Vanguard

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Active Fixed Income Perspectives Q1 2026: **Income in focus**

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Key takeaways

Performance

Fixed income delivered strong, broad-based performance in 2025. The Bloomberg U.S. Treasury Index and Bloomberg U.S. Corporate High Yield Index returned 6.32% and 8.62%, respectively, highlighting the strength across sectors and credit quality. Robust starting yields delivered steady income, while falling front-end rates boosted price returns. Municipal bonds staged an impressive comeback in the final four months of the year.

The big picture

Fixed income faces a favorable environment this year, with a modest U.S. economic uptick, steady global growth, and easing inflation pressures. Yields remain compelling, and intermediate duration exposure offers superior return potential compared with cash. With bond markets remaining stable, income will be the primary driver of bond returns in 2026.

Our approach

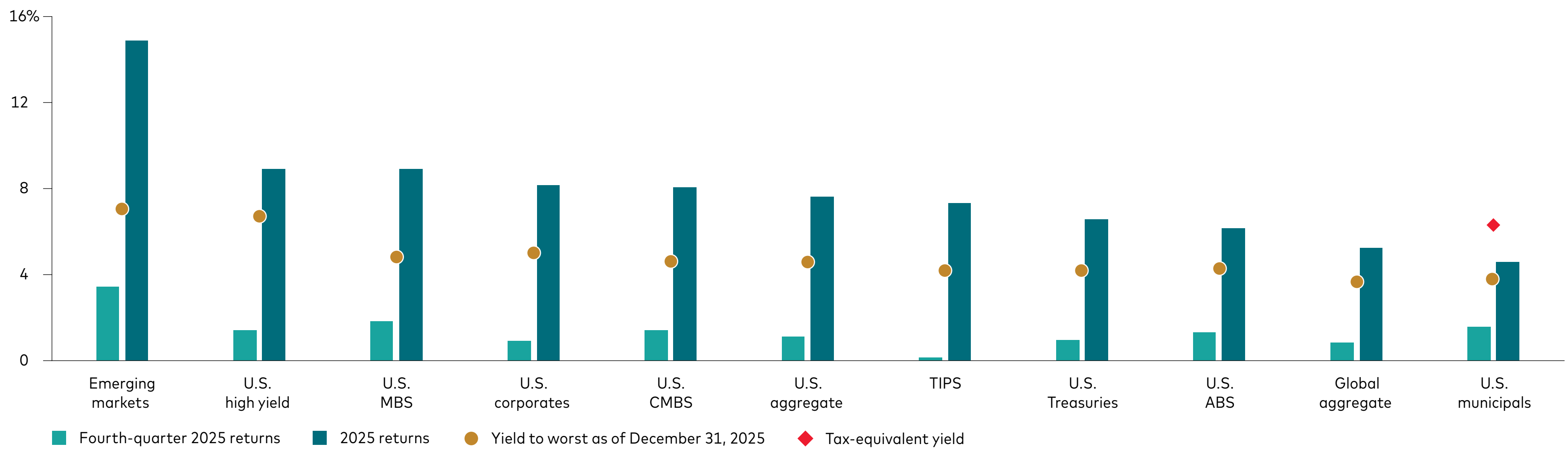
The Federal Reserve will likely approach additional rate cuts cautiously if the economy grows as expected. We are currently neutral on U.S. duration and are positioned for further yield curve steepening across several markets. In credit, discipline and precision will be needed—fundamentals are sound, yet spreads have little room to tighten with higher expected supply. Municipal bonds offer compelling opportunities further out the curve and down in quality, where selection across credits and call option structures can add value.

Carry is crowned

Taxable bonds delivered markedly strong performance across sectors and rating categories in 2025. Price gains came from falling Treasury yields and curve steepening as front-end rates priced in the Fed cuts that materialized late in the year. Credit spreads recovered from April's tariff-driven sell-off and held in a narrow range through year-end.

Coupon payments drove returns, which highlights the significance of normalized yield levels across the curve relative to recent history. Carry—the return from income, roll down, and other factors—became king in 2025, and we expect its reign to continue in 2026.

Fixed income sector returns and yields



Notes: The municipal tax-equivalent yield is calculated using a 40.8% tax bracket, which includes a 37.0% top federal marginal income tax rate and the 3.8% net investment income tax to fund Medicare. Yield to worst represents the lowest yield possible for a security given the current price, considering both call dates and maturity.

Indexes used in chart: The following indexes are represented in the sector returns and yields chart: J.P. Morgan EMBI Global Diversified Index, Bloomberg U.S. Corporate High Yield Index, Bloomberg U.S. Mortgage Backed Securities Index, Bloomberg U.S. Corporate Index, Bloomberg CMBS: Erisa Eligible Index, Bloomberg U.S. Aggregate Index, Bloomberg U.S. Treasury Inflation-Linked Bond Index (Series-L), Bloomberg U.S. Treasury Index, Bloomberg U.S. Asset-Backed Securities Index, Bloomberg Global Aggregate Index, and Bloomberg U.S. Municipal Index.

Sources: Bloomberg indexes and JPMorgan, as of December 31, 2025.

Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

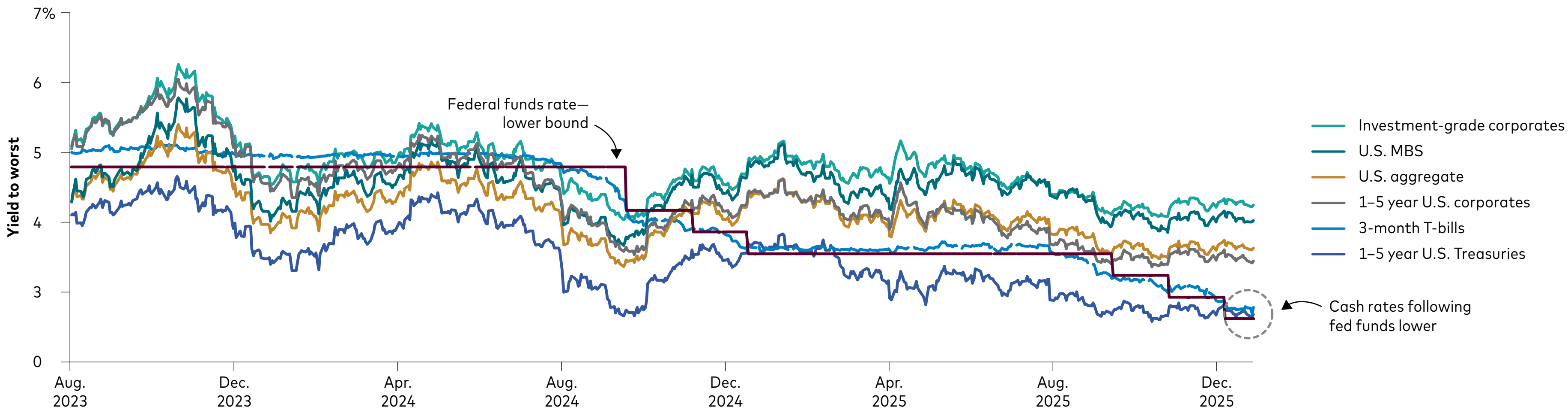
Cash is no longer king

The broader bond market last year delivered returns that were more than double those of cash instruments. The combination of attractive yields and heightened economic uncertainty translated into strong demand for fixed income. Inflows to bond mutual funds and ETFs remained robust and steady, totaling more than $600 billion for the year. (Morningstar data as of December 31, 2025.)

The composition of cash-flow activity between bond funds and money market funds has continued to shift. In 2023, for example, money market funds took in more than 80% of all fixed income flows. Last year the mix was 50/50.

With money market yields falling alongside Fed rate cuts, investors can now find better yields by extending further out the yield curve. Historically, bonds have outperformed cash over the long term, a trend we anticipate will continue. Should the Fed cut rates further in 2026, bond yields relative to cash would become even more appealing, likely boosting investor demand and supporting bond performance.

Cash dethroned: Bond yields versus T-bills



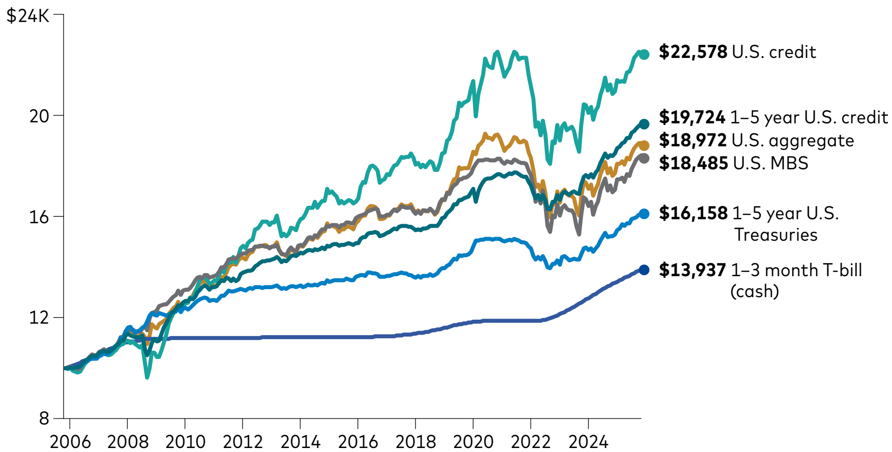
Source: Bloomberg, as of December 31, 2025.

Indexes used in chart: The following indexes are represented: Bloomberg U.S. Corporate Index, Bloomberg U.S. Mortgage Backed Securities Index, Bloomberg U.S. Aggregate Bond Index, Bloomberg U.S. Corporate 1–5 Years Index, Bloomberg U.S. Treasury Bill 1–3 Month Index, Bloomberg U.S. Treasury 1–5 Years Index.

Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

We expect high-quality core exposure to continue to deliver attractive income and provide opportunities for diversification against potential downdrafts in equities. Credit-focused strategies should be supported by a favorable economy and are valuable complements to a core allocation to increase overall yield. For investors looking beyond cash, our outlook supports a modest increase in duration and credit risk.

Paying off: Duration and credit have outperformed cash over the past 20 years



Source: Morningstar, as of December 31, 2025.

Indexes used in chart: The following indexes are represented: Bloomberg U.S. Credit Index, Bloomberg U.S. Credit 1–5 Years Index, Bloomberg U.S. Aggregate Bond Index, Bloomberg U.S. Agency Fixed Rate Mortgage-Backed Securities Index, Bloomberg U.S. Treasury 1–5 Years Index, and Bloomberg U.S. Treasury Bill 1–3 Month Index.

Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

A brighter backdrop

Globally, expansionary fiscal policy and less restrictive monetary policy will provide market support this year. Solid growth alongside more modest inflation should also slow the pace of central bank activity. In 2025, global central banks lowered policy rates more than 120 times combined. We expect fewer changes and more divergence in policy paths.

In the U.S., we expect real GDP growth to push above 2%, driven by continued AI investment and a fiscal boost from the One Big Beautiful Bill Act. We are monitoring two key economic areas:

- **Inflation.** Supportive fiscal and monetary policy can offset the ongoing drag from tariffs. We don't expect a significant spillover effect from tariffs on long-term inflation expectations, but we do see inflation remaining modestly elevated above the Fed's target through the balance of the year.
- **Labor.** The labor market is transitioning to a new normal, marked by reduced supply and demand for workers. We think the labor market will stabilize over the course of 2026, with the unemployment rate declining to 4.2% by year-end. This balance between supply and demand, however, remains fragile and presents downside risks.

Portfolio positioning and strategy

U.S. rates and yield curve

The U.S. Treasury curve steepened dramatically in 2025, as the yield on the 2-year note declined 75 basis points (bps) and the 30-year yield held steady. The additional yield premium between the front end and the long end reached 1.34%, the highest level in more than four years. While the term premium has risen substantially over recent years, it remains somewhat below the levels that persisted prior to the 2008 global financial crisis.

The Fed has now largely completed its risk management easing. We see limited scope for additional easing, which leaves a narrower range of potential outcomes for the Fed than in prior years. Markets expect around two additional cuts in 2026. That is a reasonable expectation, considering that the Fed has been weighing the employment side of its mandate more heavily than the inflation side.

We see a low probability for rate hikes this year, and this bias will likely remain with the next Fed chair. But we note that the December Fed meeting drew three dissenting votes, which creates additional uncertainty surrounding the upcoming changes to the Fed's leadership.

Our outlook calls for 10-year yields to hold within a range around current levels. We are neutral on U.S. duration but see a tactical opportunity for some additional steepening in the curve. The term premium may increase for several reasons, including increased global issuance, uncertainty around the next Fed chair, and the scale of future tariff revenues following the Supreme Court ruling on President Trump's use of emergency powers. Meanwhile, the potential to price in more Fed easing if data disappoint or expectations of a more dovish Fed chair could lead to moderately lower front-end yields, widening the differential between 2-year and 10-year yields in the near term.

U.S. yield curve steepens with improving growth outlook

Notes: The Leading Economic Index, produced by The Conference Board, is designed to be a predictive tool that anticipates—or "leads"—turning points in the business cycle by around seven months. It is made up of 10 economic components.

Sources: Bloomberg and The Conference Board, as of December 31, 2025.

We also see opportunities to position long Treasury Inflation-Protected Securities (TIPS) versus Treasuries (that is, long breakevens), where expectations for future inflation have fallen to around 2.25% at the 10-year point. We believe these levels represent a benign pricing of future inflation risk despite persistent above-target inflation and a Fed that is positioned to remain dovish.

In agency mortgage-backed securities (MBS), we remain overweight and find the greatest value in select subsectors that have lagged in the broader sector spread tightening in recent months, specifically agency commercial MBS, hybrid adjustable-rate mortgages, select collateralized mortgage obligation structures, and non-agency residential MBS.

If U.S. yields were to move significantly outside of their recent range, it would likely be because of either a sharp rise in recession risks, which would drive the curve steeper and pull yields meaningfully lower, or an acceleration of growth, which would put upward pressure on inflation and pull yields higher across the curve, driven by the long end. Of these possibilities, we believe the odds are tilted more toward the first scenario.

Non-U.S. rates

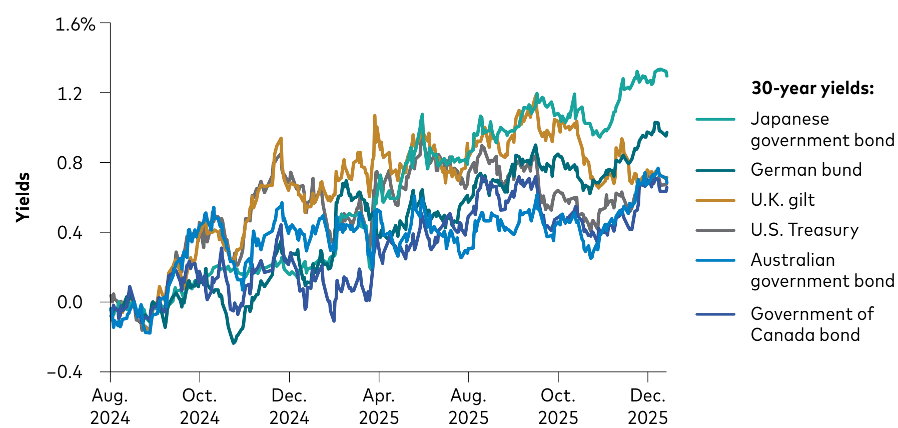
Outside the United States, inflation continues to moderate and growth has remained steady, as the most severe risks related to tariff policies have largely been averted. Looking ahead, we anticipate increasing divergence in both fiscal and monetary policies among major economies, which may offer relative value opportunities across different regions.

Thematically, the steepening trend observed in most developed markets remains intact. Investors are increasingly concerned about fiscal sustainability in these markets, leading them to demand higher term premiums for longer-duration bonds.

We believe the global term premium will continue to rise, and we are positioned for further yield curve steepening. We are focused on three areas in particular:

- **Europe.** A change in Dutch pension fund regulation in 2026 means that the Netherlands will move from a defined benefit to a defined contribution system. That will result in lower demand for long-duration fixed income at a time of growing sovereign issuance—a mismatch of supply and demand that we believe will lead to further curve steepening.
- **Germany.** We expect a significant ramp-up in government bond supply will put upward pressure on yields, particularly at the long end of the curve. We remain positioned for bund underperformance against 30-year gilts, as we observe more favorable issuance dynamics in the U.K.
- **Japan.** We continue to hold an underweight to Japanese government bonds. However, we recognize that following the sharp rise in yields in the fourth quarter, much of our expectation for higher interest rates in Japan has now been discounted.

Long-term bond yields rising globally



Source: Bloomberg, as of December 31, 2025.

Credit outlook

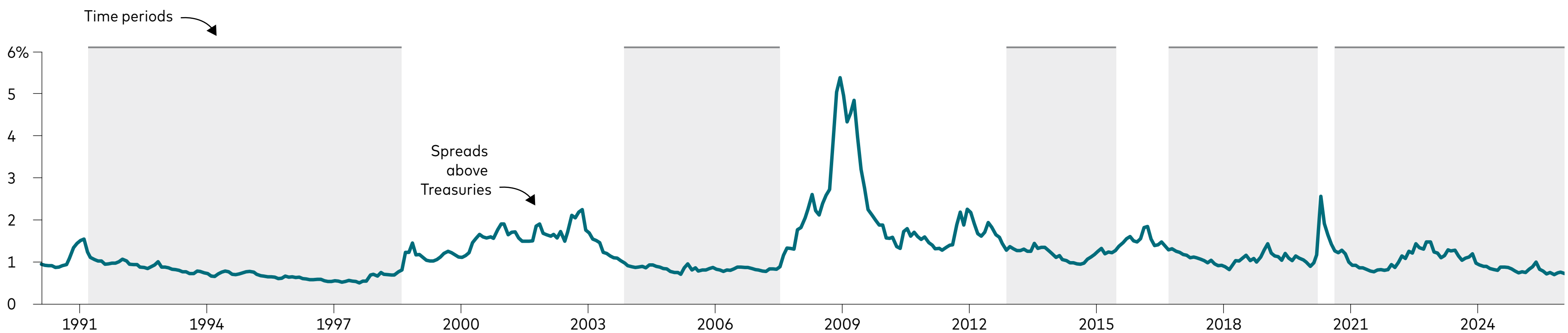
Credit spreads widened slightly in the fourth quarter but ended 2025 near where they started. Among major credit segments, emerging markets (EM) performance stood out and was one of our higher-conviction allocations this past year. Hard currency EM bonds benefited from appealing valuations and strong inflows, while local currency EM returns were boosted by EM currency strength versus the dollar.

We expect credit to outperform government bonds again this year. All-in yields are attractive across sectors and underlying fundamentals remain broadly healthy. Spread levels remain low but reflect a supportive market backdrop and strong investor demand. Generating outperformance will depend heavily on identifying credit trends among issuers and relative value opportunities among individual issues.

Supply and demand

If recession risks remain low, we see little likelihood of significant spread widening, but we do expect a headwind from a meaningful increase in new issuance over the course of the year. This uptick in overall bond supply may keep spreads from narrowing much further.

Credit spreads can remain stable for long periods of time



Notes: This chart shows the movement of credit spreads as represented by the Bloomberg U.S. Credit Index and indicates when spreads where low and stable in the five different market environments, as listed below.

Time period	Feb. 1991–July 1998	Oct. 2003–June 2007	Oct. 2012–May 2015	Aug. 2016–Feb. 2020	July 2020–Dec. 2025
Average spread level	76 bps	85 bps	120 bps	109 bps	99 bps
Spread range	73 bps	26 bps	49 bps	61 bps	77 bps

Source: Bloomberg, as of December 31, 2025.

For investment-grade corporates, industry estimates call for gross supply to increase roughly 10% from last year to $2 trillion and for net supply to rise 23% to $800 billion. Gross supply has remained robust in recent years. However, net supply has been negative, which has provided additional support to keep spreads low. This year's increase is largely attributed to continued robust investment in AI and a projected rise in merger and acquisition activities.

We believe investor appetite for high-quality yield will persist, and we view any widening as a chance to increase our exposure to preferred issuers at more attractive prices.

Lower-rated credit continues to benefit from favorable economic conditions, providing investors with increased confidence to pursue higher yields. We expect this trend to persist in the coming quarters, though it is important to note that spread levels for high-yield corporate and lower-rated EM bonds are near cyclical lows, which constrains the potential for further broad-based tightening.

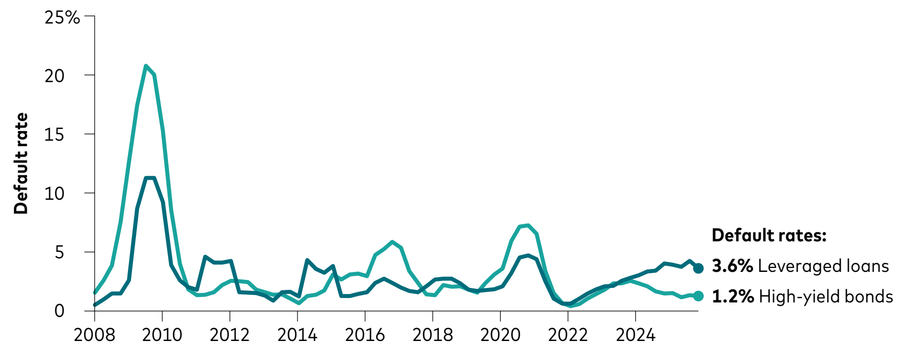
Cracks on the edges

Last year's stresses in private credit markets, while not broad, showed that elevated valuations provide little compensation in the event of a market downturn. Default rates in private credit and leveraged loans, while still relatively low, have increased in recent years. Default rates in high-yield bonds have remained low and relatively stable.

For example, the trailing 12-month default rate for private credit rose from 1.4% at the end of 2022 to 5.9% by the third quarter of 2025, according to Fitch Ratings. Leveraged loan defaults rose from a rate of 1.8% at the end of 2022 to 3.6% at the end of 2025, per Bank of America. Meanwhile, high-yield bond default rates ended the year low and stable, at 1.2%.

These trends align with the relative credit-quality differences across the three segments of lower-rated corporate credit, and provide an indication for the behavior of each as market conditions evolve.

High-yield bond and leveraged loan default rates



Sources: Fitch Ratings and Bank of America, as of December 31, 2025.

Taxable strategy map

Rates

Exposure	View	Strategy
U.S. duration and curve	• The market's pricing of expected cuts may materialize unless we see upside surprises to growth. • Longer-maturity yields are unlikely to move lower outside of recessionary scenarios.	• We remain strategically neutral on U.S. duration. • We are positioned for a steeper curve • We see value in 10-year inflation breakevens.
Global duration and curve	• Rising term premium pressures could hold long-end yields higher. • Increased supply is expected to drive bund underperformance. • Dutch pension fund reform is likely to force a steeper euro curve.	• We are positioned for a steeper curve in Europe and Canada. • We remain constructive on long-end U.K. gilts outperforming German bunds.
Mortgage-backed securities (MBS)/ agencies	• Fundamental and technical drivers are all positive for MBS. • Generic MBS valuations are rich, but subsectors offer value.	• We are overweight agency CMBS, hybrid ARMs, and select CMO structures, and underweight generic agency pass–through exposure.

Credit

Exposure	View	Strategy
Investment-grade corporates	• Higher net supply is expected from AI capex and higher M&A activity. • Fundamentals remain supportive; valuations remain stretched.	• We are overweight banks versus industrials driven by lower supply, strong fundamentals, and reduced regulation. • Q1 supply may push spreads wider, allowing opportunities to add attractive names at better valuations.
High-yield corporates	• Spread levels offer limited compensation for downside risks. • Issuance related to AI and M&A is expected to increase in 2026. • Security selection offers the best opportunities to outperform in this market.	• We remain cautious overall on generic high-yield beta exposure. • Our highest-conviction views remain at the issuer level.
Emerging markets	• The sector is benefiting from strong supply-demand technicals. • Lower-quality issuers have shown improvements. • Fundamentals remain stable, but valuations warrant more selective exposure as Q1 supply picks up.	• At current spread levels, our focus remains on country and security selection. • We are cautious on lower-quality issuers trading at narrow spread levels relative to their underlying fundamentals.
Structured products	• 2026 is expected to be a record supply year. • Spread levels are tight, but the sector offers attractive carry.	• We are overweight subordinated ABS tranches with strong structural protection. • CLO AAAs and AAs continue to provide good carry and spread pickup relative to ABS and 1–5 year corporates.

Cutting through the AI noise

AI's impact is expected to be transformative, and we are likely in the early innings of a global AI arms race. Investor focus continues to be on AI's potential and expected effects—on productivity, corporate profit margins, and revenue streams—as well as how the AI ecosystem will be financed.

McKinsey estimates that by 2030 the global AI infrastructure buildout will cost between $5 trillion and $8 trillion. These are staggering estimates, with the ultimate cost depending on the pace of AI adoption and technology uplift.

Hyperscalers have commented that compute capacity continues to lag demand, and that power is the largest limiting factor governing compute growth. Power is likely to be the main bottleneck, driven by the need for reliable, 24/7 power sources as new capacity additions beyond 2026 are likely to be constrained.

Funding the capex surge

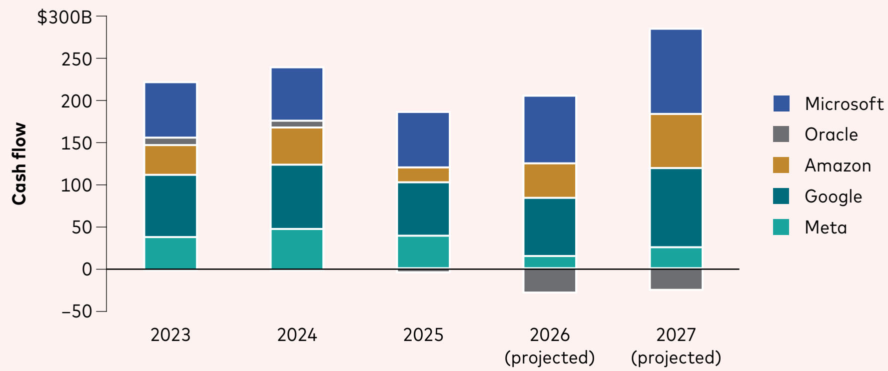
The buildout of AI infrastructure accelerated last year and has shown no signs of slowing. Hyperscaler-driven capital expenditures are expected to continue to grow at a torrid pace in 2026, with Bloomberg sell-side consensus estimates calling for nearly 30% year-over-year growth after an estimated 60% year-over-year increase in 2025.

Hyperscaler balance sheets and free cash flow are healthy. While some capex has been funded with cash flow, hyperscalers have accessed various fixed income markets for financing, including the investment-grade primary market. In 2025, investment-grade corporate bond issuance by hyperscalers surpassed $130 billion, compared with roughly $20 billion in 2024.

Looking ahead to this year, hyperscaler bond issuance may be even higher, though it depends on free cash flow generation and competing capital allocation needs.

Hyperscaler free cash flow

(Sell-side consensus estimates)



Note: Data are calendar-year-adjusted to align reporting periods for Microsoft and Oracle.
Source: Bloomberg, as of December 31, 2025.

Adding value through our selective investment process

We see both risks and opportunities with a fair amount of dispersion across the AI opportunity set, requiring careful due diligence to identify winners and losers across the corporate universe. Technicals associated with the sizable bond issuance required to fund AI infrastructure, coupled with general investment-grade funding needs, may cause investment-grade bond spreads to widen temporarily.

This may present opportunities for our active fixed income group to express selective constructive views on hyperscalers, AI adopters, and adjacent players after carefully considering the attractiveness of the risk/reward.

Looking ahead, investors need to monitor and understand the following areas:

- The evolution of AI hardware, specifically semiconductor chips.
- Model capabilities and the rate of change of improvement—breakthroughs toward superintelligence.
- AI adoption and the impact on productivity and corporate margins, how is this being measured—i.e., AI savings in dollar terms.
- Power supply trends.

Municipal bonds

Long-term perspective bears fruit

Investors who maintained their municipal bond exposures through 2025 reaped the rewards. The Bloomberg Municipal Bond Index returned 3.92% since the end of August, outperforming the Bloomberg U.S. Aggregate Bond Index by 1.72 percentage points. This marked a meaningful turnaround after a nearly flat return for the first eight months of the year.

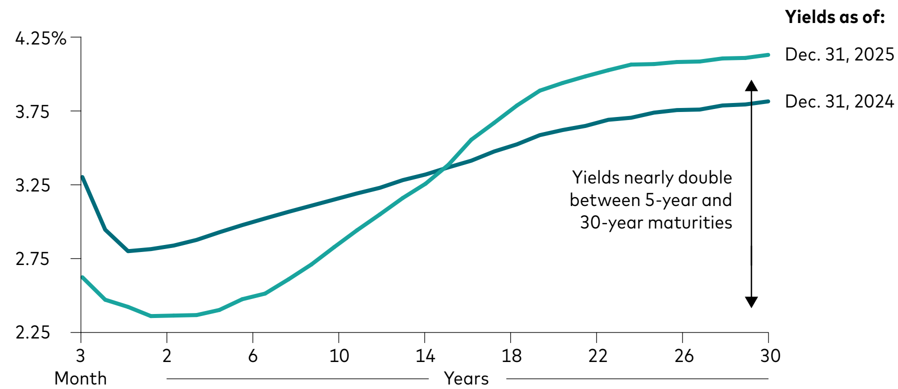
It was a case study that can offer valuable guidance going forward. While supply and demand technicals can impact returns temporarily, these effects are often cyclical and eventually reverse course. The benefits of persistence were prevalent not only at the client level, but the manager level as well. Practicing patience by holding true to long-term strategy and positioning amid the past year's volatility delivered material outperformance through the last few months of 2025.

Bend it like munis

The muni yield curve's twists were the core story for the asset class in 2025, and its current shape sets the stage for 2026. Yields at the front of the AAA muni curve compressed due to rate cuts and systematic purchasing from separately managed accounts. This left yields flat up front, as they had been at the end of 2024 (though they're now materially lower), with just 9 bps of yield pickup between 3-month and 10-year maturities.

But after the 10-year mark, the curve takes a dramatic bend upward, offering the greatest yield pickup to 20-year bonds (118 bps) recorded in the past decade.

Historical steepness in the AAA muni curve to end 2025



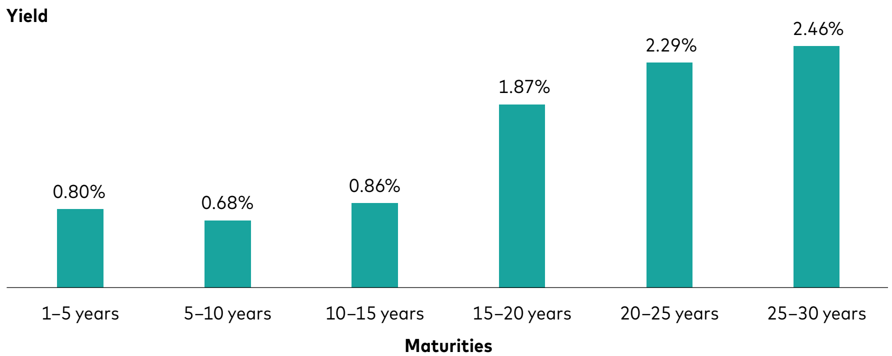
Sources: Bloomberg and Bloomberg BVAL AAA municipal yields, as of December 31, 2024, and December 31, 2025.

This offers the opportunity to be overweight longer-term bonds to add materially higher yield with attractive roll return potential as these bonds move toward maturity and down a historically steep curve.

The tax-equivalent yield pickup of municipals over the taxable aggregate index, when segmented by maturity, showcases the leap in attractive valuations when moving beyond 15-year bonds. In our view, we can capitalize on the best long-term income potential by pushing further out the curve.

However, such allocations merit deep quantitative modeling. Otherwise, an intended 5-year exposure to a municipal bond can flip to 25 years if yields move higher, or vice versa if yields move substantially lower. Being well-versed in managing these risks can also mean the difference between eroding valuations and greater return potential due to frequent mispricing of this risk factor.

Municipal bond tax-equivalent yield advantage over the Bloomberg U.S. Aggregate Index



Notes: Tax-equivalent yield for munis is calculated using a 40.8% tax bracket for each maturity band, which includes a 37.0% top federal marginal tax rate and a 3.8% net investment income tax to fund Medicare. Nominal U.S. aggregate yields within each maturity band are subtracted from corresponding municipal tax-equivalent yields to calculate the yield advantages displayed.

Sources: Vanguard calculations, based on the Bloomberg Municipal Bond Index and Bloomberg U.S. Aggregate Bond Index as of December 31, 2025.

Credit spreads offer attractive pickup

Municipal credit spreads, now around their 40th percentile historically, remain attractive (especially BBBs) relative to their taxable-sector cousins and well supported by strong fundamentals. Spreads are particularly attractive at the front end of the curve, where that additional pickup is most critical over and above the compressed yields of higher-rated issuers. We are also finding attractive entry points in select credits in headline-beaten sectors such as higher education and health care.

For many issuers, fundamentals should be even stronger than initially anticipated due to robust growth and strong equity markets that can increase tax revenues from income and capital gains in states such as California and New York. Accordingly, projections for rainy day fund levels have increased for the next fiscal year compared with 2025.

This story is probably more positive than many investors realize if the next economic slowdown or recession has in fact been pushed further into the future. Because such occurrences have a lagged effect on property values and income levels, municipalities often don't feel these effects until later. Decision-makers will have additional time to make credit quality-preserving adjustments. This is one of many reasons why in the investment-grade space, the 10-year cumulative default rate for municipal bonds is less than 4% of that of corporate bonds, according to Moody's through year-end 2024.

Yield-plus expectations in 2026

We anticipate strong demand for municipal bond investors position for another historically advantageous tax-exempt income collection year given attractive tax-equivalent yields, with avenues for active management to add more value. Extending duration or taking on appropriate credit exposure should receive the most benefits. Will there be moments of disruption from market technicals? Probably. But 2025 demonstrated how cyclical these effects can be.

Going out the curve or down in quality, however, requires professional management to help safeguard the investment. A deep bench of municipal research analysts and portfolio managers should not only serve to separate the credit winners from the losers, but also add meaningful value from yield curve positioning, coupon allocation, and convexity management.

Tax-exempt portfolio positioning

Exposure	View	Strategy
Credit allocation	• Balance sheets are still strong, with spreads offering attractive carry. • Lower-rated credit (A and lower) valuations look fair historically but are priced cheap relative to taxable bonds, whose spreads are near all-time tights.	• Maintain positions in lower-rated bonds with ample spread. • Credit trades are currently more focused on issuer and issue selection rather than broad sector allocations. • Selectively add exposure in sectors with negative sentiment, such as universities and hospitals.
Structure	• Steep, volatile yield curves place convexity management front and center.	• Capture gains from securities that performed well in September and October 2025, redeploying cash into short-call premium bonds (5% coupons). • Avoid bonds trading near par, particularly those with near-term call dates.
Duration/ curve	• Yields are particularly rich at 10-year maturities, after which we see one of the steepest curves observed in a decade. This leaves the long end offering good value. • Going forward, overall duration risks should be balanced, if not favorable.	• We favor longer maturities, particularly for intermediate and long strategies. • Implement slightly long overall duration as a hedge that pairs off against a credit overweight.

Vanguard active bond funds and ETFs

Vanguard active bond funds and ETFs		Admiral™ Shares or ETF ticker symbol	Expense ratio*
Treasury/Agency	GNMA†	VFIJX	0.11%
	Government Securities Active ETF	VGVT	0.10
	Inflation-Protected Securities	VAIPX	0.10
	Intermediate-Term Treasury	VFIUX	0.10
	Long-Term Treasury	VUSUX	0.10
	Short-Term Federal	VSGDX	0.10
	Short-Term Treasury	VFIRX	0.10
Investment-grade corporate	Core Bond	VCOBX	0.10%
	Core Bond ETF	VCRB	0.10
	Core-Plus Bond	VCPAX	0.20
	Core-Plus Bond ETF	VPLS	0.20
	Intermediate-Term Investment-Grade	VFIDX	0.09
	Long-Term Investment-Grade†	VWETX	0.10
	Multi-Sector Income Bond	VMSAX	0.30
	Multi-Sector Income Bond ETF	VGMS	0.30
	Short Duration Bond ETF	VSDB	0.15
	Short-Term Investment-Grade	VFSUX	0.09
	Ultra-Short-Term Bond	VUSFX	0.09
	Ultra-Short Bond ETF	VUSB	0.10
Below-investment-grade	High-Yield Corporate†	VWEAX	0.12%
	High-Yield Active ETF	VGHY	0.22
Global/ International	Emerging Markets Bond	VEGBX	0.35%
	Global Credit Bond	VGCAX	0.25

Vanguard active municipal bond funds		Admiral™ Shares or ETF ticker symbol	Expense ratio*
National municipal	Ultra-Short-Term Tax-Exempt	VWSUX	0.09%
	Short Duration Tax-Exempt Bond ETF	VSDM	0.12
	Limited-Term Tax-Exempt	VMLUX	0.09
	Core Tax-Exempt Bond ETF	VCRM	0.12
	Intermediate-Term Tax-Exempt	VWIUX	0.09
	Long-Term Tax-Exempt	VWLUX	0.09
	High-Yield Tax-Exempt	VWALX	0.09
State municipal	California Intermediate-Term Tax-Exempt	VCADX	0.09%
	California Long-Term Tax-Exempt	VCLAX	0.09
	Massachusetts Tax-Exempt‡	VMATX	0.09
	New Jersey Long-Term Tax-Exempt	VNJUX	0.09
	New York Long-Term Tax-Exempt	VNYUX	0.09
	Ohio Long-Term Tax-Exempt‡	VOHIX	0.09
	Pennsylvania Long-Term Tax-Exempt	VPALX	0.09

* As reported in each fund's prospectus. A fund's current expense ratio may be higher or lower than the figure shown.
† Investment advisor: Wellington Management Company LLP.
‡ Investor Shares available only. There is no minimum investment required for advised clients.
Note: Data as of December 31, 2025.

Active fixed income at Vanguard

$509B

Vanguard global active bond AUM

$298B Vanguard global active taxable bond AUM

$211B Vanguard global active municipal bond AUM

25+

Portfolio managers

35+

Traders

60+

Credit research analysts

130+

Dedicated team members

Note: Data as of December 31, 2025.

Active fixed income leadership team

Sara Devereux
Global Head of Fixed Income Group
In industry since 1992

Chris Alwine, CFA
Global Head of Credit
In industry since 1990

Roger Hallam, CFA
Global Head of Rates
In industry since 2000

Paul Malloy, CFA
Head of U.S. Municipals
In industry since 2005

For more information about active fixed income, speak with your financial advisor.

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