

# From income to outcomes

The evolution and future of fixed income

Fixed income is experiencing a profound evolution. Its very purpose is changing: Whereas investors traditionally have used fixed income to play discrete, proscribed roles in a portfolio—generating income, hedging equities, mitigating drawdown risk—they can now use the asset class to build more precise and efficient solutions tailored to their unique objectives and constraints. These solutions may accomplish a range of goals, from matching complex liabilities to hedging specific risks to meeting spending targets.

The change is being driven by a confluence of shifts in market structure, technologies, data, and investor behavior. As fixed income becomes a lever of strategic intent—capable of bridging risk management, liability design, sustainability, income, and diversification—it is poised to claim a central, dynamic role in shaping the portfolios of tomorrow. The future belongs to asset managers who can convert data into insight, complexity into clarity, and fixed income allocations into engineered outcomes.

## **Developments reshaping fixed income and its role in portfolios**

Investors are largely familiar with the changes that transformed equity markets in recent decades, including increased use of electronic trading, reductions in trading costs and fees, the growth of data, and the rise of index investment strategies. Fixed income is in the middle stages of a similar evolution, with profound implications for institutional investors.

Shifts in the ways fixed income assets are traded and managed are opening the door to a reimagination of the ways the asset class can provide value—expanding its role from a source of income and equity hedge to a foundational component of specific, highly tailored investment outcomes.

The convergence of several trends is reshaping fixed income:

- The bond market's structure and trading mechanisms are evolving
- Fast-improving technologies enable greater precision
- Index and systematic strategies are making inroads
- The definition of active management has expanded
- Fee compression is colliding with the imperative for scalable customization

# The bond market’s structure and trading mechanisms are evolving

Fixed income trading is undergoing a fundamental transition. The bond ecosystem traditionally operated with an opaque, dealer-centric structure. The structure is changing to be more electronic and transparent, with new protocols, such as portfolio trading and electronic exchanges, that provide more efficient ways to access liquidity.

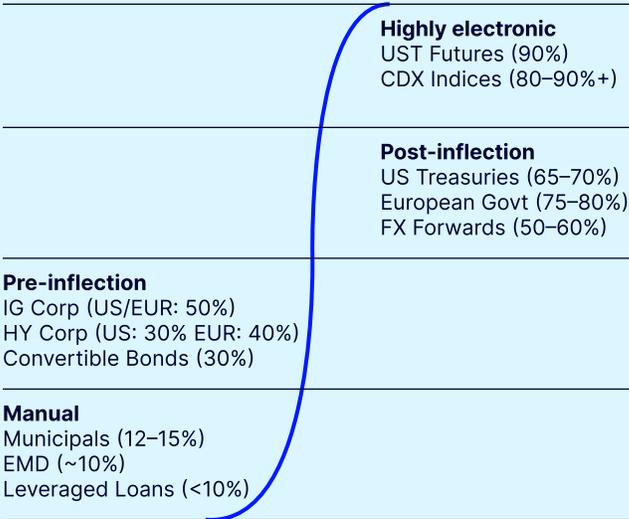
The fixed income markets’ historical structure presented investors with a variety of challenges, including asymmetric information, episodic liquidity, and pricing and execution that were contingent on entrenched dealer relationships. The widespread adoption of electronic trading platforms such as Tradeweb, MarketAxess, and Bloomberg has profoundly disrupted this model. E-trading platforms introduce real-time pricing and “all-to-all” trading environments with access to diverse networks of counterparties. These and other innovations—including portfolio trading, AI-based composite pricing algorithms, and use of automated execution tools for more-liquid and smaller tickets—make execution more efficient and more reliable.

Some fixed income sectors are farther along the evolutionary curve than others. That said, these developments are already having major impacts. They materially improve liquidity and reduce investors’ transaction costs; make it possible for asset managers to deploy scalable, factor-based investment frameworks across investment grade and high yield; and make the execution of large, complex trades more efficient and transparent.

## Benefits of e-trading adoption across fixed income

- 1 Scalability & speed
- 2 Lower transaction costs
- 3 Transparency

Figure 1: Current state of e-trading

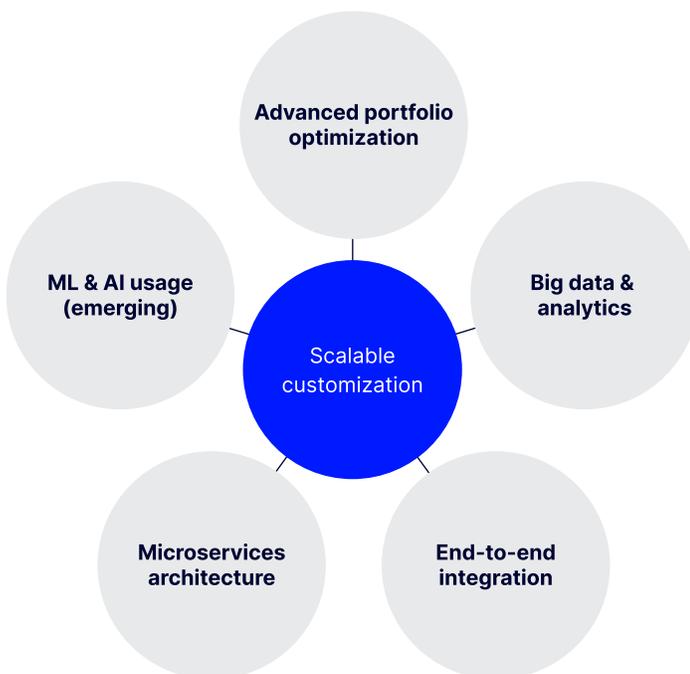


Source: Barclays Research, Flow Traders, Coalition Greenwich, FT, Tradeweb, SSIM Estimates. As of 30 June 2025. The information contained above is for illustrative purposes only.

# Fast-improving technologies enable greater precision

Technological advances—specifically in portfolio optimization, real-time decision support, and best execution—are reshaping workflows in fixed income portfolio management. The trading capabilities provided by today’s portfolio management platforms empower managers to calibrate exposures more precisely than they could in the past, making it possible to customize portfolios to more closely align with investors’ desired outcomes.

Figure 2: Technology enables customization at scale



Source: State Street Investment Management. The information contained above is for illustrative purposes only.

Managers can now integrate real-time liquidity, value, and risk metrics at the individual security level. Portfolio management platforms analyze multiple risk dimensions simultaneously, suggesting and identifying the most efficient risk-matched bonds while controlling for factors including liquidity, idiosyncratic risk, and trading costs.

Technological leaps have been accompanied by an explosion of bond-market information. More frequent trading across a broader swath of the bond market creates more data points investors can use to understand and position around fixed income market dynamics. In a positive feedback loop, improvements in precision and transparency beget demand for still more data to support enhanced capabilities and new strategies. For example, trading platforms can now aggregate historic and intraday bond pricing data from multiple public and platform-specific data sources, and they can use machine learning algorithms and prediction engines to generate real-time pricing predictions for both bids and offers. Equipped with burgeoning data, platform innovations, and automation tools, traders can undertake more complex transactions, execute higher volumes, and improve prices on clients’ behalf.

These advances provide a range of benefits to investors. The universe of investable instruments has expanded. Managers can create scalable portfolios that align tightly with specific constraints, fiduciary mandates, and regulatory frameworks: for example, efficiently optimizing a portfolio across multiple risk dimensions based on specific yield and duration targets, while avoiding client-specified exclusions and maintaining desired portfolio turnover.

Technology therefore enables and supports the move to customization at scale. Sophisticated tools allow simultaneous management of multiple constraints: cash flow matching, regulatory capital efficiency, ESG scoring, sector exposure limits, and more. These custom solutions can be deployed across client segments including model delivery platforms, portfolio management as a service, and outsourced chief investment officer (OCIO) mandates. They are meeting clients' needs by delivering mass-customized portfolios that combine precision in risk-factor targeting with alignment to client objectives, constraints, and values. New technology also enables more robust performance analytics and client reporting across a range of dimensions, including factor exposures, liquidity scores, and return drivers.

# Index and systematic strategies make inroads in fixed income

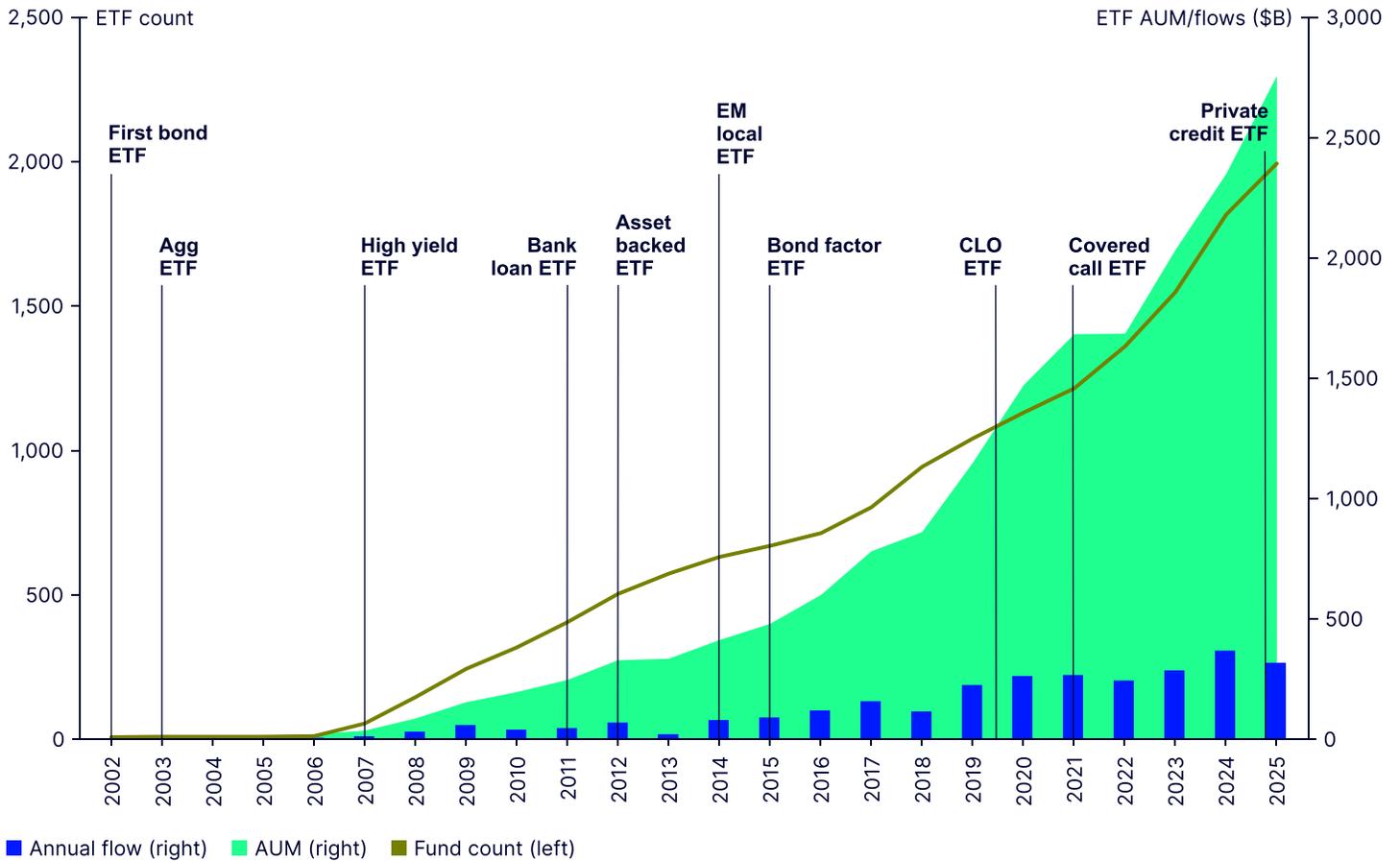
The exponential growth of fixed income ETFs and index-oriented strategies has redefined investors' market access and ability to source liquidity. ETFs evolved from peripheral tools to foundational elements of strategic and tactical asset allocation frameworks due to the benefits of their real-time pricing, cost-effective execution, and exposure to previously hard-to-access market segments. Fixed income ETFs now serve as reference points for less-liquid securities, and large institutional allocators increasingly use them to manage their exposures.

Meanwhile, evolutions in market structure and trading, paired with the explosion in market data, give rise to systematic fixed income strategies anchored in factor-based security selection, rules-based portfolio construction, and disciplined rebalancing.

These strategies are now beginning to challenge the hegemony of fundamental active management. Systematic methodologies, which are often rooted in academic literature on credit risk premia and market microstructure, deliver replicable and scalable exposures while facilitating nuanced control over a portfolio's risk characteristics. These approaches can now be scaled to deliver varied levels of excess return and risk, offering investors greater choice when building fixed income solutions. We view these strategies as complements and alternatives to fundamental active strategies, which will likely continue to play a meaningful role in investors' portfolios.

Institutional allocators now routinely blend index exposures with tactical and/or strategic overlays, using ETFs not just for beta but as precision instruments for tactical rotation, transition management, and scenario testing. By modularizing portfolio construction, ETFs can help managers improve efficiency, liquidity, risk trade-offs, and alignment with fiduciary and regulatory mandates.

**Figure 3: ETFs have reshaped the fixed income landscape**



Source: Morningstar, Americas ETF Research Calculations as of August 31, 2025. Period 2002-2007 is representative of US Fixed Income ETF data only. Figures beginning 2008 are inclusive of all global ETFs.

# The definition of active management has expanded

The boundaries of what constitutes active fixed income management are changing in front of our eyes.

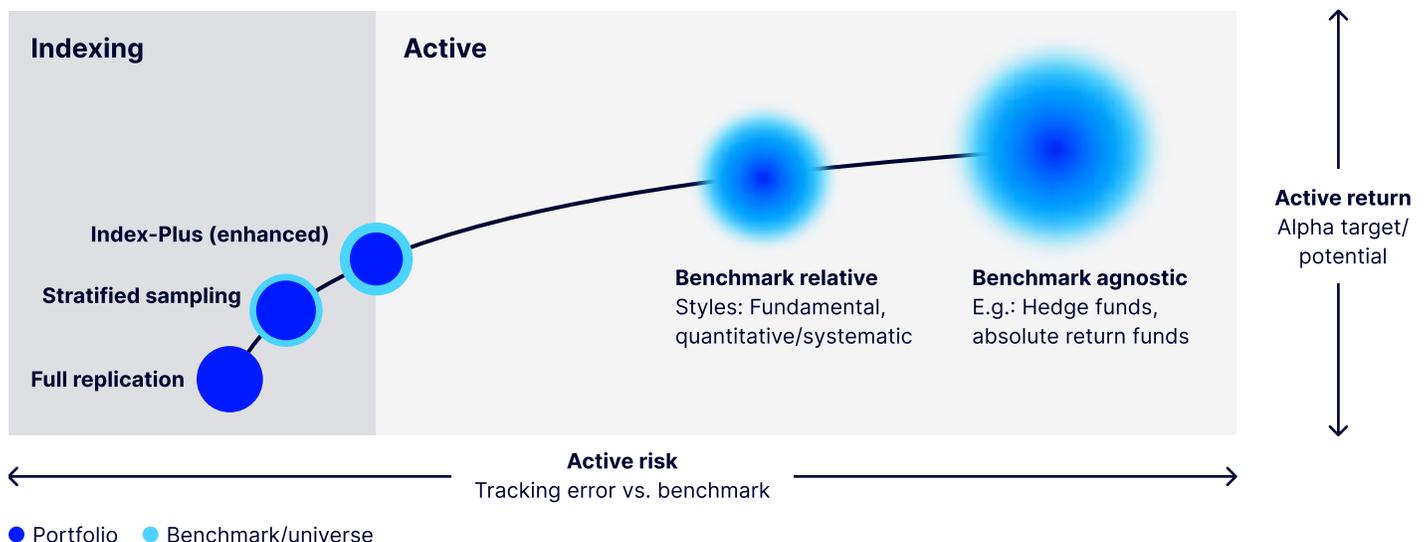
Innovations have created a rich overlap between the active and index investment paradigms, eroding the barriers between these previously distinct approaches.

- Index frameworks increasingly include active elements, as in the case of “implementation alpha,” enhanced indexing, and rules-based strategies
- Many nominally active strategies generate excess returns by exploiting known market structure inefficiencies and/or employing out-of-benchmark exposures

At the same time, the center of gravity for value creation in fixed income has shifted. Whereas managers traditionally added value primarily through security selection, asset allocators increasingly recognize that a range of other active decisions may have greater impact on investor results.<sup>1</sup> These higher-order decisions include determining strategic asset allocation targets, choosing benchmarks, and deciding whether, how, and how often to apply tactical asset allocations.

Evolutions in technology and markets enable investors to add greater value with these kinds of choices. Portfolio managers use new tools to engage in systematic portfolio engineering and to code more complex client objectives and guidelines. They can harness big data and ever-improving technology to automate trading, perform attribution, and otherwise enhance investment operations. With these capabilities, managers can provide greater value by aligning considerations like

Figure 4: The index-to-active continuum



Source: State Street Investment Management. The information contained above is for illustrative purposes only.

strategic allocation and benchmark selection with each client's unique objectives, enabling more tailored outcomes.

Managers also are using these tools to reduce implementation costs, refine their tactical risk budgeting, minimize slippage, optimize trading execution, and improve efficiency in other ways (the implementation alpha noted above). And to generate alpha in today's high-volatility, headline-news-driven environment, managers are harnessing innovations in portfolio construction algorithms, intelligent rebalancing, and dynamic risk premia harvesting.

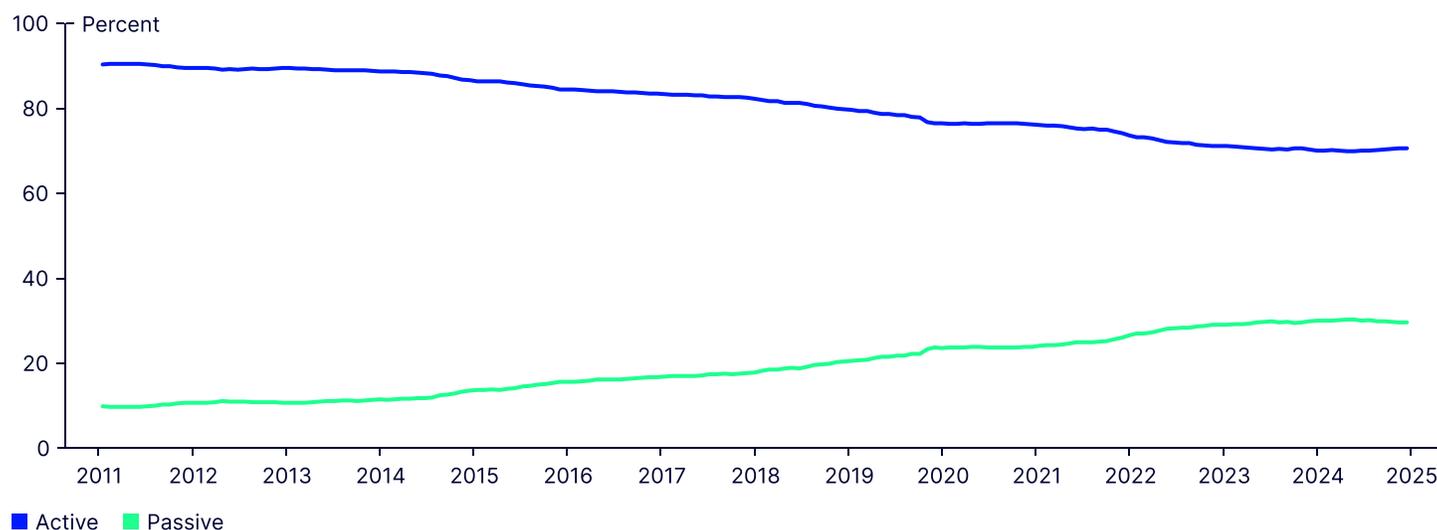
# Fee compression collides with the imperative for scalable customization

Asset management fees are under pressure, compressed by intense competition and disintermediation, as well as by investors' expectations for institutional pricing, even for differentiated, high-quality solutions. Meanwhile, investors are demanding ever-greater customization in the form of liability-sensitive portfolio construction, tax-aware optimization, ESG integration, or other bespoke approaches. Shifts in the market

and advances in technology enable managers to reconcile these two competing forces.

Asset managers are capitalizing on improved market transparency and more-efficient implementation to disaggregate fixed income exposures into underlying building blocks. Those building blocks can be blended or optimized in various ways to efficiently target specific client objectives or portfolio outcomes. In addition, managers have developed modular portfolio design architectures that leverage ETFs, model portfolios, and overlay mechanisms to construct individualized solutions at scale.

Figure 5: Active-passive ratio of the fixed income market



Source: Morningstar. Captures the broad Morningstar Worldwide Open Ended and ETF Universe, ex Money Market and Fund of Funds. As of July 31, 2025.

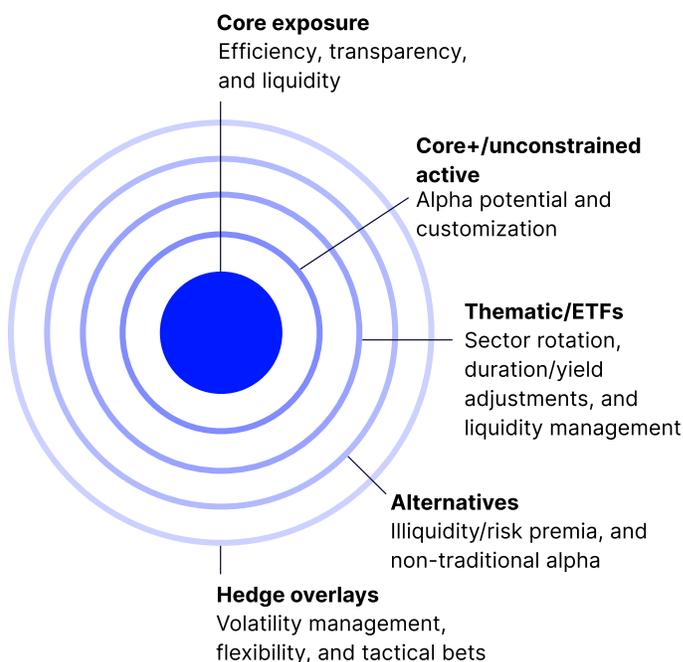
# Changes transform fixed income into a solutions asset class

The changes noted above are driving a fundamental change in the “why” for fixed income. Historically, the asset class has been used mainly to produce income, hedge equities, and/or provide excess return. As noted above, asset managers today can use fixed income to engineer portfolios to pursue a range of desired results with a high degree of transparency and reliability—in short, to deliver more precise solutions.

A solutions mindset will be a key feature of future fixed income investing. Each institution approaches its challenges with a unique set of assets, liabilities, and constraints, based on its mandates, time horizons, cash flow profiles, liquidity requirements, sensitivity exposures, capital preservation functions, regulatory requirements, and other considerations. The ability to meet these varied and constantly shifting needs will define success or failure for asset managers. This focus on outcome-based investing opens the door to innovation in performance measurement and impact attribution. Investors can now track fixed income’s contribution to goals, regulatory mandates, and broader societal outcomes such as decarbonization and infrastructure finance.

As they focus on the exposures needed to achieve specific outcomes, managers must work with their clients to strike the right balance of contrasting investment qualities: alpha and beta, liquidity and illiquidity, public and private. One approach gaining traction is a core-satellite structure consisting of reliable, cost-effective index strategies and other building blocks, complemented with high-alpha or niche satellite components that can be combined and customized to deliver specific client outcomes.

**Figure 6: The new core-satellite**



Source: State Street Investment Management. The information contained above is for illustrative purposes only.

We see the trend toward efficient exposure management playing out along several dimensions:

**Figure 7: Fixed income exposure management**

Core: Index/benchmark	Satellite: Active
Beta	Alpha
Transparent	Less transparent
Lower cost	Higher cost
Risk reducing/liability matching	Risk/return seeking
Liquid	Less liquid
Public markets	Public and private markets

Source: State Street Investment Management. For illustrative purposes only.

# Emerging innovations

Several structural and technological currents are poised to further redefine the landscape of fixed income investing. They include:

**AI and predictive analytics.** Enhanced integration of AI and machine learning will expand the frontiers of portfolio modeling, scenario analysis, and optimization of portfolio exposures. Potential use cases for these technologies include adaptive signal generation, sentiment-based FX hedging, and anomaly detection in bond pricing, but these applications likely only scratch the surface.

**Tokenization and distributed ledger technologies.** The emergence of blockchain-enabled issuance and settlement platforms will reshape how both the primary and secondary markets function, reducing friction, lowering operational costs, and increasing transparency. These platforms pave the way for fractional securities and reduce settlement timing and risks.

**Direct indexing and customized benchmarking.** Investor demand for tailored exposures will catalyze the proliferation of custom indices. These bespoke benchmarks will help align portfolios precisely with criteria including credit quality thresholds, duration targets, and ESG preferences. Asset managers will develop unique portfolio construction frameworks aligned with these proprietary benchmarks, redefining their value propositions in the process.

**Fusion of active and index approaches in ETF structures.** Active ETFs that blend active and index components will become the dominant vehicles for the delivery of sophisticated strategies, as investors capitalize on their ability to combine cost-effectiveness with strategic agility and regulatory transparency. Managers will increasingly leverage the ETF wrapper for liquidity management, capital efficiency, and cross-channel distribution.

**Integration of public and private credit markets.** Allocators' desire for holistic yield solutions and the explosive growth in private credit will drive asset managers to blend liquid and illiquid credit exposures with hybrid structures, new valuation frameworks, and enhanced liquidity. This convergence may also lead to new reporting standards and valuation tools that bridge public and private markets.

These developments will reinforce current trends, supporting increased precision, more-efficient implementation, enhanced transparency, and ultimately the creation of more customized, outcome-oriented solutions.

# The future of fixed income favors asset managers with scale and global reach

The coming environment will place new demands, expectations, and pressures on asset managers. Three key criteria will determine their success:

- **Scale:** Size matters in fixed income, now more than ever. Scale drives counterparty relationships, the breadth of building block offerings, trading volume and efficiency, and the ability to continuously invest in the people and technology needed to meet or exceed investor objectives. Scale, particularly in ETFs, also provides access to the lifeblood of investing: data.
- **Skill:** Skilled managers can harness data and trading insights to generate highly precise, transparent, and efficient exposures. These exposures form the building blocks of custom solutions.
- **Experience:** Managers can translate data, transparency, and efficiency into custom solutions only in the context of trusted partnerships with clients. These relationships take time to develop and mature. For their part, clients want to partner with an asset manager that has experience measured in decades and the culture and stability to persist through whatever the future holds.

Asset managers that successfully combine these features will be positioned to deliver what clients seek: a reliable partner who offers market insights, transparent solutions, and consistent outcomes.

# Why size matters

The biggest asset managers play an essential role in the fixed income ecosystem and enjoy strong, intertwined connections with other large market participants.

These largest managers are **essential counterparties for bond dealers**. These companies effectively act as extensions of dealers' balance sheets, thanks to their large transaction volumes and ETF franchises and the in-kind and portfolio trading they offer. The importance of these relationships earns the managers differentiated treatment, including enhanced access to liquidity. Such advantages will grow in importance as the market's structure and technologies continue to evolve.

The biggest managers also have numerous **cost advantages**, due to economies of scale, preferred pricing relationships, market positions that enable them to be price makers rather than price takers, and efficiencies provided by ETF franchises. Smaller asset managers will struggle to compete with these efficiencies.

Moreover, asset managers need to **participate in the full breadth of the fixed income universe** to deliver specific outcomes rather than simply provide income or manage volatility. The demand for solutions requires facility with the entire spectrum of global fixed income sectors and the ability to trade across all platforms and protocols.

For example, emerging markets debt's characteristics—including relatively high yields and low correlations to other segments—can make it a valuable component of a variety of portfolio solutions. Capitalizing on its potential requires experience and expertise in dozens of markets across a wide variety of disciplines. Supporting these capabilities requires resources, experience, and market position that only the largest managers possess. Comparable dynamics favor large managers in leveraged loans, high yield, and other segments that can play key roles in outcome-oriented portfolios.

The largest managers are also uniquely capable of making the **technology** investments necessary to navigate future fixed income markets and craft solutions to investors' needs. Sophisticated, expensive technology will only grow in importance. The biggest managers have the financial wherewithal to realize technology's potential, and they alone have the breadth and depth of relationships to connect through technology to the other key players at all the different points in the fixed income ecosystem.

Of course, technology is simply a tool; it can augment human judgment but does not replace it. Fixed income managers need deep **experience and expertise** to inform their judgments, so they can harness complex technologies to solve investors' challenges—another advantage for the largest firms.

Our understanding of current fixed income markets, and our vision for the future, lead us to specific key beliefs about the asset class:

- Fixed income is increasingly client-centric and solutions-oriented
- This transition is powered by a growing set of building blocks, some of which blur the lines between active and index or public and private, enabling innovative structures that employ these building blocks to gain liquid, transparent, reliable, and efficient exposures
- Core building blocks increasingly will capitalize on market structure changes and technological advances to harness known, persistent factors that drive outperformance
- Technology will continue to drive transparency, simplify complexity, and allow for greater precision, all of which will boost liquidity and efficient portfolio construction
- Scale, skill, and experience will matter more than ever, as solutions demand breadth and depth across markets and sectors

The future of fixed income lies not just in its historical role as a source of yield, driver of excess return, and counterweight to equities, but in its ability to enable client-specific outcomes. The firms that can marry scale, investing skill, experience, technological sophistication, and fiduciary integrity will be able to serve investors' needs more effectively and efficiently than ever before.

## Endnotes

- 1 For additional perspectives on the range of these types of active decisions, see “Casting a Wide Net: Why True Passive Strategies Are Rare Catches.”

## About State Street Investment Management

At State Street Investment Management, we have been helping to deliver better outcomes to institutions, financial intermediaries, and investors for nearly half a century. Starting with our early innovations in indexing and ETFs, our rigorous approach continues to be driven by market-tested expertise and a relentless commitment to those we serve. With over \$5 trillion in assets managed\*, clients in over 60 countries, and a global network of strategic partners, we use our scale to create a comprehensive and cost-effective suite of investment solutions that help investors get wherever they want to go.

\* This figure is presented as of June 30, 2025 and includes ETF AUM of \$1,689.83 billion USD of which approximately \$116.05 billion USD in gold assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Investment Management are affiliated. Please note all AUM is unaudited.

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Bonds generally present less short-term risk and volatility than stocks but contain interest rate risk (as interest rates rise, bond prices usually fall); issuer default risk; issuer credit risk; liquidity risk; and inflation risk. These effects are usually pronounced for longer term securities. Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

Investing in high yield fixed income securities, otherwise known as “junk bonds”, is considered speculative and involves greater risk of loss of principal and interest than investing in investment grade fixed income securities. These Lower-quality debt securities involve greater risk of default or price changes due to potential changes in the credit quality of the issuer

Government bonds and corporate bonds generally have more moderate short-term price fluctuations than stocks, but provide lower potential long-term returns.

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The values of debt securities may decrease as a result of many factors, including, by way of example, general market fluctuations; increases in interest rates; actual or perceived inability or unwillingness of issuers, guarantors or liquidity providers to make scheduled principal or interest payments; illiquidity in debt securities markets; and prepayments of principal, which often must be reinvested in obligations paying interest at lower rates.

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