Janus Henderson
INVESTORS

RETHINKING FIXED INCOME PORTFOLIO CONSTRUCTION:

BUILDING THE STRATEGIC ASSET ALLOCATION

Janus Henderson's approach to building customized multi-sector, core, and core plus portfolios

FOR FINANCIAL PROFESSIONAL USE ONLY / NOT FOR PUBLIC VIEWING OR DISTRIBUTION

Investors face a perpetual tradeoff in trying to achieve the highest possible returns with the least amount of risk. As active managers, we think the pursuit of the optimal balance between risk and return is vital to helping clients achieve their goals.

While it is seldom stated so bluntly, the objective of active management is to a) be **effective** in tailoring an investment portfolio to match a client's specific goals, and b) achieve that goal in the most **efficient** manner.

These key tenets of effectiveness and efficiency – coupled with deep fundamental research and sophisticated quantitative processes – form the cornerstone of our approach to constructing diversified fixed income portfolios.

The need for a new home base

When considering an allocation to fixed income, the conventional approach for most investors has been to pick a benchmark index as the starting point, such as the Bloomberg U.S. Aggregate Bond Index (U.S. Agg) or the Bloomberg Global Aggregate Bond Index (Global Agg).

However, the challenge in starting with a benchmark index is that fixed-income indices are inherently structurally limited. For example, the U.S. Agg is limited in the following ways:

- Risk profile is disproportionately skewed toward interest-rate risk (duration).
- Sector exposure is concentrated in U.S. Treasuries, agency mortgage-backed securities (MBS), and investment-grade corporates.
- Fixed-rate bonds only, no floating-rate exposure.
- Issue size minimums must be met for inclusion.
- Rating by S&P, Moody's, or Fitch required for inclusion.
- Agency MBS addition in 1986 was the last major improvement to the index.

As a result, we believe these indices fall short of adequately meeting investor needs in terms of effectiveness and efficiency.

Portfolio management

John Lloyd
- Global Head of Multi-Sector Credit
- Portfolio Manager

Nick Sandford, CFA, FRM
- Fixed Income Quantitative Analyst

Steve Preikschat, CFA
- Client Portfolio Manager

FOR FINANCIAL PROFESSIONAL USE ONLY / NOT FOR PUBLIC VIEWING OR DISTRIBUTION

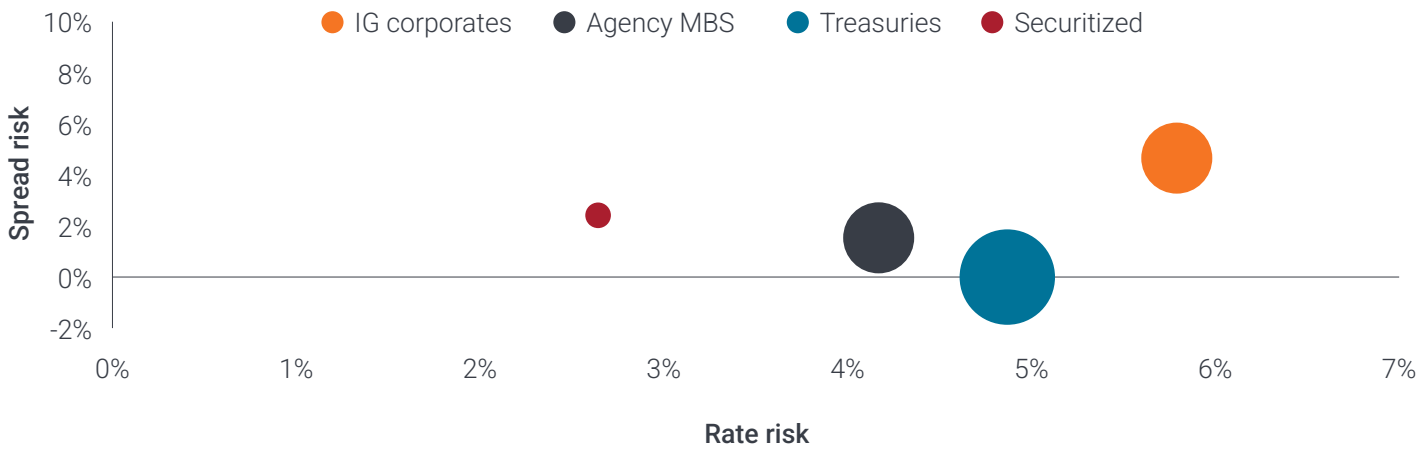
1 Benchmark indices may not be aligned with client objectives

An effective portfolio is one that successfully achieves a client's investment objective. Portfolios should adapt to meet client preferences, not the other way around. We believe one should start with the targeted investment outcome and build the portfolio to match.

The rigid and static nature of benchmark indices means they do not necessarily cater to a range of client objectives, making them a less-than-ideal home base or starting point for many investors.

The U.S. Agg is heavily skewed toward interest rate risk, with little exposure to credit spread risk. While this might be appropriate for some clients, we have found that many investors' goals are not effectively achieved by portfolios with unbalanced risk exposure.

Exhibit 1: The U.S. Agg exhibits a risk profile heavily skewed toward interest rate risk



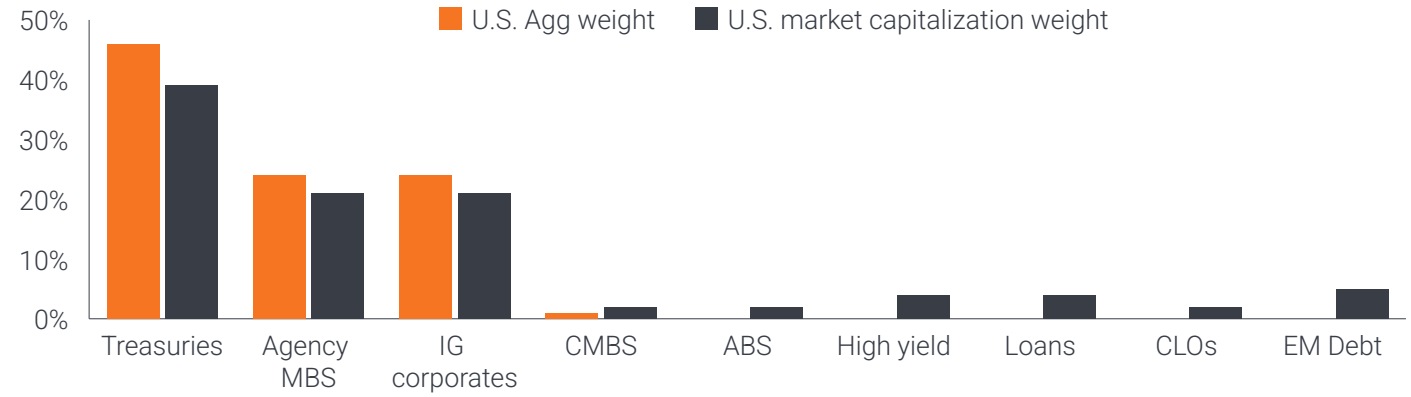
Source: Bloomberg, Janus Henderson Investors, as of 31 January 2026. Rate risk and spread risk based on rate and spread volatility for the 10-year period 31 January 2026. Circle size represents relative market weight. **Past performance does not predict future results.**

2 Benchmark indices may not adequately provide exposure to all areas of fixed income markets

More than 97% of the U.S. Agg's weight is allocated to just three sectors – U.S. Treasuries/Government-related, agency MBS, and investment-grade (IG) corporates. The Global Agg poses a similar concentration issue.

The U.S. and Global Agg exclude large sectors of the fixed income universe, like collateralized loan obligations (CLOs), high-yield corporates, and emerging markets (EM) debt. Further, meaningful segments of securitized credit markets, such as asset-backed securities (ABS) and commercial mortgage-backed securities (CMBS), are underrepresented in the indices relative to their market weight.

Exhibit 2: Benchmark indices are not representative of the market portfolio



Source: Bloomberg, Janus Henderson Investors, as of 31 January 2026.

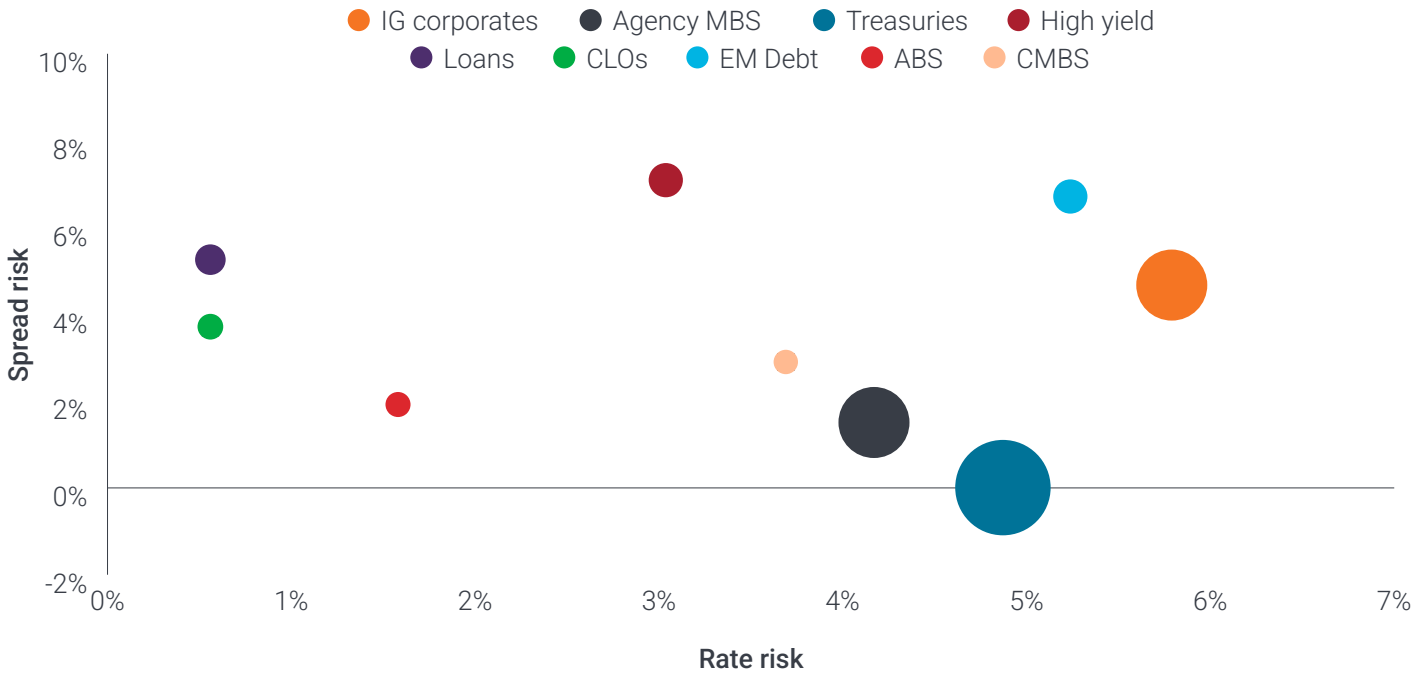
The strategic asset allocation as the optimized new home base

As we reflect on the challenges posed by fixed income benchmarks, we set out to build a home base portfolio – or strategic asset allocation (SAA) – to serve as the new starting point.

The objective in building the SAA is to create a more efficient portfolio that better aligns with a client's goals, and:

a. Has a better overall balance of interest rate risk and credit spread risk.
b. Is better diversified across more sectors that are also less correlated, thereby offering a more accurate reflection of the market portfolio.
c. Focuses its credit spread and interest rate exposures in areas that have historically provided a better risk-return trade off.

Exhibit 3: The fixed income universe comprises a diverse range of sectors that may be combined to achieve better risk-adjusted outcomes.



Source: Bloomberg, Janus Henderson Investors, as of 31 January 2026. Rate risk and spread risk based on rate and spread volatility for the 10-year period 31 January 2026. Circle size represents relative market weight. **Past performance does not predict future results.**

The goal

The objective of the SAA process is to create a customized mix of assets that may provide the optimal risk-reward profile over the long term. Referring to this as simply the "optimal" profile is intentionally ambiguous because objectives may differ from client to client.

For example, client A might seek to preserve capital and limit downside risk to 5%, while client B may want a strategic allocation that minimizes tracking risk versus the U.S. Agg, with a neutral duration profile and a return target of cash +4%.

No matter the goals and limits imposed, the process is consistent. This brings us back to the "optimal" solution that is unique to each strategy or client.

The process

Building a fixed income portfolio from ground zero means there are numerous moving parts. Therefore, we follow a methodical multi-step process. At its core, the process is an optimization problem. We seek to maximize or minimize an objective function within the imposed constraints.

FOR FINANCIAL PROFESSIONAL USE ONLY / NOT FOR PUBLIC VIEWING OR DISTRIBUTION

The **objective function** could be a return target, a Sharpe ratio, or a level of risk, and it can be expressed in absolute terms or relative to a benchmark index. **Constraints** can then be anything that is not part of the objective function, such as risk limits, exposure limits, duration targets, or asset class inclusions and exclusions.

Once defined, we work to optimize the portfolio to the objective, given the constraints. This involves using historical market returns, analytical data, and capital market assumptions. First, we determine the ideal mix of assets by way of an historical analysis optimization. The next step incorporates the discretion of the portfolio management team and considers long-horizon structural views on the market and the ability to generate potential returns in each asset class.

We continue blending various sectors together in an iterative process until we believe we have maximized the portfolio's efficiency. We evaluate factors that may drive the risk-adjusted returns of the portfolio, including, but not limited to:

- Static risk measures such as duration times spread (DTS), mathematical duration, and empirical duration
- Absolute volatility
- Tracking error relative to the benchmark index
- The correlation of returns versus the benchmark index
- Historical absolute and relative returns, drawdowns, and tail risks
- Forecasted absolute and relative returns, risk, and correlations based upon our capital market assumptions

The results

The intended result of the home base SAA is a portfolio that maximizes or minimizes the objective function but is adjusted with discretion from the portfolio management team. The SAA will be the basis for future fund positioning, and any deviations would be classified as active management decisions.

In terms of performance, we consider the SAA to be the **structural alpha** that is available in the market due to:

a. A poorly constructed primary benchmark such as the U.S. or Global Agg, and/or,
b. The ability to generate higher security-related alpha in certain asset classes.

We believe the SAA also results in a more efficient use of capital as it diversifies risk across factors. In our view, the SAA does a better job of capturing various risk premia than the U.S. and Global Agg indices. These include, but are not limited to:

1. Credit spread sectors generally offer a risk premium over the long term.
2. Shorter-duration corporate bonds have outperformed longer-duration corporates.
3. BB rated bonds have offered the best risk-adjusted returns within the high yield universe.
4. BBB bonds have typically outperformed within the IG corporate universe.
5. Certain market dynamics – such as issue size and out-of-index or first-time issuers – may offer alpha opportunities.
6. Floating rate exposure (excluded from benchmark indices) has been shown to improve overall portfolio diversification.

Ongoing review

The SAA is constructed to account for the long-run horizon view on the market. Therefore, it is not necessary to adjust it frequently, but it is reviewed periodically.

In the review process, returns and risk are continually assessed to ensure the SAA is performing in line with expectations. If necessary, deviations from expected performance would warrant further investigation. It is expected that the SAA will be mostly static, with adjustments being made if there is a fundamental change in the market regime.

Fully customizable

Janus Henderson uses a bespoke SAA framework across all multi-sector strategies, including core, core-plus, global multi-sector, and customized solutions.

The SAA enables tailored client outcomes rather than one-size-fits-all portfolios. It is fully embedded in the firm's portfolio construction process, with risk budgeting, attribution, and daily risk reporting all run relative to the SAA. This integration supports transparency, repeatability, and consistency in decision-making, ultimately contributing to more reliable portfolio outcomes and returns, in our view.

Example[1]

Here is an example of the process in action, where the objective function is to maximize the Sharpe ratio given the portfolio's constraints.

- **Objective function:**
  - Maximum Sharpe ratio
- **Constraints:**
  - Target excess returns versus the U.S. Agg in the range of 150-200 basis points (bps)
  - No active duration risk versus the U.S. Agg
- **Our solution:**

As shown below in the following exhibits, we optimized the portfolio for a mix of assets that meets the return target while also exhibiting an improved Sharpe ratio and drawdown profile versus the U.S. Agg. Additionally, in the analysis of ex-post risk, all the active risk is being driven by spread factors, while active risk from rates is effectively zero.

Exhibit A: Custom SAA weighting

Sector	SAA weighting
IG corporates	15.0%
High yield	40.0%
Securitized	10.0%
CLOs	10.0%
Agency MBS	12.5%
Treasuries	12.5%

Exhibit B: Return statistics

	SAA	U.S. Agg	Global Agg	U.S. High Yield
Total return	3.66%	1.85%	0.53%	5.48%
Volatility	5.26%	4.62%	5.95%	6.88%
Downside Volatility	5.82%	4.62%	6.21%	8.37%
Maximum drawdown	-15.72%	-17.18%	-24.19%	-14.74%
Sharpe ratio	0.39	0.06	-0.18	0.57
Sortino ratio	0.63	0.40	0.09	0.66

Source: Janus Henderson Investors, for the period 1 January 2013 to 31 December 2025. **Past performance does not predict future results.**

[1] The portfolio and their performance are hypothetical, not real. They do not represent the investment performance or the actual accounts of any investors. The weightings in this hypothetical portfolio were selected with the full benefit of hindsight, after their performance over the period shown was known. It is not likely that similar results could be achieved in the future. The model performance information in this presentation is based on the backtested performance of a hypothetical investment over the time period indicated. "Backtesting" is a process of objectively simulating historical investment returns by applying a set of rules for buying and selling fund shares backward in time, testing those rules, and hypothetically investing in the shares that are chosen. Backtesting is designed to allow investors to understand and evaluate certain strategies by seeing how they would have performed hypothetically during certain time periods. It is possible that the markets will perform better or worse than shown in the projections, the actual results of an investor who invests in the manner these projections suggest will be better or worse than the projections, and an investor may lose money by investing in the manner the projections suggest. The projections assume the reinvestment of dividends, no deduction for advisory or brokerage fees, and that assets are allocated in the manner the projections suggest for 13 years and are rebalanced annually. Although the information contained herein has been obtained from sources believed to be reliable, its accuracy and completeness cannot be guaranteed. While backtesting results reflect the rigorous application of the investment strategy selected, backtested results have certain limitations and should not be considered indicative of future results. In particular, they do not reflect actual trading in an account, so there is no guarantee that, in fact, an actual account would have achieved the results shown. Backtested results also assume that asset allocations would not have changed over time and in response to market conditions, which might have occurred if an actual account had been managed during the time period shown.

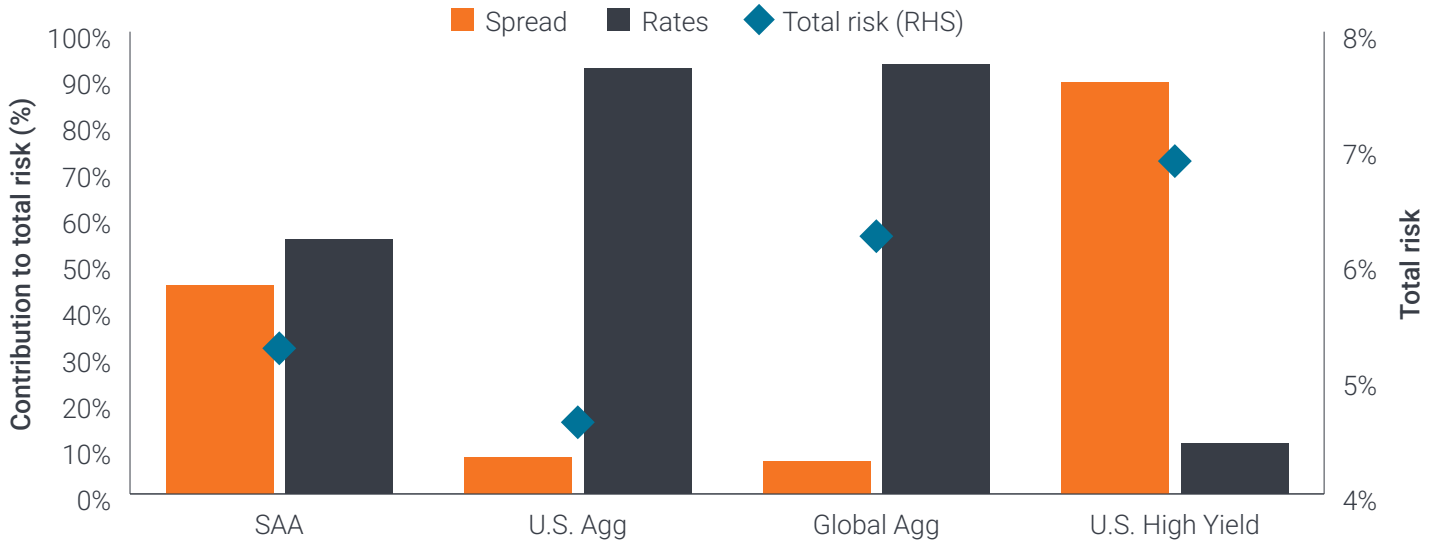
FOR FINANCIAL PROFESSIONAL USE ONLY / NOT FOR PUBLIC VIEWING OR DISTRIBUTION

Exhibit C: Ex-post results of volatility and contribution to volatility (CVol)

	SAA		U.S. Agg		Global Agg		U.S. High Yield	
	Volatility	CVol	Volatility	CVol	Volatility	CVol	Volatility	CVol
Spreads	4.18%	2.35%	1.61%	0.38%	1.35%	0.42%	6.76%	6.15%
IG corporate spread	0.63%	0.37%	1.04%	0.18%	0.68%	0.21%	–	–
High yield corporate spread	2.70%	1.59%			–	–	6.76%	6.15%
Securitized spread	0.34%	0.12%	0.05%	0.00%	0.02%	0.00%	–	–
CLOs spread	0.33%	0.18%			–	–	–	–
Agency MBS spread	0.18%	0.09%	0.39%	0.18%	0.17%	0.08%	–	–
Covered bond spread	–	–			0.03%	0.01%	–	–
Government-related spread	–	–	0.13%	0.01%	0.45%	0.11%	–	–
Rates	4.42%	2.91%	4.51%	4.25%	6.10%	5.82%	2.90%	0.73%
Diversification		*-3.34%*		*-1.50%*		*-1.21%*		*-2.78%*
Total		**5.26%**		**4.62%**		**6.23%**		**6.88%**

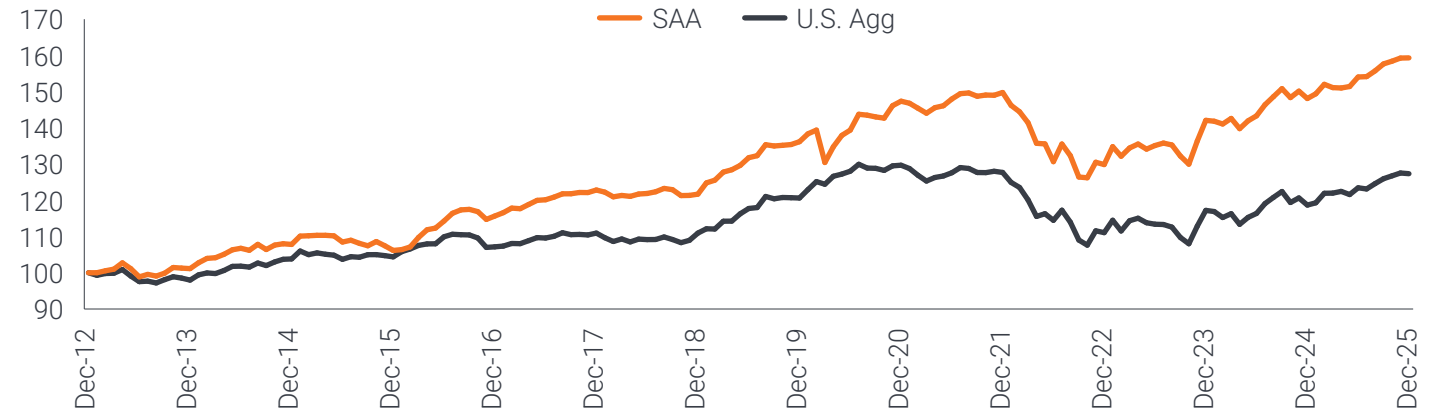
Source: Janus Henderson Investors, for the period 1 January 2013 to 31 December 2025. **Past performance does not predict future results.**

Exhibit D: Risk contribution mix



Source: Janus Henderson Investors, for the period 1 January 2013 to 31 December 2025. **Past performance does not predict future results.**

Exhibit E: Cumulative returns (indexed to 100 on 31 December 2012)



Source: Janus Henderson Investors, for the period 1 January 2013 to 31 December 2025. **Past performance does not predict future results.**

FOR MORE INFORMATION, PLEASE VISIT JANUSHENDERSON.COM

Janus Henderson
INVESTORS

The views presented are as of the date published. They are for information purposes only and should not be used or construed as investment, legal or tax advice or as an offer to sell, a solicitation of an offer to buy, or a recommendation to buy, sell or hold any security, investment strategy or market sector. Nothing in this material shall be deemed to be a direct or indirect provision of investment management services specific to any client requirements. Opinions and examples are meant as an illustration of broader themes, are not an indication of trading intent, are subject to change and may not reflect the views of others in the organization. It is not intended to indicate or imply that any illustration/example mentioned is now or was ever held in any portfolio. No forecasts can be guaranteed and there is no guarantee that the information supplied is complete or timely, nor are there any warranties with regard to the results obtained from its use. Janus Henderson Investors is the source of data unless otherwise indicated, and has reasonable belief to rely on information and data sourced from third parties. Past performance does not predict future returns. Investing involves risk, including the possible loss of principal and fluctuation of value.

Not all products or services are available in all jurisdictions. This material or information contained in it may be restricted by law, may not be reproduced or referred to without express written permission or used in any jurisdiction or circumstance in which its use would be unlawful. Janus Henderson is not responsible for any unlawful distribution of this material to any third parties, in whole or in part. The contents of this material have not been approved or endorsed by any regulatory agency.

Actively managed investment portfolios are subject to the risk that the investment strategies and research process employed may fail to produce the intended results. Accordingly, a portfolio may underperform its benchmark index or other investment products with similar investment objectives.

Asset-backed securities (ABS) are financial investments backed by a pool of income-generating assets like loans, leases, or credit card balances.

The Bloomberg US Aggregate Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate pass-throughs), ABS and CMBS (agency and non-agency).

The Bloomberg Global Aggregate Index is a flagship measure of global investment grade debt from a multitude local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.

Basis point (bp) equals 1/100 of a percentage point. 1 bp = 0.01%, 100 bps = 1%.

Credit quality ratings are measured on a scale that generally ranges from AAA (highest) to D (lowest). The S&P 500 Index or Standard & Poor's 500 Index is a market-capitalization weighted index of 500 leading publicly traded companies in the U.S.

Correlation measures the degree to which two variables move in relation to each other. A value of 1.0 implies movement in parallel, -1.0 implies movement in opposite directions, and 0.0 implies no relationship.

Credit Spread is the difference in yield between securities with similar maturity but different credit quality. Widening spreads generally indicate deteriorating creditworthiness of corporate borrowers, and narrowing indicate improving.

Diversification neither assures a profit nor eliminates the risk of experiencing investment losses.

Duration measures a bond price's sensitivity to changes in interest rates. The longer a bond's duration, the higher its sensitivity to changes in interest rates and vice versa. **Mathematical (analytical) duration** measures theoretical price sensitivity to interest rates using formulas, assuming static spreads and cash flows. **Empirical duration** measures actual price sensitivity using historical data and regression, capturing real-world relationships between bond prices, benchmark yields, and credit spreads.

Duration Times Spread (DTS) is a fixed-income metric measuring a bond's sensitivity to relative changes in its credit spread, calculated as spread duration multiplied by the Option-Adjusted Spread (OAS). It acts as a standardized tool to evaluate credit risk volatility, helping investors compare risk across different issuers, sectors, and maturities.

Fixed income securities are subject to interest rate, inflation, credit and default risk. The bond market is volatile. As interest rates rise, bond prices usually fall, and vice versa. The return of principal is not guaranteed, and prices may decline if an issuer fails to make timely payments or its credit strength weakens.

Floating rate bonds are debt instruments with interest rates (coupons) that adjust periodically—rather than staying fixed—based on a benchmark interest rate, such as SOFR or LIBOR. They typically pay a base rate plus a spread, helping investors reduce interest rate risk and hedge against rising inflation.

High-yield bonds, or "junk bonds," are corporate debt securities with lower credit ratings (below BBB–/Baa3) that offer higher interest rates to compensate for a greater risk of default. They are issued by companies with lower creditworthiness or high debt levels. While riskier, they offer higher income potential and lower sensitivity to interest rate changes.

Investment-grade securities: A security typically issued by governments or companies perceived to have a relatively low risk of defaulting on their payments. The higher quality of these bonds is reflected in their higher credit ratings when compared with bonds thought to have a higher risk of default, such as high-yield bonds.

Securitized products, such as mortgage-backed securities and asset-backed securities, are more sensitive to interest rate changes, have extension and prepayment risk, and are subject to more credit, valuation and liquidity risk than other fixed-income securities.

The Sharpe ratio is a financial metric used to evaluate an investment's return relative to its risk (volatility). It measures "excess return per unit of risk," helping investors determine if higher returns are due to smart investment choices or taking on excessive risk.

The Sortino ratio is a financial metric used to evaluate an investment's return relative to its "downside risk" or bad volatility. It improves upon the Sharpe ratio by focusing only on negative returns (losses), rather than total volatility, providing a clearer picture of risk-adjusted performance for investors concerned with avoiding downside.

Structural alpha is excess investment return **(alpha)** generated by exploiting market inefficiencies, structural anomalies, or specific product designs (e.g., ETFs, structured products) rather than relying on active, discretionary manager skill. It is a persistent, often repeatable, long-term source of outperformance derived from the structure of an investment.

Tracking error measures the divergence between a portfolio's returns and its benchmark index, indicating how consistently an investment follows its target. It is calculated as the annualized standard deviation of the difference between the returns of the portfolio and the benchmark, reflecting the consistency of performance rather than just total outperformance or underperformance.

U.S. Treasury securities are direct debt obligations issued by the U.S. Government. With government bonds, the investor is a creditor of the government. Treasury Bills and U.S. Government Bonds are guaranteed by the full faith and credit of the United States government, are generally considered to be free of credit risk and typically carry lower yields than other securities.

Volatility measures risk using the dispersion of returns for a given investment.

The **yield curve** is a graph that plots the yields of U.S. government bonds with different maturities at a single point in time. It is used to visualize the relationship between the interest rates (yields) and the time until the bonds mature, providing insights into economic expectations.

Janus Henderson Investors is the name under which investment products and services are provided by the entities identified in the following jurisdictions: (a) **Europe** by Janus Henderson Investors International Limited (reg no. 3594615), Janus Henderson Investors UK Limited (reg. no. 906355), Janus Henderson Fund Management UK Limited (reg. no. 2678531), Tabula Investment Management Limited (reg. no. 11286661), (each registered in England and Wales at 201 Bishopsgate, London EC2M 3AE and regulated by the Financial Conduct Authority) and Janus Henderson Investors Europe S.A. (reg no. B22848 at 78, Avenue de la Liberté, L-1930 Luxembourg, Luxembourg and regulated by the Commission de Surveillance du Secteur Financier); (b) the **U.S.** by SEC registered investment advisers that are subsidiaries of Janus Henderson Group plc; (c) **Canada** through Janus Henderson Investors US LLC only to institutional investors in certain jurisdictions; (d) **Singapore** by Janus Henderson Investors (Singapore) Limited (Co. registration no. 199700782N). This advertisement or publication has not been reviewed by Monetary Authority of Singapore; (e) **Hong Kong** by Janus Henderson Investors Hong Kong Limited. This material has not been reviewed by the Securities and Futures Commission of Hong Kong; (f) **South Korea** by Janus Henderson Investors (Singapore) Limited only to Qualified Professional Investors (as defined in the Financial Investment Services and Capital Market Act and its sub-regulations); (g) **Japan** by Janus Henderson Investors (Japan) Limited, regulated by Financial Services Agency and registered as a Financial Instruments Firm conducting Investment Management Business, Investment Advisory and Agency Business and Type II Financial Instruments Business; (h) **Australia and New Zealand** by Janus Henderson Investors (Australia) Limited (ABN 47 124 279 518) and its related bodies corporate including Janus Henderson Investors (Australia) Institutional Funds Management Limited (ABN 16 165 119 531, AFSL 444266) and Janus Henderson Investors (Australia) Funds Management Limited (ABN 43 164 177 244, AFSL 444268); (i) **the Middle East** by Janus Henderson Investors International Limited, regulated by the Dubai Financial Services Authority as a Representative Office. This document relates to a financial product which is not subject to any form of regulation or approval by the Dubai Financial Services Authority ("DFSA"). The DFSA has no responsibility for reviewing or verifying any prospectus or other documents in connection with this financial product. Accordingly, the DFSA has not approved this document or any other associated documents nor taken any steps to verify the information set out in this document, and has no responsibility for it. The financial product to which this document relates may be illiquid and/or subject to restrictions on its resale. Prospective purchasers should conduct their own due diligence on the financial product. If you do not understand the contents of this document you should consult an authorised financial adviser. No transactions will be concluded in the Middle East and any enquiries should be made to Janus Henderson. We may record telephone calls for our mutual protection, to improve customer service and for regulatory record keeping purposes.

Outside of the U.S., Australia, Singapore, Taiwan, Hong Kong, Europe and UK: For use only by institutional, professional, qualified and sophisticated investors, qualified distributors, wholesale investors and wholesale clients as defined by the applicable jurisdiction. Not for public viewing or distribution. Marketing Communication.

Janus Henderson® and any other trademarks used herein are trademarks of Janus Henderson Group plc or one of its subsidiaries. © Janus Henderson Group plc.