

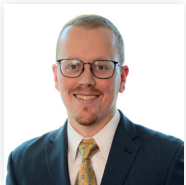
US Private Families Should Revisit How Munis Fit Within a Broader Diversification Strategy

Published April 10, 2026

Many US private families reduced US tax-exempt municipal bond (muni) exposure in recent years as low yields, poor performance, and elevated volatility weakened the case for tax-exempt fixed income. That rationale now looks much less compelling. With yields higher and a more meaningful tax advantage of munis, tax-exempt bonds should play a larger role in the portion of the portfolio intended to diversify equity risk.

At the same time, effective portfolio construction in this segment of the portfolio should still balance tax-efficient income with broader objectives, including liquidity, downside protection, and diversified sources of return. In that context, some families with acute liquidity or spending needs may still benefit from modest exposure to cash or taxable fixed income, while selected diversifying strategies, including certain hedge fund strategies, can complement munis and support stronger after-tax portfolio resilience.

Why some US private families have soured on munis



TJ Scavone
Senior Investment
Director, Capital
Markets Research

Historically, munis have delivered stronger after-tax returns than comparable taxable bonds, making them a core fixed income allocation for high-net-worth US private families (Figure 1). Most US private families have long allocated the majority, if not all, of their fixed income exposure to munis, though some have maintained modest positions in taxable alternatives such as cash, US Treasury securities, and investment-grade credit.

In recent years, however, several structural headwinds have challenged that position. Relative to larger segments of the investment-grade bond universe, particularly the US Treasury market, the muni market is smaller and less liquid, with a larger retail investor base. As a result, munis have at times been more vulnerable to liquidity squeezes and sharper bouts of volatility during periods of market stress. During the COVID-driven sell-off in early 2020, for example, some investors were forced to sell at a discount, crystallizing losses at an inopportune moment.

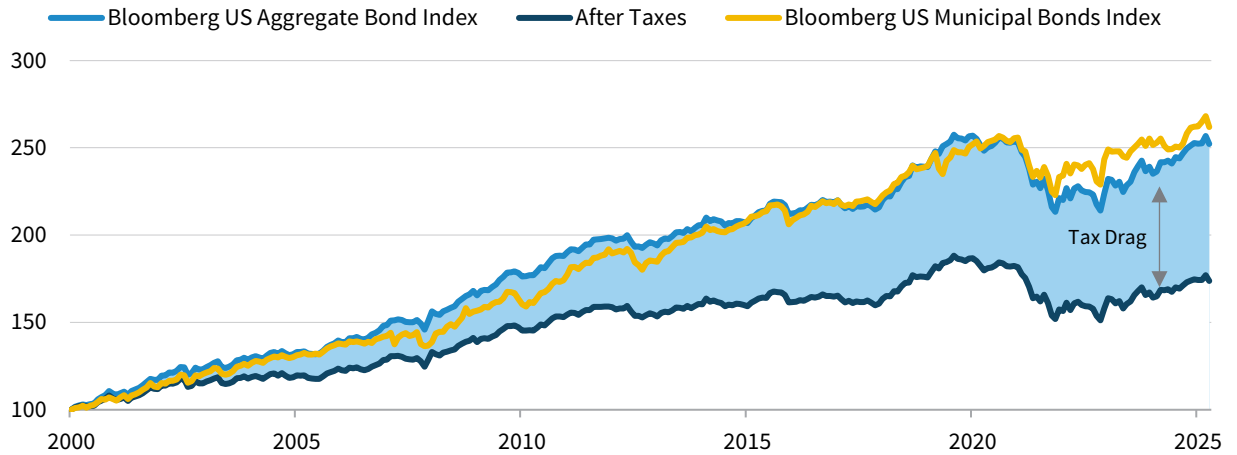
Meanwhile, persistently low yields in the years following the Global Financial Crisis (GFC) reduced the relative tax advantage of munis. More recently, the sharp rise in bond yields and the return of positive stock-bond correlations weakened fixed income performance more broadly and



Katherine Armstrong
Managing Director,
Private Client Practice

Figure 1 Munis have consistently outperformed taxable equivalents after accounting for federal income taxes

December 31, 2000 – March 31, 2026 • Cumulative Performance • December 31, 2000 = 100



Sources: Bloomberg Index Services Limited, Tax Foundation, and Thomson Reuters Datastream.

Notes: **Past performance is not a reliable indicator of future results. All financial investments involve risk. Depending on the type of investment, losses can be unlimited.** After-tax returns are based on the historical US income tax rate for the highest tax bracket. Neither capital gains taxes or state and local taxes are taken into account.

reduced its effectiveness as a diversifier. Together, these developments made it understandable that some families reduced their overall fixed income exposure and shifted a portion of their remaining allocations away from munis.

Cambridge Associates' data suggest this shift has been meaningful. The median US private family client held nearly 90% of fixed income and cash assets in munis in 2015; by 2025, that figure had fallen to below 70%.

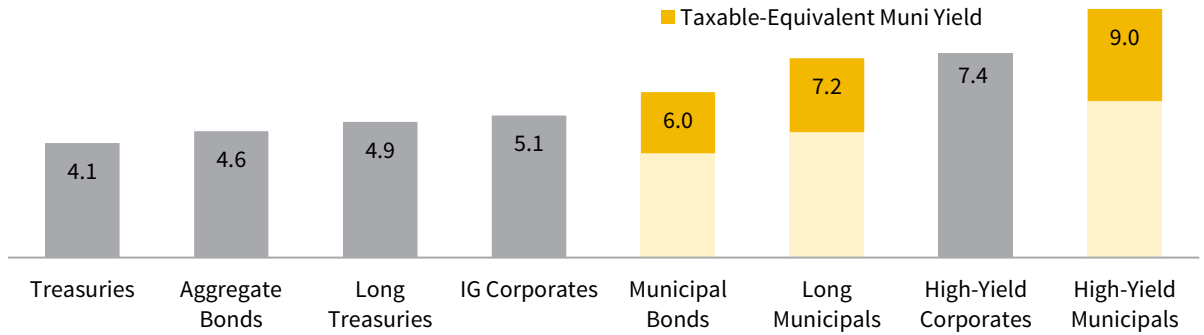
Why munis are regaining their edge

With the benefit of hindsight, reducing muni exposure was a defensible decision. The past five years were unusually challenging for munis, with low starting yields, rising interest rates, and elevated volatility weighing on returns. Over this period, munis returned 0.8%, significantly outperforming Treasuries at -1.8% but trailing cash at 1.8% after taxes, despite considerably higher volatility. Some alternative strategies, including certain hedge funds, also delivered stronger after-tax outcomes. The subset of hedge funds we view as most investable outperformed munis by nearly 400 basis points (bps) per year after taxes and net of fees.

Today, the environment is more favorable. Higher yields have improved return prospects across fixed income and provide a larger cushion against future volatility than investors had in recent years. They have also significantly increased the tax advantage of munis. As yields rise, the value of the tax exemption increases, resulting in greater tax savings for US private families in high tax brackets (Figure 2).

Figure 2 The rise in US bond yields has boosted the tax advantage offered by munis

As of March 31, 2026 • Percent (%)



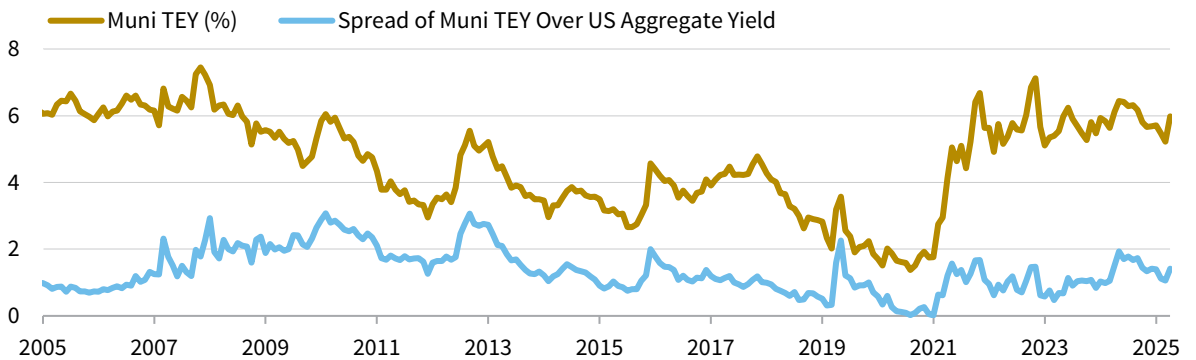
Sources: Bloomberg Index Services Limited, Intercontinental Exchange Inc., and Thomson Reuters Datastream.

Notes: The taxable-equivalent yield adjusts the nominal yield by the current federal personal income tax rate of 37% for the highest tax bracket. Neither capital gains taxes or state and local taxes are taken into account.

The Bloomberg Municipal Bond Index currently yields 3.8%, translating to a taxable-equivalent yield (TEY) of 6.0% for top-bracket US private families, which are well above levels seen for most of the past decade and higher than comparable taxable bonds. On a pre-tax basis, muni yields may not appear especially compelling relative to taxable bonds by historical standards. After adjusting for taxes, however, the value proposition improves. The TEY spread versus the Bloomberg Aggregate Bond Index is currently 140 bps, in the 85th percentile of the past ten years (Figure 3). Historically, higher TEY spreads have been associated with stronger after-tax excess returns for munis.

Figure 3 Muni taxable-equivalent yields are elevated

December 31, 2005 – March 31, 2026



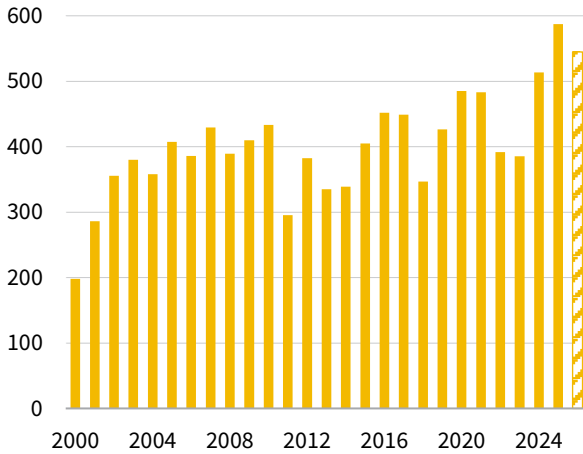
Sources: Bloomberg Index Services Limited and Thomson Reuters Datastream.

Notes: Taxable-equivalent yields (TEY) are based on the historical US income tax rate for the highest tax bracket. Neither capital gains taxes or state and local taxes are taken into account.

These elevated TEY spreads come even as sector credit fundamentals remain strong. State and local governments maintain healthy balance sheets, revenues continue to outpace expenditures, rainy-day fund balances are near record highs, and public pension funding ratios have improved for a third consecutive year (Figure 4). The expiration of COVID-era federal support and new federal policy changes present emerging headwinds, particularly for sectors such as hospitals and higher education. Even so, the broader municipal credit backdrop remains solid.

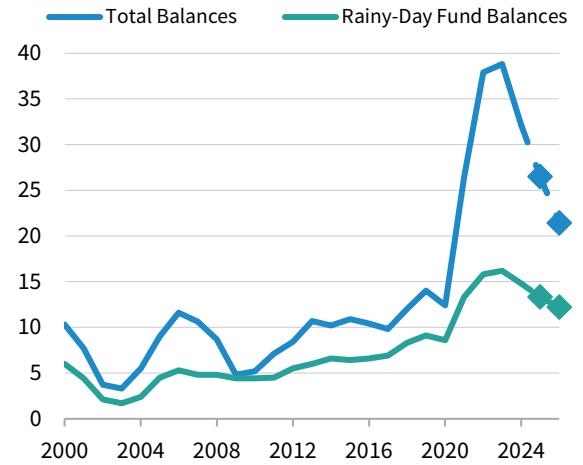
Figure 4 While issuance will likely remain elevated, issuers are well positioned to manage funding pressure

Tax-exempt municipal bond issuance
2000–26 • US\$B



State balance sheets

2000–26 • As a percent of expenditures (%)



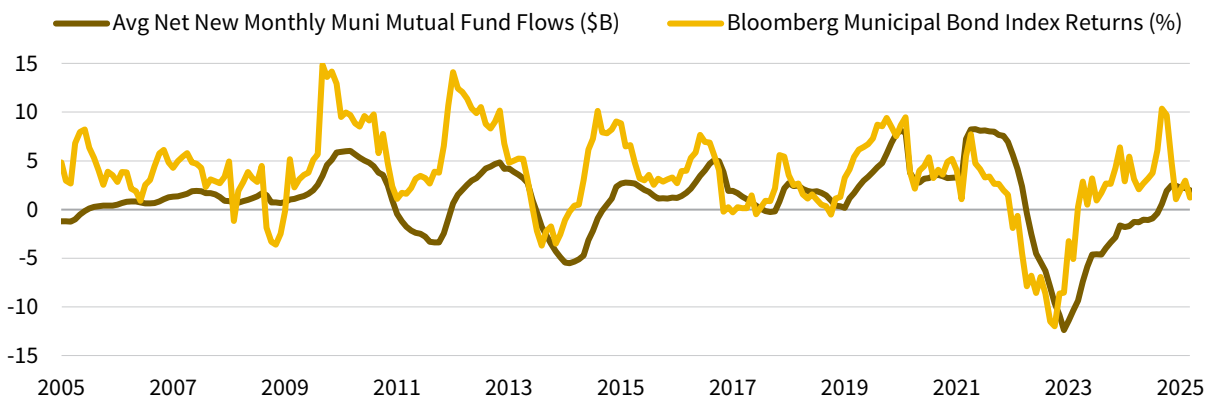
Sources: J.P Morgan Securities, Inc., NASBO Fall 2025 Fiscal Survey, and Securities Industry and Financial Markets Association.
Notes: Data for state balances for 2025 and 2026 are forecasts. Total balances are the sum of rainy-day fund balances and general fund balances. Projected issuance for 2026 is based on J.P. Morgan forecasts.

Reduced federal support is also contributing to higher issuance, and supply is likely to remain elevated as municipalities continue to fund capital needs. Attractive after-tax yields, sound fundamentals, and a healthy macro backdrop should nevertheless support healthy retail demand. Inflows into muni separately managed accounts (SMAs), mutual funds, and exchange-traded funds (ETFs) accelerated in 2025, and the market appears well positioned to absorb additional supply (Figure 5).

Recent events provide an early test of that thesis. The Iran War has weighed on risk assets and pressured fixed income, echoing some of the dynamics seen in 2022, albeit on a smaller scale. So far, munis have held up relatively well compared to Treasury securities. While near-term risks remain elevated, the medium-term case for munis to play a larger role in after-tax portfolio resilience remains intact.

Figure 5 Improved demand from retail investors is a positive for muni performance

December 31, 2005 – February 28, 2026 • Rolling 12-month



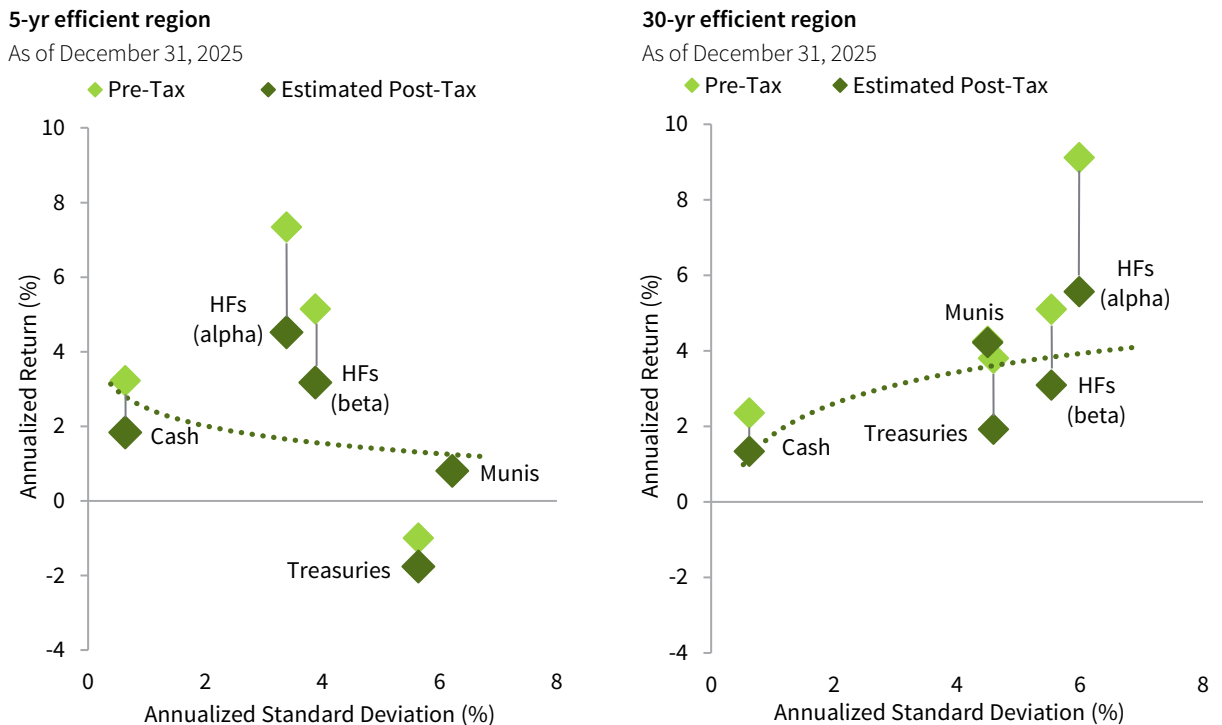
Sources: Bloomberg Index Services Limited, Investment Company Institute, and Thomson Reuters Datastream.

How munis fit within a broader diversification strategy

Munis should remain the core holding for US private families within the portion of the portfolio intended to diversify equity risk. With yields higher and the tax advantage of munis more meaningful again, the case for allocating more to less tax-efficient alternatives has weakened. While those assets can still play narrower complementary roles in some cases, the tax cost of holding them should carry greater weight in portfolio construction than it did in recent years. For those that reduced muni exposure, the case for rebuilding it has become materially stronger.

Figure 6 compares munis with a range of less tax-efficient alternatives, including US cash, US Treasury securities, and hedge funds. It plots volatility on the x-axis and both pre- and after-tax returns on the y-axis over the past five and 30 years to show how the return, risk, and tax trade-offs among these assets have shifted over time. Over the past five years, the tax cost of moving away from munis was not especially meaningful in the context of the broader return and risk environment: cash and many hedge fund strategies held up better after taxes, while US Treasury securities performed worse than munis even on a pre-tax basis. However, that period appears more unusual than representative. Over the past 30 years, munis delivered approximately 4.2%

Figure 6 Current conditions align more closely with munis' long-term, after-tax advantage



Sources: Bloomberg Index Services Limited, Cambridge Associates LLC, Hedge Fund Research, Inc., Standard's & Poor's, and Thomson Reuters Datastream. Third-party data are provided "as is" without any express or implied warranties.

Notes: Asset classes represented by: ICE BofA 0-3 Month US Treasury Bill Index (Cash), Bloomberg Municipal Bond Index (Munis), Bloomberg US Treasury Index (Treasuries), HFRI Fund of Funds Composite Index (HFs [beta]). HFs (alpha) performance represents the median fund performance of a historical subset of high-conviction hedge fund strategies. HF manager returns are reported net of fees. Post-tax returns are determined using the tax adjustment model from our equilibrium long-term capital market assumptions.

after taxes, outperforming cash at 1.3%, Treasuries at 1.9%, and even a broad hedge fund index at 3.1%, while doing so with much lower volatility than hedge funds. The key exception is a carefully selected group of hedge fund managers capable of generating persistent after-tax alpha. The median performance of the subset of hedge funds we view as most investable has exceeded muni returns by 135 bps per year after taxes over the past 30 years, net of fees.

Taken together, this analysis suggests US private families should maintain a higher bar for shifting too much away from munis, given higher-than-expected after-tax returns prospects. This does not mean less tax-efficient alternatives no longer have a role. Cash, Treasuries, and other high-quality taxable bonds may still be appropriate for some US private families with near-term liquidity or spending needs, particularly because cash and Treasuries have been more resilient in some periods of market stress (Figure 7). But periods when munis underperform Treasuries have typically been relatively modest and/or brief, with the notable exception of the GFC, and US private families should not underestimate the cumulative tax drag of holding those assets over time. In many cases, a leaner cash position paired with access to a line of credit may offer a more tax-efficient way to preserve flexibility while maintaining meaningful muni exposure.

Figure 7 Asset class returns during S&P 500 price declines of 19% or more
Percent (%)

Start Date	End Date	Returns (%)						Yield Spread Widening (bps) Munis - Treasuries
		S&P	Cash	Treasuries	Munis	HFRI	HFs (alpha)	
07/31/98	08/31/98	-19.3	0.4	2.7	1.5	-7.5	-5.0	27
03/31/00	03/31/01	-27.8	6.1	12.0	10.9	-2.1	14.8	62
05/31/01	09/30/01	-26.4	1.2	6.1	3.5	-1.9	1.1	56
12/31/01	07/31/02	-32.0	1.0	6.1	6.0	-0.2	-0.7	21
08/31/02	09/30/02	-19.3	0.2	2.7	2.2	-0.4	-0.3	13
09/30/07	10/31/08	-45.8	2.7	8.6	-2.9	-16.4	-13.6	220
10/31/08	11/30/08	-25.2	0.1	5.3	0.3	-2.6	-3.0	70
12/31/08	02/28/09	-27.6	0.0	-3.4	4.2	0.3	1.0	-95
04/30/11	09/30/11	-19.4	0.0	7.8	6.0	-7.2	-7.9	14
09/30/18	12/31/18	-19.8	0.6	2.6	1.7	-4.9	-5.6	17
02/29/20	03/31/20	-33.9	0.2	2.9	-3.6	-7.6	-9.2	126
12/31/21	09/30/22	-25.4	0.6	-13.1	-12.1	-6.9	-5.9	3
Average		-26.8	1.1	3.3	1.5	-4.8	-2.9	44.3
Success Rate		0.0	100.0	83.3	75.0	8.3	25.0	

Sources: Bloomberg L.P., Hedge Fund Research, Inc., Intercontinental Exchange, Inc., Standard & Poor's, and Thomson Reuters Datastream. Third-party data are provided "as is" without any express or implied warranties.

Notes: **Past performance is not a reliable indicator of future results. All financial investments involve risk. Depending on the type of investment, losses can be unlimited.** HFs (alpha) performance represents the median fund performance of a historical subset of high-conviction hedge fund strategies. HF manager returns are reported net of fees.

Selected hedge fund strategies have a stronger case than other less tax-efficient alternatives because they can provide differentiated return streams and, in some environments, greater resilience when traditional fixed income is under pressure, as seen in 2022 and in more recent, less severe equity market corrections. Even so, the hurdle remains high: these strategies should complement, rather than replace, meaningful muni exposure and are most compelling when implemented through carefully selected managers with a demonstrated ability to generate persistent after-tax alpha.¹ This aligns with our previous advice to build exposure across a range of diversifier strategies²—a principle that remains relevant, since no single strategy performs well across all environments.

Conclusion

We believe US private families should continue to anchor the portion of the portfolio intended to diversify equity risk with munis, while being more selective about allocations to cash, Treasuries, and other taxable fixed income, given the shift in after-tax trade-offs. Selected hedge fund strategies also remain an attractive complement to fixed income today, particularly when accessed through managers with a demonstrated ability to generate persistent after-tax alpha. For US private families that have drifted away from munis in recent years, the after-tax math has shifted decisively back in their favor. Now is the time to reassess and, in many cases, rebuild exposure. ■

- 1 Identifying tax-efficient fund structures is a critical component of manager selection, as the after-tax return differential between tax-efficient and tax-inefficient hedge funds can be substantial.
- 2 Please see TJ Scavone, “Heightened Inflation Risks Favor Building More Resilient Portfolios” Cambridge Associates LLC, September 2025.

Drew Boyer also contributed to this publication.

Index Disclosures

Bloomberg US Aggregate Bond Index

The Bloomberg US Aggregate Bond Index is a broad-based benchmark that measures the performance of the US investment-grade, taxable bond market. The index includes securities such as US Treasuries, government-related and corporate bonds, mortgage-backed securities, asset-backed securities, and commercial mortgage-backed securities that meet specified maturity, liquidity, and quality requirements.

Bloomberg US Municipal Bond Index

The Bloomberg US Municipal Bond Index measures the performance of the US dollar-denominated, long-term, tax-exempt bond market. The index is designed to cover the investment-grade US municipal bond market and includes municipal bonds that meet specified maturity, liquidity, and quality requirements.

Bloomberg US Treasury Index

The Bloomberg US Treasury Index measures the performance of US dollar-denominated, fixed-rate, nominal debt issued by the US Treasury. The index includes public obligations of the US Treasury with remaining maturities that meet specified index requirements. Index returns do not reflect deduction of fees, expenses, or transaction costs.

Index Disclosures cont.

HFRI Fund of Funds Composite Index

The HFRI Fund of Funds Composite Index is a global, equal-weighted index designed to reflect the performance of funds of hedge funds. The index includes fund of funds managers that invest with multiple underlying hedge fund managers and report returns to HFR Database. The index is intended to provide a broad measure of the fund of funds segment of the hedge fund universe.

ICE BofA 0-3 Month US Treasury Bill Index

The ICE BofA 0-3 Month US Treasury Bill Index tracks the performance of US dollar-denominated Treasury bills publicly issued by the US government in its domestic market with remaining maturities of less than three months. The index is intended to measure short-term US government bill performance.

S&P 500 Index

The S&P 500 Index is an unmanaged, market capitalization-weighted index consisting of 500 leading publicly traded US companies. The index is designed to measure the performance of the large-cap segment of the US equity market.

Copyright © 2026 by Cambridge Associates. All rights reserved.

This document, including but not limited to text, graphics, images, and logos, is the property of Cambridge Associates and is protected under applicable copyright, trademark, and intellectual property laws. You may not copy, modify, or further distribute copies of this document without written permission from Cambridge Associates ("CA"). You may not remove, alter, or obscure any copyright, trademark, or other proprietary notices contained within this document. This document is confidential and not for further distribution, unless and except to the extent such use or distribution is in accordance with an agreement with CA or otherwise authorized in writing by CA.

This report is provided for informational purposes only. The information does not represent investment advice or recommendations, nor does it constitute an offer to sell or a solicitation of an offer to buy any securities. Any references to specific investments are for illustrative purposes only. The information herein does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Information in this report or on which the information is based may be based on publicly available data. CA considers such data reliable but does not represent it as accurate, complete, or independently verified, and it should not be relied on as such. Nothing contained in this report should be construed as the provision of tax, accounting, or legal advice.

Past performance is not a reliable indicator of future results. All financial investments involve risk. Depending on the type of investment, losses can be unlimited.

Any information or opinions provided in this report are as of the date of the report, and CA is under no obligation to update the information or communicate that any updates have been made. Information contained herein may have been provided by third parties, including investment firms providing information on returns and assets under management, and may not have been independently verified.

Cambridge Associates is a global group of companies that provide investment management, investment advisory, research, and performance reporting services. For the purposes of this document "us", "the Firm", "our", "we", "CA", "Cambridge Associates", and similar terms refer collectively to the following list of companies. Similarly, unless otherwise stated the figures provided are the combined total for the following list of companies: Cambridge Associates, LLC (a registered investment adviser with the US Securities and Exchange Commission, a Commodity Trading Adviser registered with the US Commodity Futures Trading Commission and National Futures Association, and a Massachusetts limited liability company with offices in Arlington, VA; Boston, MA; Dallas, TX; New York, NY; and San Francisco, CA), Cambridge Associates Limited (a registered limited company in England and Wales, No. 06135829, that is authorized and regulated by the UK Financial Conduct Authority in the conduct of Investment Business, reference number: 474331); Cambridge Associates GmbH (authorized and regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht ("BaFin"), Identification Number: 155510), Cambridge Associates Asia Pte Ltd (a Singapore corporation, registration No. 200101063G, which holds a Capital Market Services License to conduct Fund Management for Accredited and/or Institutional Investors only by the Monetary Authority of Singapore), Cambridge Associates Limited, LLC (a Massachusetts limited liability company with a branch office in Sydney, Australia, a registered investment adviser with the US Securities and Exchange Commission and registered in several Canadian provinces ARBN 109 366 654), Cambridge Associates Investment Consultancy (Beijing) Ltd (a wholly owned subsidiary of Cambridge Associates, LLC which is registered with the Beijing Administration for Industry and Commerce, registration No. 110000450174972), Cambridge Associates (Hong Kong) Private Limited (a Hong Kong Private Limited Company licensed by the Securities and Futures Commission of Hong Kong to conduct the regulated activity of advising on securities to professional investors), Cambridge Associates AG (a Swiss Limited Company, registration number CHE-115.905.353, that is authorized and Regulated by the Swiss Financial Market Supervisory Authority (FINMA), and Cambridge Associates (DIFC) Limited (incorporated as a Private Company and regulated by the Dubai Financial Services Authority, License Number: FO11237).