

ELEVATE YOUR PORTFOLIO: AN INSTITUTIONAL INVESTOR'S GUIDE TO EFFICIENTLY USING ETFs

In today's dynamic investment landscape, exchange-traded funds (ETFs) are growing in importance for institutional investors, offering a flexible and efficient way to navigate complex markets. Over the last 30 years, ETFs have evolved from a novelty to a fundamental part of portfolio management. With the ETF market now at US\$19.2 trillion (as shown in Figure 1), these tools are key for risk management, benefiting from adaptability, innovation, and flexibility. Yet, experience tells us that ETFs comprise a larger portion of individual investors' portfolios but historically are used less in the institutional world. We see reasons for that to change.

For institutional investors, ETFs have diverse strategic applications, from offering a liquid and cost-effective means of accessing esoteric markets and facilitating tactical asset allocation to enabling securities lending. They are versatile solutions that can address many different client needs.

Institutional investors can now choose from a wide range of ETFs, including both index and active strategies across all major markets and asset classes.

This paper explores how ETFs can boost diversification, enhance liquidity, and optimize portfolio management for entities like pension funds, insurance companies, family offices, endowments, and foundations. While ETFs are used differently by different client types, examples are provided of some of the solutions Janus Henderson is currently seeing in market.

Explore how institutional investors are using ETFs:

1. Segregated account customization
2. Liquidity enhancement
3. Tactical asset allocation
4. Market access / sub-asset class specialization
5. Transition management
6. Securities lending

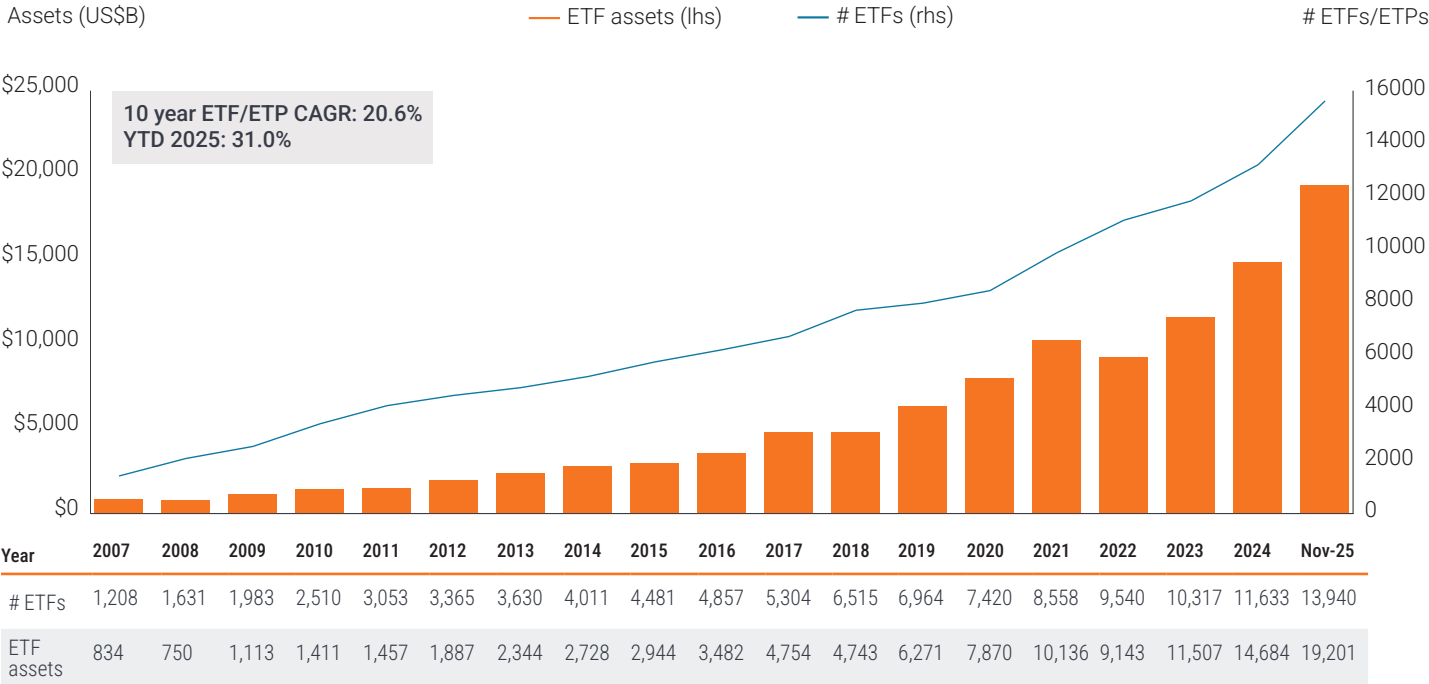
“For institutional investors facing challenges in optimizing portfolios for risk-adjusted returns, ETFs can offer strategic solutions to navigate complex markets, boost portfolio efficiency, and achieve specific investment objectives.”

Kelly Cavagnaro

Managing Director and Head of North America Institutional Client Group



Figure 1: Growth in assets in the global ETF industry



Source: ETFGI as of 30 November 2025

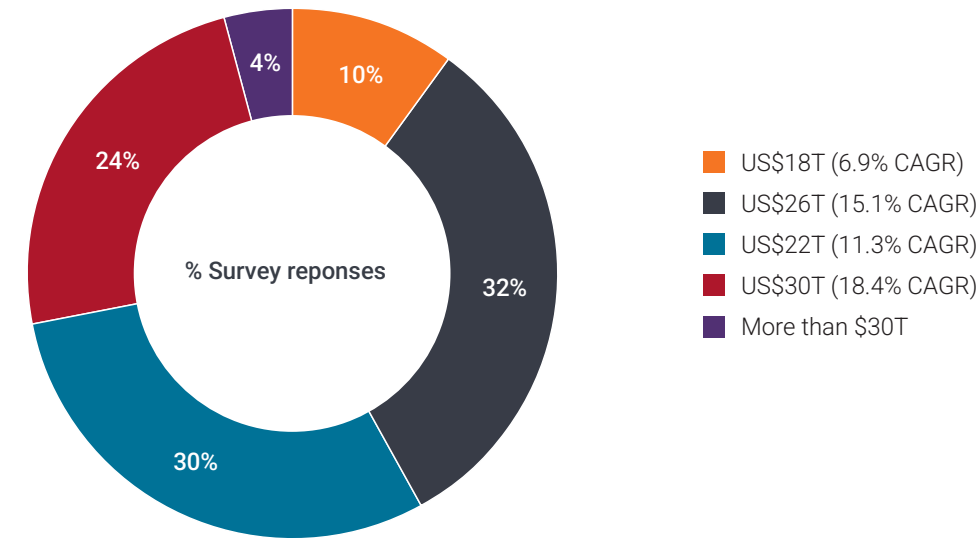
The global ETF market is poised for growth

ETFs have several unique features that may make them an attractive option for institutional investors. These include intraday liquidity, transparency, cost-effectiveness, and versatility. These qualities make them an efficient choice for gaining exposure to a wide range of asset classes and strategies.

Although ETFs have grown rapidly, especially in the U.S., they still account for less than 20% of global investable assets, highlighting significant room for expansion and adoption. Indeed, expectations for growth are significant, as highlighted in PwC’s latest survey shown in figure 2.

Figure 2: Global ETF AUM predictions US\$T

Expectations for the size of the global ETF market by 2029



Source: PwC Global ETF Survey 2024, ‘ETFs 2029: The path to US\$30 trillion, 4 March 2025. No forecasts can be guaranteed.

Here we explore six key ways that institutional investors are maximizing the benefits of ETFs within portfolios:

1. Segregated accounts: Customizing efficient exposures

Segregated accounts operate as bespoke wrappers around selected investment instruments, often including a portfolio of ETFs, to deliver institutional-grade flexibility. These accounts are legally and operationally separate from other investors' assets, ensuring that the client's portfolio is insulated from external flows or liquidity events. Institutions can specify parameters such as:

- Asset selection and weighting based on strategic objectives
- Liquidity management to meet cash flow needs
- Compliance and regulatory alignment for jurisdiction-specific requirements
- Fee structures negotiated directly with the provider for cost efficiency

As institutional investors know, this customization is particularly valuable for entities such as pension funds, insurers, endowments, and sovereign treasuries, which often have complex liability-driven investment frameworks.



IN FOCUS: Potential benefits of using ETFs within segregated accounts

- **Enhanced control and customization**

Institutions can tailor ETF exposures in an effort to meet precise investment objectives, including risk and return targets, sector tilts, or duration matching. This level of customization is difficult to achieve by purchasing standalone ETFs outright.

- **Operational efficiency**

By consolidating ETF positions within a segregated account, institutions may be able to reduce transaction costs, streamline reporting, and negotiate lower management fees. This is especially relevant for large-scale investors seeking economies of scale. These operational efficiencies are also pertinent for building exposures in more esoteric or harder-to-access asset classes like collateralized loan obligations (CLOs) or securitized.

- **Risk mitigation and transparency**

Segregated accounts provide clear visibility into holdings and eliminate commingling risk. This transparency supports robust governance and simplifies audit processes.

- **Discretion and confidentiality**

Institutions often prefer discretion in portfolio construction, both in terms of privacy and providing managers another tool to add value. Segregated accounts allow for confidential implementation of strategies without public disclosure of holdings, which can be critical for competitive or regulatory reasons. Additionally, hiring an investment manager to manage a portfolio of ETFs, or a mix of underlying securities and ETFs, allows for additional tools for alpha generation and risk management for allocators.

- **Liquidity and transition management**

Incorporating ETFs within segregated accounts can offer flexibility for managing liquidity events and portfolio transitions efficiently, minimizing market impact and operational complexity.

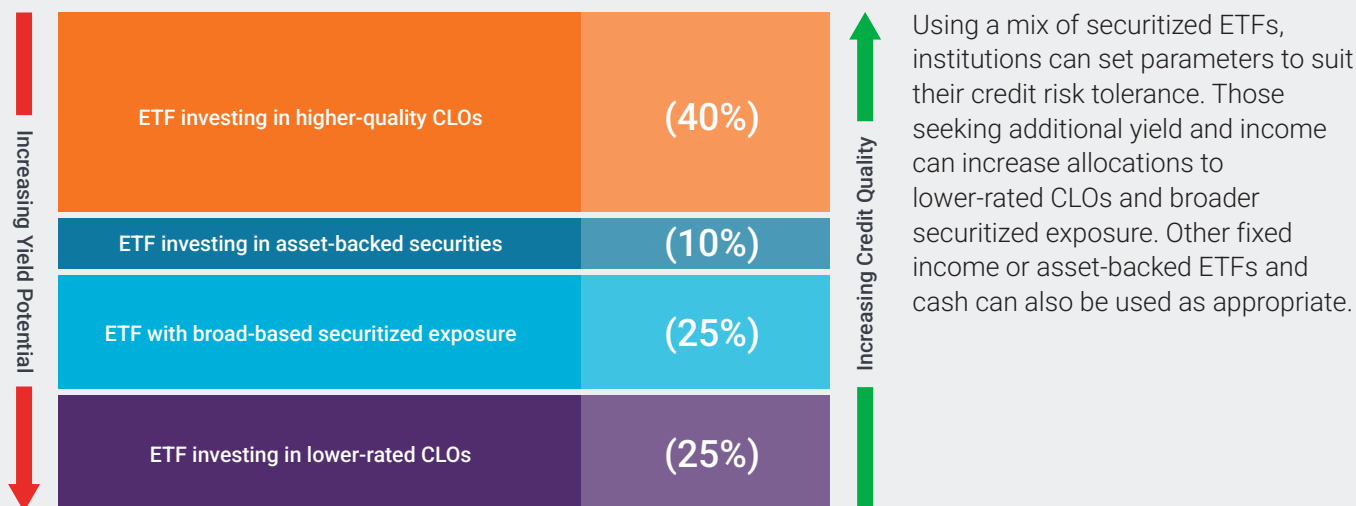
- **Cost savings**

ETF fees are generally not negotiable as they are embedded into the structure of the fund, and all investors share in the same overall costs of the ETF, including the management fee. The management fee may be viewed as expensive by institutional investors, who are often paying lower fees on other fund structures or segregated accounts given their generally higher allocations in the tens or hundreds of millions of dollars. By hiring a manager to invest in a segregated account of their ETFs, with discretion on weightings, the institutional client may benefit from scale and negotiate with the investment manager on an all-in fee.

Case study: Accessing esoteric asset classes via an ETF-based, manager-run solution

Institutions seeking access to securitized markets can use ETFs within segregated accounts to customize risk and return preferences.

Illustrative custom institutional segregated account



Source: Janus Henderson Investors. The graphic above is for illustrative purposes only. This is not an attempt to buy or sell securities or provide investment advice.

“Over-funded corporate pension funds have mostly de-risked, yet still need to out-earn their pension liability and pay for service costs. Including ETFs in asset classes like CLOs and securitized could allow investors to add yield to their fixed income portfolios without the punitive transaction costs to access these asset classes or the ramp-up period required to build a fully diversified portfolio. Hiring a manager that can use these as tools within their discretionary portfolio transfers tactical weighting decisions to the manager, enabling real-time action, as opposed to asset allocation shifts at the Plan level that can take several months to go through proper governance channels.”

Grant Podolski CFA, CAIA

Head of North America Institutional Relationship Management

Why now?

The growing adoption of ETFs by institutional investors has created demand for structures that combine the liquidity and cost benefits of ETFs with the bespoke nature of traditional mandates. Segregated accounts facilitate this hybrid solution – offering institutions the ability to scale ETF usage while maintaining full control over implementation.

2. Liquidity enhancement

For institutional investors, managing liquidity is crucial yet challenging, especially during periods of market volatility. Asset owners managing separately managed accounts (SMAs), mutual funds, general accounts, and Collective Investment Trusts (CITs) must balance cash reserves with strategic investments.

Excessive cash can hurt performance, while full investment may leave portfolios unprepared for sudden liquidity needs, potentially forcing asset sales at unfavorable prices and increasing transaction costs. Portfolios often include less liquid securities that are hard to trade and valuable to hold.

To tackle these challenges, advanced liquidity management solutions are essential. ETFs can play a key role by enhancing liquidity while maintaining investment exposures. With access to primary and secondary markets, ETFs can offer high liquidity and allow for efficient, cost-effective trading, even for large transactions.



IN FOCUS: How insurers are using ETFs:

Insurers have traditionally managed investments through unit-linked funds and direct holdings but are increasingly turning to ETFs. This shift is driven by several key factors:

- The need for precise and cost-effective access to global markets
- The pursuit of enhanced portfolio diversification
- The requirement for liquidity during periods of market volatility

ETFs may provide an extra layer of defense against unexpected market changes, potentially enabling asset managers to quickly adjust their portfolios while preserving returns. This "liquidity sleeve" allows for swift market exits without sacrificing existing bond and equity market exposures.

Why insurers use higher quality CLO ETFs

Insurers often seek efficient ways to manage liquidity while maintaining strong credit quality. One solution gaining traction is the use of ETFs that invest in AAA CLOs as a cash substitute.

AAA CLOs are positioned as a step beyond traditional money market instruments, seeking enhanced yield while preserving high credit standards.

Liquidity and yield advantage

ETFs with high daily trading volume provide valuable liquidity. This liquidity, combined with the AAA credit quality of the underlying tranches, and yields above cash rates, has driven adoption of this cash substitute in insurers' general accounts.

Regulatory and capital benefits

Insurers are particularly drawn to ETFs with an NAIC1 designation, which offers favorable capital treatment under regulatory frameworks. In today's volatile market environment, this designation can provide an advantage for insurers prioritizing NAIC1 or NAIC2-designated securities.

Case study: Managing issuance proceeds

Consider a large insurer issuing Funding Agreement Backed Notes (FABNs) at 80 bps over Treasuries. Given the size and immediacy of FABN issuance, the insurer seeks to avoid cash drag and deploy proceeds efficiently while maintaining high liquidity and credit quality. AAA CLO ETFs can provide an effective interim deployment vehicle, allowing the insurer to put FABN proceeds to work immediately, earning a spread pickup over its funding cost. This creates a compelling spread differential that insurers can leverage to enhance returns during the ramp period, without sacrificing liquidity, asset quality, or balance-sheet discipline.

¹ Janus Henderson, Bloomberg (as at 31 December 2025). AAA CLO ETFs are not cash equivalents and may fluctuate in value. They are subject to credit, liquidity, and structured product risks, and may be more volatile than traditional cash investments.

Key stats:

- Insurers continue to **dominate investment in the CLO sector**. In 1H 2025, insurance companies purchased around \$70B of CLO/CBO/CDOs, according to data from Bank of America Merrill Lynch (BAML).
- Insurers specifically **bought CLO ETFs**. In 2025, with total ETF purchases sitting at around US\$11B across 139 insurance entities, BAML estimates US\$1.6B was in CLO ETFs.

“Due to their liquidity and trading structure, ETFs can enable investors to capitalize on a second-by-second price move in the market, compared to other products that can only be traded at market close or even less frequently than that.”

Kelly Cavagnaro

Managing Director and Head of North America Institutional Client Group

3. Tactical asset allocation

Effective risk management and the ability to seize opportunities in dynamic markets are critical capabilities for institutional investors. ETFs, known for their liquidity and diverse asset class exposures, can offer viable tools for this purpose. They enable swift market adjustments and strategy implementation, often at a lower cost, making them a valuable component for institutional portfolios.



IN FOCUS: How public pension funds are using ETFs

The wide range of available ETFs provides a diverse set of tools for public pension fund managers facing challenges in different stages of a defined benefit scheme. ETFs can help achieve liquidity, enhance portfolio diversification, and facilitate smooth, cost-effective transactions during new mandates or endgame insurance buyouts.

Pension scheme managers can effectively use the diverse range of ETFs to access various geographies, sectors, and asset classes, streamlining strategic asset allocation and portfolio diversification.

The extensive selection, from core equity to bond ETFs, offers easy market access and innovative options like short-dated bonds. This flexibility is particularly beneficial for making quick adjustments during periods of market volatility, allowing managers to maintain optimal portfolio balance efficiently.

Why public pension funds use ETFs

Public pension funds face unique challenges in managing large, diversified portfolios while meeting long-term obligations. Tactical asset allocation and effective risk management are critical for these institutions, especially in dynamic market environments. ETFs have emerged as valuable tools for achieving these objectives.

Case study: Dynamic adjustments during market shifts

Consider a scenario where a public pension fund needs to reduce credit risk while maintaining yield. By leveraging short-dated bond ETFs or shifting allocations across sectors, managers can execute these changes quickly without disrupting overall portfolio structure. This ability to act decisively in volatile markets underscores the strategic value ETFs can bring to public pension funds.

4. Market access / sub-asset class specialization

With a vast selection of ETFs available across various market segments, factors, and themes, institutional investors can now use them strategically to align with their specific investment goals.

ETFs not only offer exposure to equities, fixed income, commodities, and alternative markets linked to major indices like the S&P 500 but also provide access to niche markets such as bank loans, convertible bonds, preferred stocks, factor-based equities, gold, and non-USD markets. This capability can be particularly beneficial for investors lacking the expertise or resources to navigate complex, less liquid markets, where they might otherwise resort to derivatives.

Further, ETFs offer added precision within standard benchmarks, allowing for tailored portfolio strategies based on sectors or specific asset classes. In our view, ETFs have become an indispensable tool for multi-asset managers looking to gain targeted market exposure efficiently.



IN FOCUS: How family offices are using ETFs

ETFs are instrumental to family offices, offering potential diversification across asset classes, sectors, and regions while supporting effective risk management. They enable precise market exposure, cost efficiency through lower expense ratios, and easy liquidity on major exchanges.

ETFs also provide transparency through regular disclosure of holdings and access to niche markets without requiring extensive expertise. This can boost operational efficiency, helping family offices optimize their investment strategies.

Why family offices use ETFs

Family offices manage wealth across generations, often with lean investment teams and limited research resources. Their primary goals include diversification, risk management, and efficient access to global markets. However, navigating complex or niche asset classes can be challenging without specialized expertise.

Case study: Diversification without complexity

Consider a family office aiming to diversify into alternative credit and emerging markets but lacking internal expertise. Instead of building bespoke portfolios or using derivatives, they can deploy ETFs targeting bank loans or non-USD fixed income. This approach facilitates immediate exposure, liquidity, and risk control—without the operational burden of managing illiquid assets.

5. Transition management

ETFs can offer a cost-effective way for institutional investors to maintain market exposure during manager transitions or strategic shifts, minimizing cash drag and enhancing transition efficiency.

By working with authorized participants (APs), investors can convert portfolios to ETFs and back at a lower cost than liquidating assets. For those managing capital internally or switching managers, ETFs allow for market exposure with minimal rebalancing.

They also enable discreet funding of new mandates through secondary market purchases, making them particularly appealing in the fixed income sector, where liquidity can be limited and large capital deployments may affect pricing.

Further, ETFs have proven their use in various market stress scenarios, including the Global Financial Crisis, Covid-19 volatility, and the tariff uncertainties of April 2025. In each instance, index ETFs have played a crucial role in enhancing market liquidity and facilitating price discovery.



IN FOCUS: How endowments and foundations are using ETFs

ETFs can offer a highly liquid investment option, minimizing the cash drag that can hinder returns during portfolio transitions. This feature is especially valuable for endowments and foundations shifting from equities to bonds to manage risk.

By using ETFs, these institutions can maintain market exposure, support stable cash flow strategies, and potentially boost overall returns while ensuring cost-effective transitions.

Why endowments & foundations use ETFs

Endowments and foundations face unique challenges in balancing long-term return objectives with liquidity needs. Historically, these institutions enjoyed tax-agnostic planning, but recent changes to tax tiers—rising from 1.4% to 4% and 8%—have introduced new complexities. Achieving consistent return targets now requires higher pre-tax returns while maintaining sufficient liquidity to meet operational and tax obligations.

Case study: Meeting higher return targets under new tax rules

Consider an endowment in the 8% tax tier, where maintaining an 8% net return requires an additional 58 bps in pre-tax performance. Rather than overexposing to illiquid private equity, the institution can allocate to ETFs focused on emerging market debt or short-duration credit. This approach may deliver incremental yield, preserve liquidity, and supports operational flexibility—critical in a post-tax return environment.

6. Securities lending

Securities lending allows portfolios to temporarily loan securities to borrowers, such as short sellers or market makers, in exchange for collateral and a fee. Thanks to their structure and broad user base, ETFs are now a sound option for a "long and lend" strategy, designed to enhance portfolio yields.

Asset owners like insurers and asset managers can use ETFs to earn additional income with lower execution costs by working with APs to convert portfolios into ETFs and vice versa. This approach helps maintain market exposure during manager transitions or strategy shifts without the need for significant rebalancing, and it is especially useful in the fixed income sector.

However, investors should weigh the benefits against potential risks like reduced liquidity, counterparty defaults, and collateral requirements.



IN FOCUS: How borrowers are using ETFs for securities lending

Borrowers have adopted ETFs for security lending given their liquidity, high-trading volumes, and widespread user bases.

- **Reduced Costs and Increased Efficiency** - ETFs are a viable choice in securities lending because additional shares can be issued to meet borrower demand, potentially preventing a product from trading at excessive premiums or discounts.
- **Versatility** - The broad range and detailed nature of the ETF market enables hedging, short selling, and balance sheet management across a variety of asset classes and market exposures.

Why partner with Janus Henderson Investors?

Janus Henderson is a leader in the ETF market, working globally with institutional investors to integrate ETFs into their portfolios. We support clients through the entire investment process with innovative research, product development, market insights, index guidance, and efficient trade execution.

Trusted partners

Benefit from over a decade of ETF expertise and established capital markets relationships.

Insight-led strategies

Leverage the insights of Janus Henderson’s active investment teams to optimize your portfolio.

Client-focused innovation

Access pioneering investment solutions developed in direct response to evolving client needs, including CLOs and tokenised vehicles.

Industry-leading active ETF provider:

1st	4th	Over \$35bn
Largest CLO ETF provider globally	Largest active fixed income ETF provider globally by AUM	In ETF assets under management

Source: Bloomberg as at 31 December 2025

FOR MORE INFORMATION, PLEASE VISIT JANUSHENDERSON.COM

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Important information:

Investing involves risk, including the possible loss of principal and fluctuation of value. There is no assurance the stated objective(s) will be met.

Actively managed portfolios may fail to produce the intended results. No investment strategy can ensure a profit or eliminate the risk of loss.

Alpha compares risk-adjusted performance relative to an index. Positive alpha means outperformance on a risk-adjusted basis.

Alternative investments include, but are not limited to, commodities, real estate, currencies, hedging strategies, futures, structured products, and other securities intended to be less correlated to the market. They are typically subject to increased risk and are not suitable for all investors.

Bank loans often involve borrowers with low credit ratings whose financial conditions are troubled or uncertain, including companies that are highly leveraged or in bankruptcy proceedings.

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

Collateralized Loan Obligations (CLOs) are debt securities issued in different tranches, with varying degrees of risk, and backed by an underlying portfolio consisting primarily of below investment grade corporate loans. The return of principal is not guaranteed, and prices may decline if payments are not made timely or credit strength weakens. CLOs are subject to liquidity risk, interest rate risk, credit risk, call risk and the risk of default of the underlying assets.

Concentrated investments in a single sector, industry or region will be more susceptible to factors affecting that group and may be more volatile than less concentrated investments or the market as a whole.

Derivatives can be more volatile and sensitive to economic or market changes than other investments, which could result in losses exceeding the original investment and magnified by leverage.

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.

Equity securities are subject to risks including market risk. Returns will fluctuate in response to issuer, political and economic developments.

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.

Mortgage-backed securities (MBS) may be more sensitive to interest rate changes. They are subject to extension risk, where borrowers extend the duration of their mortgages as interest rates rise, and prepayment risk, where borrowers pay off their mortgages earlier as interest rates fall. These risks may reduce returns.

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Procedures Manual of the NAIC Investment Analysis Office. The assignment of an NAIC Designation is not a recommendation to purchase the Fund and is not intended to convey approval or endorsement of the Fund Sponsor or the Fund by the NAIC.

Increased **portfolio turnover** may result in higher expenses and potentially higher net taxable gains or losses.

Any **risk management** process discussed includes an effort to monitor and manage risk which should not be confused with and does not imply low risk or the ability to control certain risk factors.

Securitized products, such as mortgage- 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.

Short sales are speculative transactions with potentially unlimited losses, and the use of leverage can magnify the effect of losses.

S&P 500® Index reflects U.S. large-cap equity performance and represents broad U.S. equity market performance.

Strategic allocation (SAA) is designed to represent the management style of the strategy and is the starting point for sector allocation decisions. The SAA aligns with the strategy's objectives and seeks to systematically maximize expected risk-adjusted returns by taking advantage of inefficiencies in the fixed income market and traditional benchmarks. The SAA incorporates objective criteria and proprietary hedging assumptions. The SAA is rebalanced to the neutral allocation monthly and may vary over time with prevailing market conditions. More detail can be provided upon request.

Volatility is a measure of the variation of the return of investments over a period of time. There are a number of ways in which volatility can be measured or calculated. One method, 'Realised Volatility', measures the variation of historic returns over a particular period of time. 'Forecast Volatility', which can be calculated in different ways, is calculated using models with assumptions to forecast the possible variation of returns of investments for a future time period. Forecast volatility is useful for financial planning and investment management and is used for this fund. Further details of the volatility parameters and measurement process can be obtained from Janus Henderson. Janus Henderson has produced simple guides to volatility and risk profiling which are designed for you to use with your clients, to help them understand their investments. These guides are available at www.janushenderson.com - or on request from Janus Henderson.

Funds classified as "nondiversified" can take larger positions in a smaller number of issuers than "diversified" funds, which could lead to greater volatility.

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