

JANUARY 2025

Active Fixed Income Perspectives Q1 2025: A real deal

Key takeaways

Performance

Higher income returns helped spark positive performance across most bond market sectors in 2024, despite a modest rise in intermediate- and long-term yields. Lower-quality credit segments outperformed, driven by favorable macroeconomic conditions and robust investor demand.

The big picture

The overall outlook for bonds in 2025 is notably positive. We anticipate an era where interest rates remain above inflation, helping investors achieve success in fixed income. Yields are attractive compared with those observed since the 2008 global financial crisis. Still, uncertainties underlie the outlook, given potential changes to U.S. immigration and trade policy. Monetary easing is expected to continue in 2025, albeit at a notably slower pace this year in the U.S.

Approach

Evolving macroeconomic conditions will test taxable credit spread valuations that look full relative to historical levels. We favor a tactical approach to rates strategies and prefer credit sectors that have lagged recent tightening. In municipals, tax-equivalent yields for high earners are above yields for most taxable sectors. We prefer municipal credit and see more room for spreads to tighten.

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A real deal for investors

We expect a favorable environment for fixed income this year. Attractive starting yields across the curve offer the prospect of durable income and can also provide a buffer against price volatility and capital appreciation if rates drop.

Bonds are positioned to perform well across a range of scenarios, which strengthens the case for their role in a portfolio, especially for those investors who hold excess cash. Most bond yields are comparable to or notably higher than prevailing money market rates, and bonds offer better diversification properties.

In our economic and market outlook for 2025, we reemphasized our view that we've entered an era of sound money—one characterized by positive real interest rates, which provides a foundation for solid fixed income returns over the next decade. Importantly, even though policy rates are generally expected to fall further, we believe they will ultimately settle at levels higher than those observed during the 2010s.

Relative to history, we are back to a more normal fixed income regime. Investors should recognize that there is a real deal in bonds.

A rare occurrence: The 10-year U.S. Treasury yield is higher than the S&P 500 earnings yield

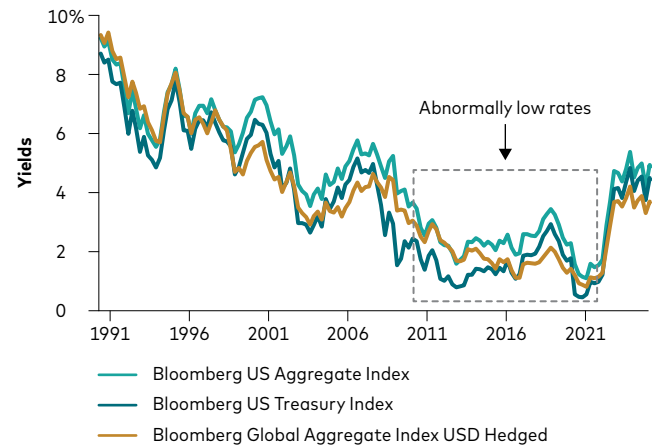


Note: The Standard and Poor's (S&P) 500 Index earnings yield is a weighted average of each constituent stock's most recent trailing 12-month earnings per share divided by its share price.

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.

Source: Bloomberg, as of December 31, 2024.

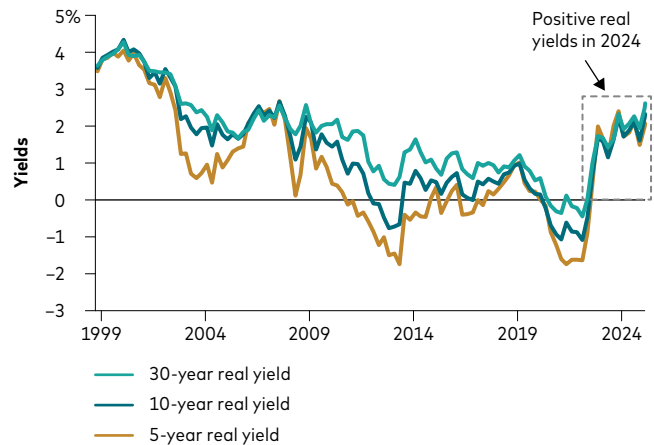
Back to normal: Bond yields during the 2010s were an outlier



Source: Bloomberg, as of December 31, 2024.

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Treasury yields in excess of inflation were positive across the curve



Source: Bloomberg, as of December 31, 2024.

Past performance is no guarantee of future returns.

Opportunities and risks

There is always policy uncertainty when a new administration takes the reins in Washington, D.C., but perhaps even more so now given today's level of partisan rancor and domestic and global tensions. While our base case outlook is positive, we emphasize that the uncertainty created by the incoming administration creates a broader range of potential outcomes for growth, inflation, and monetary policy, both domestically and abroad. This merits a disciplined and nimble approach to risk assets, and the need for ballast should be considered in portfolio construction.

Market performance this year will depend on several key factors:

- **Economic momentum.** Households and corporate balance sheets are fundamentally healthy, contributing to the spending that is helping bolster growth and stall disinflation.
- **Tariffs.** The size and distribution of tariffs could dampen growth while potentially boosting inflation. Geopolitical retaliation could increase business uncertainty and further constrain growth.
- **Immigration.** Border policy and its implementation could sharply curtail immigration, which would reduce much of the labor supply that has spurred growth recently. That could dampen future growth and increase inflation as businesses compete for workers.

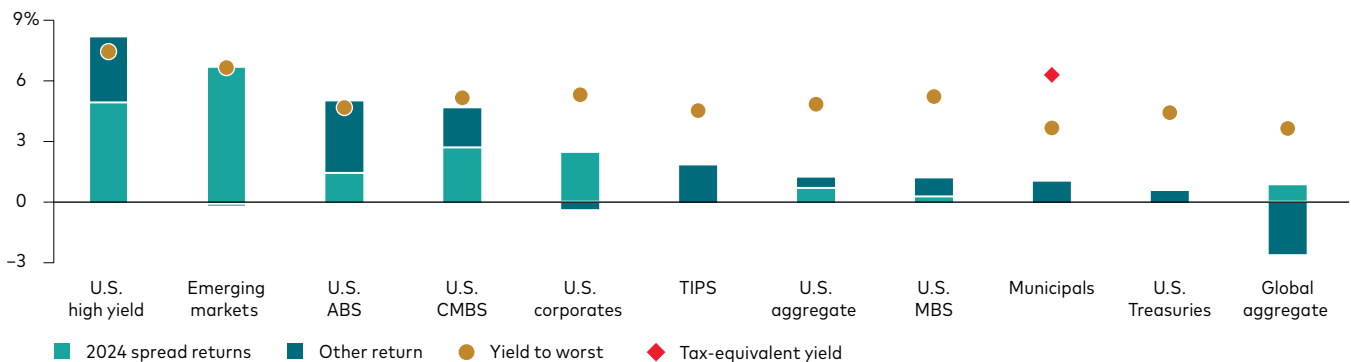
- **Fiscal policy.** The net impact of tax and spending decisions could be expansionary and inflationary, which could push yields high enough to tighten financial conditions and ultimately slow the economy down. Risks are higher given the elevated levels of government debt.
- **Deregulation.** Depending on how it is implemented, deregulation could spur innovation and productivity, impacting some sectors of the economy more than others.

Depending on how these factors play out, the Federal Reserve will have to guide monetary policy in an environment where there is significant uncertainty about the neutral rate.

With a lot of good news already priced into risk assets, such as equities and corporate bond spreads, we continue to take a long-term view and approach the year ahead with patience. Uneven economic environments can produce higher market volatility but also uncover new opportunities.

Within a framework of disciplined risk management and robust credit research, the dispersion and dislocations in the market can be harnessed and monetized into alpha via security selection.

Fixed income sector returns and yields



Note: 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.

Sources: Bloomberg indexes and JPMorgan, as of December 31, 2024. See page 7 for a full list of indexes.

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Economy, policy, and markets

Market participants were surprised last year by the resilience of the U.S. economy, which powered through the effects of the fastest rate-hiking cycle in 40 years. Since the Fed stopped raising rates 18 months ago, the economy has enjoyed strong growth, low unemployment, and cooling inflation.

As we detailed in our recent economic outlook, we attribute these conditions primarily to healthy supply factors, including a surge in productivity and available labor.

We anticipate that the U.S. economy will maintain its momentum, albeit at a slightly slower pace. Emerging policy risks, including the potential implementation of trade tariffs and stricter immigration rules, could reduce the labor supply and increase inflationary pressures. Our base case forecast is for U.S. GDP growth to remain sound at 2.1%, which accounts for a modest drag from potential changes in trade and immigration policies.

We also expect progress on inflation to stall, driven by increases in shelter and services costs. That will likely keep core inflation measures above the Fed's 2% target and above 2.5% for most of the year.

The decline in inflation from pandemic-era highs has allowed the Fed to deliver 100 basis points (bps) of maintenance cuts so far this cycle, reducing the policy rate from 5.5% to 4.5%. However, economic growth and persistent above-target inflation should lead to a more gradual path of rate cuts in 2025. Unless growth weakens significantly, we expect the Fed to maintain a cautious approach, keeping the federal funds rate at or above 4%.

Markets and the Fed will need to navigate the uncertainty. We are closely monitoring emerging policy risks, particularly those that could dampen economic growth and exacerbate inflation. These factors may influence the Fed's decisions regarding the extent and timing of further policy rate reductions.

International markets

Outside the U.S., less favorable supply dynamics and restrictive monetary policies in Europe and elsewhere have translated into weaker economic growth. The course ahead looks uneven and hinges on the status of U.S. tariff policy. We see the following scenarios playing out across the globe:

- **Euro zone.** Growth is likely to remain below trend next year. We expect the European Central Bank (ECB) to cut rates to below 2% by the end of 2025, which is appropriately reflected in market pricing, in our view.
- **United Kingdom.** Fiscal stimulus measures should support growth. Slowing but sticky inflation will likely put the Bank of England on a gradual cutting path and keep policy rates above neutral next year.
- **Japan.** A pickup in domestic demand should propel growth above 1%. We expect the Bank of Japan (BOJ) to continue its gradual hiking cycle as economic activity recovers and inflation momentum holds steady.
- **Emerging markets.** We anticipate that easing cycles broadly will continue and will include more countries, though interest rates will likely stay in restrictive territory.
- **China.** Stimulus measures could offer a temporary economic boost, but more comprehensive fiscal and monetary policies will be essential to counter the significant external challenges posed by potential U.S. trade policies, structural issues in the property sector, and the lack of confidence among households and businesses.

Active strategy

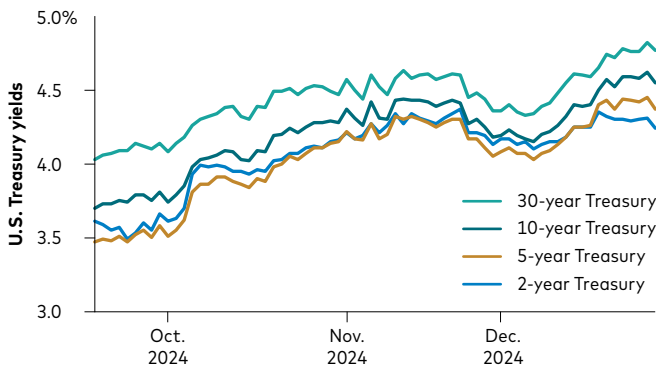
Rates

Last year, interest rates responded to shifting narratives around the economy and Fed policy. Multiple hotter-than-expected inflation prints drove rates higher in April. Then, with the unemployment rate rising in a pattern reminiscent of previous recessions, markets reacted and yields fell sharply in the third quarter.

The Fed responded forcefully by cutting rates by 100 bps over three months. However, since its initial cut of 50 bps in September, labor market and growth data have painted a more positive picture of U.S. economic growth and consumer health while inflation has stalled above the Fed's target.

Yields retraced higher in response and gained further momentum in the aftermath of the U.S. presidential election, as the market continues to digest expectations for pro-growth and potentially pro-inflationary policies.

U.S. Treasury yields since the September Fed rate cut



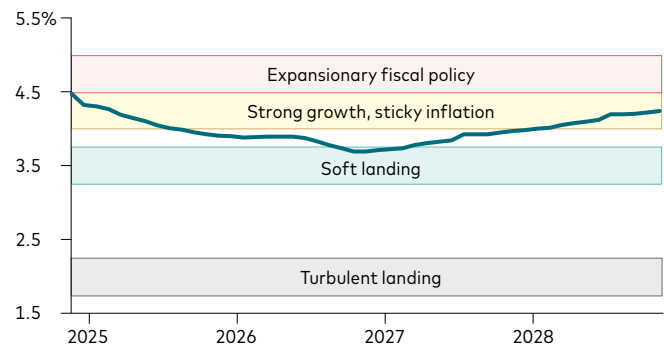
Source: Bloomberg, as of December 31, 2024.

Past performance is no guarantee of future returns.

Over the first half of 2025, we expect strong growth and sticky inflation to persist, keeping the yield curve relatively flat and yields to be consistently higher than they were for most of 2024. The Fed sees itself in a new phase of the cycle where the bar for further cuts is higher. If inflation continues to run hot, as it has done in the first quarter of the past couple of years, yields on the short end of the curve could back up a bit and flatten the curve even more as 2025 cuts get priced out.

Market pricing reflects economic expectations

Fed funds futures' implied policy path



Note: Fed funds futures are financial futures contracts based on the federal funds rate and traded on the Chicago Mercantile Exchange operated by CME Group Inc.

Source: Bloomberg, as of December 31, 2024.

U.S. 10-year Treasury yield



Source: Bloomberg, as of December 31, 2024.

Past performance is no guarantee of future returns.

In the near term, we don't see a catalyst for a sustained rise at the long end of the curve. Continued flows into fixed income across maturities have helped keep bond yields in check.

Worries about U.S. deficit spending, as well as a potential term-premium shock to yields, are front of mind with the nomination of Scott Bessent as Treasury Secretary. Bessent has communicated his preference to reduce the fiscal deficit. Though we don't expect it, significant changes in U.S. government policies could provide a basis for long-end rates to go higher.

With respect to curve positioning, we like the risk/reward mix best in the belly of the yield curve. Short- to intermediate-term yields offer a good balance of attractive income potential with less downside price risk.

Global positioning

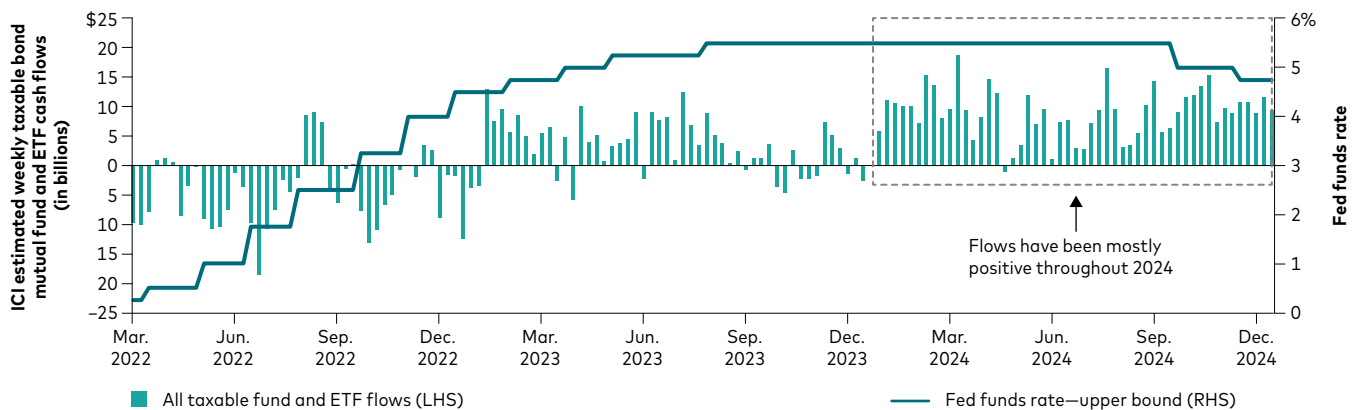
Inflation for the past two years has declined significantly in most economies outside the U.S., but so has economic growth. As inflation rates

approach central bank targets, the global easing cycle is expected to continue into 2025, though the paths for policy rates are likely to vary.

European rates markets are now appropriately pricing in a weaker growth outlook that accounts for potential global trade friction and a more dovish tone from the ECB. We have reduced our European exposure, taking profits after a period of outperformance. Nevertheless, we remain positive on sovereign fundamentals in peripheral Europe and would seek to add back exposure at wider spread levels.

In Japan, we anticipate that monetary policy will become more restrictive. We believe that the BOJ will raise rates more aggressively than current market expectations suggest to combat domestic inflation. As a result, we are maintaining a short position in Japanese government bonds and will continue to position for a flatter yield curve.

Flows into taxable bond funds and ETFs were strongly positive throughout 2024



Sources: Bloomberg, Federal Reserve, and Investment Company Institute, as of December 31, 2024.

Credit

The positive U.S. growth story has driven credit spreads across sectors to multidecade lows. In 2024, excess returns were notably positive, with the highest gains observed in lower-rated bonds.

While spread levels remain narrow relative to history, we believe the vigor of the economy and issuers' clean balance sheets justify the prices. All-in yields remain compelling across sectors when compared with prior decades, which has attracted investor demand across most sectors.

Credit yields remain attractive while spreads imply risk

Sector	Yields (%)			Spreads (bps)		
	Yield to worst (12/31/2024)	25-year median*	25-year percentile*	Option-adjusted spread (12/31/2024)	25-year median*	25-year percentile*
U.S. corporates	5.31	4.41	66%	80	131	0%
1- to 5-year corporates	4.92	2.85	75%	60	91	7%
5- to 10-year corporates	5.36	3.59	91%	82	131	1%
10-year-plus corporates	5.80	5.02	71%	98	169	0%
Euro corporates	3.45	3.80	43%	102	112	40%
High yield	7.49	7.68	44%	287	455	3%
High yield BB	6.39	6.28	50%	179	311	1%
High yield B	7.43	7.53	46%	277	450	4%
High yield CCC	10.16	10.85	36%	558	820	13%
Emerging markets investment-grade (USD)	5.84	4.58	97%	106	187	2%
Emerging markets high yield (USD)	10.34	9.07	76%	401	554	17%
U.S. ABS	4.73	3.04	67%	44	63	13%
U.S. CMBS	5.66	4.19	73%	75	104	15%
U.S. MBS	5.27	3.81	73%	43	44	46%

* Index data for yields and spreads go back to December 31, 1998 when available; all others use earliest date possible.

Note: Option-adjusted spread (OAS) is the yield spread to be added to a benchmark yield curve to discount a security's payments to match its market price using a dynamic pricing model that accounts for embedded options. **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.**

Source: Bloomberg, as of December 31, 2024. See below for a full list of indexes.

Indexes used in charts

The following indexes are represented in the sector returns and yields chart on page 3: Bloomberg US Corporate High Yield Bond Index; J.P. Morgan Emerging Markets Bond Index (EMBI) Global Diversified; Bloomberg US Asset-Backed Securities Index; Bloomberg CMBS Erisa Eligible Index; Bloomberg US Corporate Bond Index; Bloomberg US Treasury Inflation-Linked Bond Index (Series-L); Bloomberg US Aggregate Index; Bloomberg US Mortgage Backed Securities Index; Bloomberg US Municipal Index; Bloomberg US Treasury Index; and Bloomberg US Global Aggregate Index.

The following indexes are represented in the credit yields chart on page 7: Bloomberg US Corporate Bond Index; Bloomberg US 1–5 Year Corporate Bond Index; Bloomberg U.S. 5–10 Year Corporate Bond Index; Bloomberg U.S. 10+ Year Corporate Index; Bloomberg Pan-European Aggregate Index; Bloomberg US Corporate High Yield Bond Index; Bloomberg Ba US High Yield Index; Bloomberg B US High Yield Index; Bloomberg Caa US High Yield Index; J.P. Morgan Emerging Markets Bond Index Global Diversified Investment Grade; J.P. Morgan Emerging Markets Bond Index Global Diversified High Yield; Bloomberg US Asset-Backed Securities Index; U.S. CMBS: Bloomberg CMBS: Erisa Eligible Index; Bloomberg US Mortgage Backed Securities Index.

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Nonetheless, there is limited room for spreads to narrow much further. Recent inflation trends have prompted the Fed to adopt a more cautious stance, which is likely to dampen the performance of risk assets.

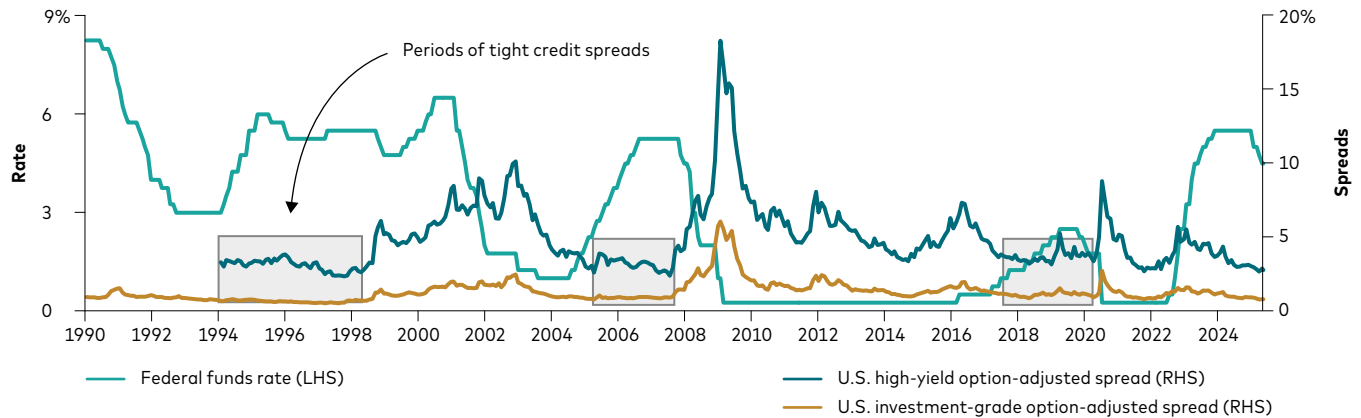
History shows that credit spreads can remain narrow for extended periods of time, particularly in the later stages of an economic expansion. If spreads are able to hold near current levels, credit should outperform government bonds due to higher starting yields.

Our base case view expects credit spreads to stay within a narrow range over the coming months. We remain constructive on credit risk but are

maintaining a lower-than-average exposure. We expect higher volatility in 2025 as new trade, tax, and immigration policies are negotiated and potentially implemented. If credit fundamentals stay healthy, these volatile periods should present opportunities to add credit risk.

Our portfolios have higher-conviction positions in sectors that have lagged recent tightening. Short-term credit, including consumer asset-backed sectors and specific pockets of U.S. and European corporates, has room to outperform. We remain defensive and focused on bond selection opportunities in U.S. high yield and emerging markets.

Credit spreads can remain tight for long periods even as the Federal Reserve keeps rates high



Note: The index tracking high-yield option-adjusted spreads began in January 1994.

Source: Bloomberg data as of December 31, 2024. Option-adjusted spread (OAS) is the yield spread to be added to a benchmark yield curve to discount a security's payments to match its market price using a dynamic pricing model that accounts for embedded options.

Alternate scenarios

The best possible scenario for credit would require sustained economic growth and inflation falling clearly downward toward 2%, which would enable the Fed to implement more rate cuts than currently anticipated.

A less optimistic scenario would be one where inflation progress stalls, leading the Fed to communicate a pause in rate cuts. Markets might then become concerned about possible rate hikes. Fear of a prolonged period of restrictive rates could raise growth concerns, and credit spreads would likely widen as a result.

The most challenging scenario for credit performance would be a sustained trend of weaker growth. Rising recession fears would result in much wider spreads, although the negative performance impact may be cushioned by a corresponding decline in Treasury yields. While not likely over the near term, this scenario could be a rising risk as 2025 progresses.

Current positioning in taxable portfolios

Rates		
Exposure	View	Strategy
U.S. duration & curve	<ul style="list-style-type: none"> The recent trend higher in yields and a steeper curve reflect the market's view of a less accommodative policy outlook, as well as expectations for a surge in issuance at the start of year. The risk/reward of owning duration is improving given improved valuations, policy risks, and the tightening of financial conditions. A substantial move higher in yields would require the market to contemplate more hawkish Fed policy or significant term-premium concerns. 	<ul style="list-style-type: none"> We have a bias to extend duration above 4.75% on 10-year Treasuries as long as inflation is less than 3% and there is no meaningful deficit expansion.
Global duration & curve	<ul style="list-style-type: none"> BOJ rate hikes and quantitative tightening to continue to pressure Japanese government bond yields higher, which should also flatten the curve. U.S.-imposed tariffs may present significant headwind to euro zone growth. Favorable valuations on U.K. gilts versus German bunds 	<ul style="list-style-type: none"> We remain short Japanese government bonds and are positioned for yield curve flattening. We retain a modest overweight in peripheral Europe. Long 10-year U.K. rates versus short German 10-year rates.
Mortgage-backed securities (MBS)/ agencies	<ul style="list-style-type: none"> Strong flows into bonds are supportive for the sector. MBS index spreads are toward the lower end of our fair-value range. Higher yields and steeper curves should improve bank and REIT demand this year. Higher mortgage rates should translate into lighter 2025 supply. 	<ul style="list-style-type: none"> We maintain a modest overweight to agency MBS and look to add selectively in agency commercial mortgage-backed securities (CMBS) and non-agency residential mortgage-backed securities (RMBS).
Credit		
Exposure	View	Strategy
Investment-grade (IG) corporates	<ul style="list-style-type: none"> Corporate fundamentals remain healthy but are well reflected in narrow spreads. Potential deregulation could provide further upside, but the impact will vary across sectors. Net new issuance in 2025 should be modest (\$250B) and met with strong demand absent an economic downturn. Valuations and cycle position justify moving up in earnings quality. 	<ul style="list-style-type: none"> We're overweight BBB rated industrials and shorter-maturity financials. We prefer issuers that are deleveraging, and we are cautious on those looking to pursue debt-funded M&A. Across the curve, we like the front end and the long end.
High-yield corporates	<ul style="list-style-type: none"> Credit fundamentals have improved given a better growth backdrop, resulting in lower default rate activity. Spreads are below historical averages and have limited room to absorb negative surprises. We see a positive supply/demand mix in 2025 as higher expected new issue volume should be met by strong demand for credit. 	<ul style="list-style-type: none"> We hold a lower-than-average allocation to the sector. Focus is on bottom-up security selection as dispersion across issuers remains high.

(Continued on page 11)

Credit

Exposure	View	Strategy
Emerging markets	<ul style="list-style-type: none">• Performance across countries has been uneven, creating pockets of value in some areas while others look expensive.• The fiscal picture for emerging markets should continue to look favorable relative to developed markets in 2025. We expect low default activity.• We are cautious given risks to trade and growth. Flows into the sector may stall with policy uncertainty and slower Fed easing.	<ul style="list-style-type: none">• We are using the first wave of 2025 issuance to add where we see value. We are defensive on names that have near-term spread widening risk.• We are looking for opportunities to add local duration exposure. We prefer emerging markets foreign currencies in Latin America versus Asia.
Structured products	<ul style="list-style-type: none">• Our favorable view of asset-backed securities (ABS) vs. short-duration corporates is reflected in recent performance. We still view ABS as an attractive source of carry.• In CMBS, 10-year AAA rated bonds offer value over similar duration corporates and should see strong demand given lack of 10-year issuance.	<ul style="list-style-type: none">• Our favorable view of ABS versus short-duration corporates is reflected in recent performance.• We still view ABS as an attractive source of carry.• In CMBS, 10-year AAA rated bonds offer value over similar duration corporates and should see strong demand given lack of 10-year issuance.

Active fixed income leadership team



Sara Devereux
Global Head of Fixed
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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

Active fixed income at Vanguard

\$473B

Vanguard Global Active
Bond AUM

\$276B Vanguard Global Active
Taxable Bond AUM

\$197B Vanguard Global Active
Municipal Bond AUM

25+ Portfolio managers

35+ Traders

60+ Credit research analysts

130+ Dedicated team members

* 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, 2024.

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Bonds of companies based in emerging markets are subject to national and regional political and economic risks and to the risk of currency fluctuations. These risks are especially high in emerging markets.

High-yield bonds generally have medium- and lower-range credit-quality ratings and are therefore subject to a higher level of credit risk than bonds with higher credit-quality ratings.

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Bond funds are subject to interest rate risk, which is the chance bond prices overall will decline because of rising interest rates, and credit risk, which is the chance a bond issuer will fail to pay interest and principal in a timely manner or that negative perceptions of the issuer's ability to make such payments will cause the price of that bond to decline.

Investments in bonds issued by non-U.S. companies are subject to risks including country/regional risk and currency risk.

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