

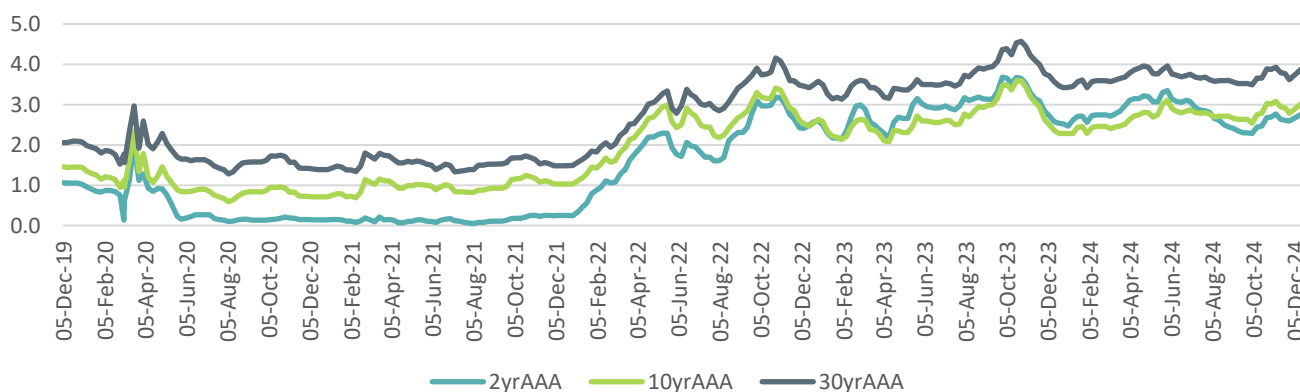
Higher Rates for Longer Doesn't Mean Forget Munis

- After-tax municipal bond yields are attractive, especially for those in higher income tax brackets
- Another strong year of supply should offer good entry points, especially when considering typical seasonal trends
- Yields already priced for higher inflation are in better position to offset negative economic shocks and weaker equity market returns

Now that the Federal Reserve has dialed back the pace of rate cuts, investors may feel less urgency to consider fixed income. Yields are higher than where they were before the Fed started hiking in 2022, but if they aren't likely to decline significantly, then an investor is left with a low, single digit return from the income and little chance for additional price return. This type of expectation pales in comparison to the 20%+ annual returns investors have experienced with the S&P 500 in each of the past two years and even significantly higher returns from other alternatives like Bitcoin. However, we think investors should remember that fixed income isn't meant to produce equity-like returns. As part of a diversified portfolio, the steady income component of bonds can provide a good source of stability to offset the volatility of other riskier market segments like equities. While we may be past the peak in yields for this cycle, yields are still attractive, especially on an after-tax basis for those subject to high income tax rates and the expectation for another year of heavy supply in the municipal market may present an opportune time to invest in tax-exempt bonds.

Municipal yields most likely peaked in late 2023, barring any inflationary spike that requires the Fed to begin hiking rates again. While benchmark AAA municipal yields are 14% below the highs achieved in October 2023, they remain close to 50% higher than the previous five-year average. The pace of cuts may have slowed, but the trajectory is still for lower rates unless economic growth strengthens and inflation spikes. A 3.94% AAA tax-exempt yield equates to more than 6.3% for an individual in the highest income tax bracket. Yields get even more attractive as an investor moves down the quality spectrum. Therefore, yields around current levels remain attractive for investors with high income tax liabilities.

AAA Muni Yields



Source: Bloomberg, December 2024

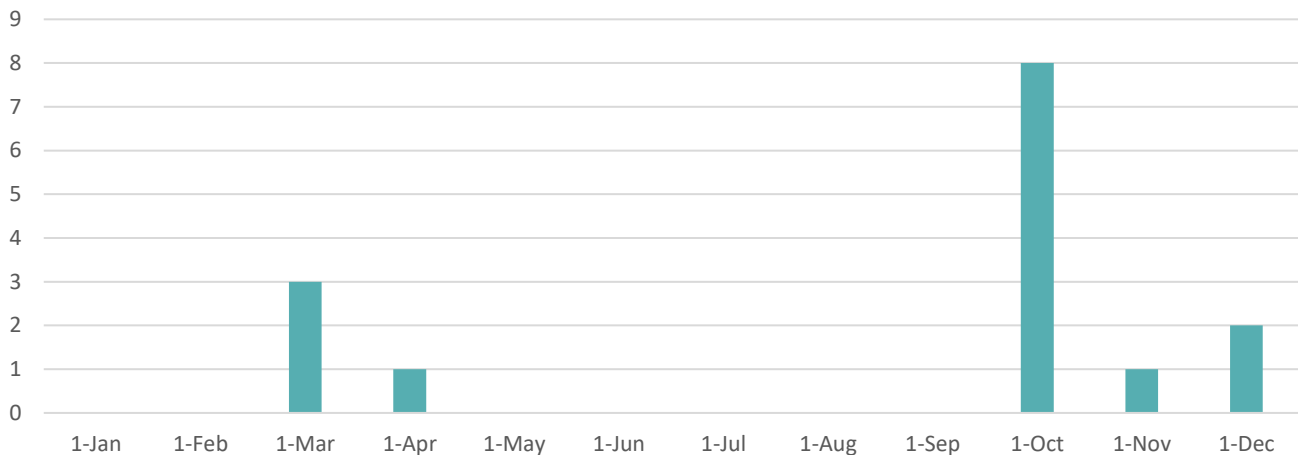
The comments, opinions and estimates contained herein are for informational purposes only and sets forth our views as of this date. The underlying assumptions and these views are subject to change without notice. Past performance or any prediction or forecast is not indicative of futures results. No assurance can be given that any forecast or target will be achieved.

For Institutional and Registered Representative Use Only. Not for public viewing or distribution.

Market consensus is for another strong year of bond issuance after a record year of supply in 2024. Given the added uncertainty of impending tax code changes that are most likely to occur later in the year due to other priorities like immigration and tariffs, many issuers could try and come to market in the first half of the year to avoid any potential noise around tax policy. However, issuance could also exceed normal averages toward the end of the year if any tax code changes directly impact particular sectors or the entire market, similar to what was experienced in 2017. This may be a real possibility for certain sectors of the municipal market that have been targeted in the past, like higher education and other areas of private activity, that may rush to market as the window closes on their ability to issue tax exempt debt. The municipal market easily absorbed record supply of more than \$500 billion in 2024 due to a return of mutual fund inflows, positive ETF flows, and the consistent demand of individual buyers. Yet, there are no guarantees that these trends will continue and further Treasury rate volatility or distractions from more favorable alternatives could at the very least moderate money invested into the municipal bond market. These dynamics could create periods of opportunity to buy tax-exempt bonds at attractive yields in 2025.

There have historically been months in each year that see more supply. That doesn't mean that those are always the best months to invest. However, if those periods of supply spikes coincide with modest demand and rate volatility, they can be very favorable times to get invested. In the past 20 years, there have been certain months when more supply was issued in that month than any other month that year. In 2017, the last year when tax policy changes had a direct effect on the municipal market, the largest month of supply was in December as issuers rushed to advance refund outstanding bonds before it would no longer be allowed. In our opinion, it is unknown when the best value will occur in 2025 and current yields levels already offer value, but an understanding of historical seasonal trends is another variable that can add value on the margin.

Number of years where each month had the largest issuance



Source: Bloomberg, December 2024

Interest rates may be staying higher for longer, but that doesn't mean investors should avoid municipal bonds. The Fed has signaled a slowing pace of Fed Funds Rate increases, and as a result rates may remain elevated and move sideways in coming months. In our view, any significant move higher would require a reversal in recent inflationary and/or employment trends. Higher municipal bond supply projections and market volatility could present opportunities to add attractive yields in 2025. Now that higher inflation is priced into bond yields, municipal bonds likely have negative correlation to equity returns and may outperform corporate bonds if the economic outlook weakens. Negative stock market performance would put fixed income, especially higher quality municipal bonds back in favor and the lower but at least positive returns may be a welcome outcome for many investors.

The comments, opinions and estimates contained herein are for informational purposes only and sets forth our views as of this date. The underlying assumptions and these views are subject to change without notice. Past performance or any prediction or forecast is not indicative of futures results. No assurance can be given that any forecast or target will be achieved.

For Institutional and Registered Representative Use Only. Not for public viewing or distribution.

Contributors

Matthew Caggiano

Co-head of Municipal Bond
Management

James Dearborn

Head of Municipal Bond
Research

Chad Farrington

Co-head of Municipal Bond
Management

Important risk information

Bond and loan 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. Floating rate loans tend to be rated below-investment grade and may be more vulnerable to economic or business changes than issuers with investment-grade credit. 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.

Index performance is shown for illustrative purposes only and is not intended to represent historical or to predict future performance of any specific investment or DWS's. DWS products may have experienced negative performance over these time periods. Past performance is not indicative of future results. Investments are subject to risk, including possible loss of investment capital.

The comments, opinions and estimates contained herein are for informational purposes only and sets forth our views as of this date. The underlying assumptions and these views are subject to change without notice. Past performance or any prediction or forecast is not indicative of futures results. No assurance can be given that any forecast or target will be achieved.

The material was prepared without regard to the specific objectives, financial situation or needs of any particular person who may receive it. It is intended for informational purposes only and it is not intended that it be relied on to make any investment decision. It is for professional investors only. It does not constitute investment advice or a recommendation or an offer or solicitation and is not the basis for any contract to purchase or sell any security or other instrument, or for DWS and its affiliates to enter into or arrange any type of transaction as a consequence of any information contained herein.

Please note that this information is not intended to provide tax or legal advice and should not be relied upon as such. DWS does not provide tax, legal or accounting advice. Please consult with your respective experts before making investment decisions.

This document contains forward looking statements. Forward looking statements include, but are not limited to assumptions, estimates, projections, opinions, models and hypothetical performance analysis. No representation or warranty is made by DWS as to the reasonableness or completeness of such forward looking statements. Past performance is no guarantee of future results.

The information contained in this document is obtained from sources believed to be reliable. DWS does not guarantee the accuracy, completeness or fairness of such information. All third party data is copyrighted by and proprietary to the provider. DWS has no obligation to update, modify or amend this document or to otherwise notify the recipient in the event that any matter stated herein, or any opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate.

Investments are subject to various risks. Detailed information on risks is contained in the relevant offering documents.

For Investors in Canada: No securities commission or similar authority in Canada has reviewed or in any way passed upon this document or the merits of the securities described herein and any representation to the contrary is an offence. This document is intended for discussion purposes only and does not create any legally binding obligations on the part of DWS Group. Without limitation, this document does not constitute an offer, an invitation to offer or a recommendation to enter into any transaction. When making an investment decision, you should rely solely on the final documentation relating to the transaction you are considering, and not the [document – may need to identify] contained herein. DWS Group is not acting as your financial adviser or in any other fiduciary capacity with respect to any transaction presented to you. Any transaction(s) or product(s) mentioned herein may not be appropriate for all investors and before entering into any transaction you should take steps to ensure that you fully understand such transaction(s) and have made an independent assessment of the appropriateness of the transaction(s) in the light of your own objectives and circumstances, including the possible risks and benefits of entering into such transaction. You should also consider seeking advice from your own advisers in making this assessment. If you decide to enter into a transaction with DWS Group you do so in reliance on your own judgment. The information contained in this document is based on material we believe to be reliable; however, we do not represent that it is accurate, current, complete, or error free. Assumptions, estimates and opinions contained in this document constitute our judgment as of the date of the document and are subject to change without notice. Any projections are based on a number of assumptions as to market conditions and there can be no guarantee that any projected results will be achieved. Past performance is not a guarantee of future results. The distribution of this document and availability of these products and services in certain jurisdictions may be restricted by law. You may not distribute this document, in whole or in part, without our express written permission.

For investors in Bermuda: This is not an offering of securities or interests in any product. Such securities may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda. Additionally, non-Bermudian persons (including companies) may not carry on or engage in any trade or business in Bermuda unless such persons are permitted to do so under applicable Bermuda legislation.

No liability for any error or omission is accepted by DWS. Opinions and estimates may be changed without notice and involve a number of assumptions which may not prove valid.

This document may not be reproduced or circulated without DWS's written authority.

Please note that this information is not intended to provide tax or legal advice and should not be relied upon as such. DWS does not provide tax, legal or accounting advice. Please consult with your respective experts before making investment decisions.

This document is intended for discussion purposes only and does not create any legally binding obligations on the part of DWS and/or its affiliates. Without limitation, this document does not constitute investment advice or a recommendation or an offer or solicitation and is not the basis for any contract to purchase or sell any security or other instrument, or for DWS to enter into or arrange any type of transaction as a consequence of any information contained herein. The information contained in this document is based on material we believe to be reliable; however, we do not represent that it is accurate, current, complete, or error free. Assumptions, estimates and opinions contained in this document constitute our judgment as of the date of the document and are subject to change without notice. Past performance is not a guarantee of future results. Any forecasts provided herein are

For Institutional and Registered Representative Use Only. Not for public viewing or distribution.

based upon our opinion of the market as at this date and are subject to change, dependent on future changes in the market. Any prediction, projection or forecast on the economy, stock market, bond market or the economic trends of the markets is not necessarily indicative of the future or likely performance. Investments are subject to risks, including possible loss of principal amount invested.

War, terrorism, sanctions, economic uncertainty, trade disputes, public health crises and related geopolitical events have led and in the future may lead to significant disruptions in US and world economies and markets, which may lead to increased market volatility and may have significant adverse effects on the fund and its investments. The brand DWS represents DWS Group GmbH & Co. KGaA and any of its subsidiaries, such as DWS Distributors, Inc., which offers investment products, or DWS Investment Management Americas Inc. and RREEF America L.L.C., which offer advisory services.

DWS is the brand name of DWS Group GmbH & Co. KGaA and its subsidiaries under which they do business. The DWS legal entities offering products or services are specified in the relevant documentation. DWS, through DWS Group GmbH & Co. KGaA, its affiliated companies and its officers and employees (collectively "DWS") are communicating this document in good faith and on the following basis.

This document is for information/discussion purposes only and does not constitute an offer, recommendation or solicitation to conclude a transaction and should not be treated as investment advice.

Not all products and services are available in all jurisdictions.

This document is intended to be a marketing communication, not a financial analysis. Accordingly, it may not comply with legal obligations requiring the impartiality of financial analysis or prohibiting trading prior to the publication of a financial analysis

Neither DWS Group nor any of its affiliates, gives any warranty as to the accuracy, reliability or completeness of information which is contained. Except insofar as liability under any statute cannot be excluded, no member of the DWS Group, the Issuer or any officer, employee or associate of them accepts any liability (whether arising in contract, in tort or negligence or otherwise) for any error or omission or for any resulting loss or damage whether direct, indirect, consequential or otherwise suffered. The "full faith and credit" guarantee of the US government applies to the timely repayment of interest, and does not eliminate market risk. Because of the rising US government debt burden, it is possible that the US government may not be able to meet its financial obligations or that securities issued by the US government may experience credit downgrades.

The brand DWS represents DWS Group GmbH & Co. KGaA and any of its subsidiaries such as DWS Distributors, Inc., which offers investment products, or DWS Investment Management Americas, Inc. and RREEF America L.L.C., which offer advisory services.

© 2025 DWS Group GmbH & Co. KGaA. All rights reserved. 104154_1.0 (01/25)