hypothetical performance results and the actual results subsequently achieved by any particular trading program. One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. In addition, simulated trading does not involve financial risk, and no simulated trading record can completely account for the impact of financial risk in actual trading. For example, the ability to withstand losses or to adhere to a particular trading program in spite of trading losses are material points that can also adversely affect actual trading results. There are numerous other factors related to the markets in general or to the implementation of any specific trading program that cannot be fully accounted for in the preparation of hypothetical performance results and all of which can adversely affect actual trading results.

Model or target portfolio information presented, including, but not limited to, objectives, allocations, and portfolio characteristics, is intended to provide a general example of the strategy's implementation. Hypothetical returns are unaudited, are calculated in US dollars using the internal rate of return, and may reflect the reinvestment of dividends, income, and other distributions but may exclude transaction costs and advisory fees and do not take individual investor taxes into consideration. The deduction of such fees would reduce the results shown. Detailed backtested and model portfolio data is available upon request.

No security, discipline, or process is profitable all of the time. There is always the possibility of loss of principal.

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. A portion of municipal bond income may be subject to alternative minimum tax. Income may be subject to state and local tax.

The views expressed in this report are those of portfolio managers and are current only through the date on this page. These views are subject to change at any time based on market or other conditions, and Parametric disclaims any responsibility to update such views. These views may not be relied on as investment advice and, because investment decisions are based on many factors, may not be relied on as an indication of trading intent on behalf of any Parametric strategy. This commentary may contain statements that are not historical facts—referred to as “forward-looking statements.” The strategy's actual future results may differ significantly from those stated in any forward-looking statement, depending on factors such as changes in securities or financial markets or general economic conditions.

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 (e.g., natural disasters, health crises, terrorism, conflicts, and social unrest) that affect markets, countries, companies, or governments. It is difficult to predict the timing, duration, and potential adverse effects (e.g., portfolio liquidity) of events. Accordingly, you can lose money investing in an SMA.

Comparing the management or performance of an SMA to a mutual fund or exchange-traded fund is not a true and equal comparison due to differences in guidelines and restrictions, fees and expenses, and cash flows, among other factors. Because of these disparities, investors and clients are cautioned against undue reliance on SMA-fund performance comparisons.

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 to achieve more favorable tax treatment or to sell a security to create tax losses. Prospective investors should consult with a tax or legal advisor before making any investment decision.

Index data provided for comparison purposes. It is not possible to invest directly in an index.

The Bloomberg MM Short-Intermediate 1–10 Year Index is a market-value-weighted index that covers the short and intermediate components of the Bloomberg Barclays Municipal Bond Index. “Bloomberg” is a trademark and service mark of Bloomberg Finance LP (“Bloomberg”). “Barclays” is a trademark and service mark of Barclays Bank Plc, used under license. Bloomberg, its affiliates, or its licensors own all proprietary rights in the Bloomberg Barclays indexes. Neither Bloomberg nor Barclays Bank Plc or its affiliates (collectively, Barclays) guarantees the timeliness, accuracy, or completeness of any data or information related to the Bloomberg Barclays indexes. This strategy is not sponsored or endorsed by Bloomberg or Barclays, and each makes no representations regarding the content of this material.

The ICE BofA 1–10 Year US Corporate Bond Index measures the performance of US corporate bonds with a time to maturity between one and 10 years. The index data referenced herein is the property of ICE Data Indices LLC (“ICE”), its affiliates, and its third-party suppliers. ICE, its affiliates, and its third-party suppliers accept no liability in connection with its use.

All contents ©2022 Parametric Portfolio Associates® LLC. All rights reserved. Parametric Portfolio Associates® and Parametric® are trademarks registered in the US Patent and Trademark Office and certain foreign jurisdictions.

Parametric is headquartered at 800 Fifth Avenue, Suite 2800, Seattle, WA 98104. For more information regarding Parametric and its investment strategies or to request a copy of Parametric's Form ADV, please contact us at 206 694 5500 or visit [www.parametricportfolio.com](http://www.parametricportfolio.com).

35450 | 8.8.2022

©2022 Parametric Portfolio Associates® LLC

NOT FDIC INSURED. OFFER NOT A BANK GUARANTEE. MAY LOSE VALUE.  
NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY. NOT A DEPOSIT.

SEATTLE ▶ BOSTON ▶ MINNEAPOLIS ▶ NEW YORK ▶ WESTPORT

