Insights

#### **Fixed Income**

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# The Role of Active, Index, and Systematic Investing in Fixed Income Portfolios

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In the world of investment management, the active versus indexed debate is a longstanding one. As the discussion has evolved over time, a new question has emerged as to whether an active, indexed, or systematic approach makes more sense for certain fixed income sectors, and for the asset class as a whole.

For a long time, active strategies dominated the entire investment landscape. As indexing options developed, investors came to value the efficiency and lower costs inherent in such strategies. More recently, systematic investing has emerged as a powerful approach, leveraging data and algorithms to optimize investment decisions. As a result, bond investors can benefit from the experience and skills of investment professionals, as well as the rigor and breadth of systematic investing strategies.

As we focus attention in this piece on fixed income investing styles, there are two points worth emphasizing at the outset:

- Market expertise is required for active, indexed, and systematic fixed income investing.
- Asset managers that possess expertise across a breadth of capabilities and investment styles can most effectively deliver solutions to investors.

Understanding the challenges that investment managers face in each bond sector is important, as are the techniques that are utilized to meet investors' objectives. Investors armed with this knowledge can determine what risks they are comfortable with and what their return objectives are. An asset manager with broad active, indexed, and systematic capabilities across fixed income sectors and geographies can allocate to sources of risk and return from various markets to fulfill unique client objectives. Recognizing when an active, indexed, or systematic approach to bond investing makes sense can be invaluable for investors.

## When Active Makes Sense

The case for active largely depends on objectives, constraints, and fees. Assuming that an investor does not want out-of-sector positions (but guidelines are not otherwise constrained), credit and securitized mandates are two examples of sectors that lend themselves well to active management. Excess returns of 25–50 basis points (bps) or more, before fees, are possible — assuming moderate discretion — in these sectors due to structural inefficiencies, cyclical fluctuations, and security selection opportunities.

# When Indexing Makes Sense

In general, the case for indexing in fixed income is strongest when alpha potential is low, and the cost of indexing is also low (i.e., where liquidity is high and bid/offer spreads are reasonable). However, this should not be interpreted as implying that indexing should only work for developed market government bonds, where liquidity is inexpensive; the argument is also strong when an experienced fixed income index manager has an investment process that adds value and can effectively reduce the cost of indexing. Such a process may include stratified sampling, thoughtful buy/sell timing, participation in new issues, and minimizing turnover.

# When Systematic Makes Sense

Systematic fixed-income investing makes sense for investors seeking alpha generation through a consistent, rules-based approach to security selection. It is particularly effective in bond markets with extensive data history and coverage, where quantitative signals demonstrate efficacy over multiple cycles and in different market environments. In these contexts, data-driven models can identify opportunities that may not be apparent to human managers. This approach reduces biases and emotions in decision making, ensuring a disciplined adherence to the predefined strategy. Additionally, systematic investing can be advantageous in managing large, complex portfolios where scalability and efficiency are paramount, allowing for precision risk management and cost control.

## When It Depends

The decision to employ active, index, or systematic strategies will ultimately depend on an investor's objectives and risk appetite — not all investors in fixed income markets are profit-maximizers. For some, like insurance companies and defined benefit (DB) pension schemes, the priority may be risk-minimization rather than benchmark outperformance.

The lines separating active, index, and systematic strategies begin to blur when an investment management firm has vast market knowledge, experience, and cutting-edge research capabilities and technology. For example, at State Street Global Advisors, our index process does not simply blindly attempt to replicate as much of the benchmark as possible — it is possible to deliver reliable performance by tracking results using a stratified sampling framework. In sectors where transaction costs may be higher (such as in credit, high yield, or emerging markets), we employ techniques and strategies that can help to offset the impact of trading and can sometimes lead to outperformance over the benchmark over the medium term — what we refer to as "implementation alpha." These value-add techniques include turnover reduction, efficient trade execution, participation in new issue markets, and relative value analysis within the security selection process.

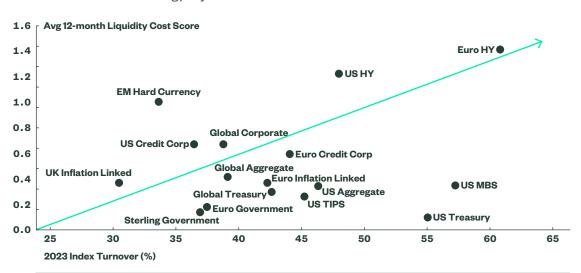
Though widely used within equity investing for many years, systematic investing is a relatively newer concept in fixed income due to the relative complexity and illiquidity of bond markets vis-à-vis equities. Our systematic offerings take a data-driven, risk-controlled approach focused on value, momentum, and sentiment signals to select bonds for fund inclusion. Like traditional fundamental active strategies, systematic strategies have both alpha and risk targets.

# Where Expertise Matters

Liquidity and turnover costs are incurred by active, indexed, and systemic strategies alike. Indexers must reallocate according to new benchmark weights, while active managers must adjust to maintain their preferred positions through benchmark changes or align portfolios with their latest views. With systematic strategies, dynamic updating that's also turnover aware can keep the overall strategy attuned to current market trends and maintain positive tilts to our alpha factors, while recognizing that excessive portfolio churn can materially erode performance. However, not all sectors of the bond market are created equal. Figure 1 illustrates the overall cost of managing against various fixed income benchmarks, presenting a cross-section of 2023 turnover percentages and Liquidity Cost Scores (LCS) from Barclays. LCS provide an estimate of the round-trip transaction cost of trading a bond, as a proportion of its market value, based on quotes from Barclays trading desks.

As expected, developed market government bonds are very liquid, followed by US and Global Aggregate indices that are largely made up of governments and mortgage-backed securities (MBS). Beyond this, higher points in the chart include credit, emerging market government debt, and high yield. Some more complex beta strategies require frequent and expensive trading to remain in-line with strategy objectives.

Figure 1
Liquidity Cost and
Turnover by Sector



Source: Barclays, Bloomberg as of December 31, 2023. Index Turnover — the greater of either total percentage of buys or sells in the index per Bloomberg, multiplied by two. Global indices only partially covered by Barclays LCS (Global Aggregate 84%; Global Treasury 86%; Global Credit 94%). US Aggregate LCS does not include commercial mortgage backed securities/asset basked securities. Barclays Liquidity Cost Score (LCS) is computed using an average of end-of-month bid/ask indications provided by Barclays Capital traders to clients through Bloomberg Finance, LP.

# Our Sector-by-Sector Synthesis of Active, Index, and Systematic Management

While duration and yield curve management can be utilized to drive alpha in virtually every fixed income market, a spectrum of other methods is employed across various fixed income sectors. A recent issue in fixed income has been the slow erosion of systematic and structural inefficiencies over time. These inefficiencies were historically sources of outperformance for active managers. It is true that a larger fixed income market, growing investor base, and trading innovations (such as straight-through processing) have resulted in a more efficient market.

However, there are still opportunities for active managers to add value, for systematic investors to leverage data-driven strategies, and for indexers to intelligently approach benchmark-tracking for each major bond sector. These assessments are based on our portfolio management team's insights as well as eVestment universe data (see Appendix).

#### **Government Securities**

Government bond sectors are highly liquid and exhibit low idiosyncratic risk. These two characteristics make it challenging for managers to add significant alpha through security selection and conversely make it relatively straightforward for indexing portfolios to track them effectively. US Treasury bonds are the most liquid, while other developed market government securities in the UK, eurozone, and Japan also fit within this category.

Active management also has a role here. While security selection is challenging due to high liquidity and low idiosyncratic risk between issues, market structure and economic expertise can provide insights for yield curve allocations and duration positioning. Active strategies have generated outperformance in this sector by combining structural carry with secular and cyclical economic views. Expanding the opportunity set to include inflation-linked securities (including US Treasury Inflation Protected Securities), which share the same liquidity and low idiosyncratic risk characteristics as their nominal counterparts, allows managers to express a view on inflation expectations. This provides an additional source of potential excess return, as well as the opportunity to increase portfolio yield. Finally, allowing a structural allocation to agency mortgages and credit securities in the portfolio as out-of-benchmark positions can add carry and improve diversification over time.

## Investment Grade Credit

Compared to government bonds, credit exposures possess additional dimensions of risk including sector, credit quality, issuer, seniority, and liquidity. These can give rise to inefficiencies and mispricing in credit markets, presenting excess return opportunities for investors.

Investor segmentation is a source of inefficiency that encompasses quality biases, the duration needs of DB pension plans, and the "gray zone" that exists in maturities between cash and 1–3-year strategies. Small allocations to high yield and other out-of-benchmark securities are also commonly used to drive alpha. Active strategies thus have ample opportunities to deliver excess returns in investment grade credit. Talented fundamental credit analysis teams and robust macro top-down processes can add value, albeit with a sliding scale of additional tracking error volatility risk.

Systematic fixed income strategies are perhaps most widely utilized in credit sectors, where there is an abundance of historical data, data coverage of the investment universe is extensive, and the alpha signals have demonstrated consistency and efficacy over different time periods and market environments. Whereas fundamental active investing may target a company, duration band, or credit sector, in systematic investing, the entire universe of bonds is analyzed daily against the established factor signals, and security selection decisions are made based on an individual bonds' desirability in accordance with those signals. In our view, investment grade credit is an ideal fixed income sector in which to use a systematic approach.

Having a thorough understanding of the inefficiencies and challenges in credit is vital for index managers with clients concerned about tracking error. Indexed credit strategies can deliver reliable tracking results through stratified sampling and can offset some transaction costs by adding value through a rigorous security selection process, routine primary market participation, and anticipating and managing around index events.

#### Securitized

Successfully managing MBS requires a robust understanding of the underlying mortgage pools. As a function of prepayment fundamentals, an almost unlimited number of pools, and a firm's expectations for the direction and volatility of interest rates, a portfolio manager has multiple opportunities to drive alpha in MBS. Some of these methods include swap strategies (e.g., coupon product, and maturity), pool characteristic rotations, and utilizing to-be-announced securities (TBAs) and collateralized mortgage obligations (CMOs).

An indexed approach also benefits from analysis of mortgage pools as stratified sampling can provide reliable tracking results while security selection can be utilized to offset some transaction costs.

For commercial mortgage-backed securities (CMBS) and asset-backed securities (ABS), insight into the underlying collateral can produce opportunities for outperformance by actively managed portfolios while also providing sampling guidance for index managers. However, this space is relatively more challenging for indexing due to limited market inventory, wide bid/ask spreads, and poor pricing reliability between the benchmarks and the market.

#### **High Yield**

Similar to Credit, High Yield exposures exhibit dimensions of risk that give rise to inefficiencies and mispricing, presenting excess return opportunities. However, this part of the fixed income markets is characterized by higher transaction costs, and greater emphasis is placed on analyzing idiosyncratic risks due to the extreme tail risks of default prevalent in this sector. In fact, most active strategies in this space are consistently underweight overall credit beta in order to safeguard portfolios during bear markets.

Essentially, we believe outperformance is driven more by avoiding defaults than through finding upgrade candidates. In times of distress, however, the asymmetry flips and opportunities emerge to add value from recovery situations and/or when the market has overshot, and recovery values exceed the market price.

The systematic process in high yield is similar to that in investment grade credit, utilizing similar value, momentum, and sentiment signals. There is an additional signal that takes advantage of forced selling by many investors when bonds are downgraded from investment grade to high yield. This selling leads to excessive declines in the prices of these "fallen angels," followed by strong mean-reversion. Incorporating this fourth signal is materially additive to the performance of a systematic high yield strategy. Like the investment grade sector, high yield is an attractive sector in which to consider a systematic investing approach.

Credit analysis is crucial to adding alpha, but it is also required for the sampling process used for indexing. In general, it can be expected that the performance of a highly sophisticated indexing strategy will modestly lag the benchmark during most time periods. Meanwhile, active strategies will tend to primarily underperform in bull markets, while providing alpha during bear markets.

## **US Municipals**

There are over 56,000 securities in the Bloomberg US Municipal Index, providing challenges for both active and index managers. For active managers, an experienced team of credit analysts is key to managing against this benchmark. The size of the market and prevalence of small illiquid issues makes this a very challenging sector in which to deliver an indexing strategy, and very few managers even attempt to do so. Even strategies defined as indexed may perform active credit analysis to avoid potential downgrades and defaults.

# Emerging Market Debt (EMD)

It seems intuitive that emerging market sovereign debt, with its inherent idiosyncratic risks and frequent episodes of volatility, should provide opportunities for active managers to add value. After all, the magnitude of performance divergence across issuer, country, and currency can provide plentiful and varied opportunities to find alpha. However, managers with long experience of developed market debt have discovered that investing in EMD presents additional challenges and complexities. Among those is the potential for geopolitical risks to surface at any time, quickly undermining confidence and confounding fundamentals.

In addition, active managers in the EMD space often rely on overweighting risk in search of a yield advantage (carry trades) to outperform the benchmark. This can lead to herding behavior where similar trades become crowded. Combining this with loss aversion means that the investment styles of active managers can be quite cyclical, resulting in outperformance in up markets and underperformance in down markets.

Overall, the success of active managers in this area has varied; the elevated tracking error associated with the sector may not sit well with typical fixed income investment goals. Meanwhile, improvements in liquidity have made an indexing approach much more feasible — sophisticated portfolio construction and sampling techniques mean that index managers can closely track index returns and, when combined with lower index costs, can rival the net performance of active portfolios.

Improvements in liquidity and data availability in emerging market debt mean that a systematic approach could be beneficial in this space. There is strong evidence that cross-asset momentum signals (equity and FX) can be valuable tools for EM sovereign debt. Although the research is less developed than for US credit in general, we think a systematic approach will play an important role in client EMD portfolios in the future. Certainly, EMD will be a focus for the development of future quantitative research.

Figure 2

Comparison of

Active, Index and

Systematic Investing in

Fixed Income Portfolios

Criteria	Active	Index	Systematic
Objective	Outperform the market or a specific benchmark.	Track the performance of a specific market index.	Achieve competitive alpha based on predefined rules.
Management Style	Active management by portfolio managers.	Passive management tracking an index.	Algorithmic, using quantitative signals and data.
Flexibility	High; managers can adapt quickly to market changes.	Low; follows the index regardless of market conditions.	Moderate; objective function clearly defined, but adaptable in implementation.
Cost	Generally higher due to active management fees.	Lower due to minimal management and transaction costs.	Moderate; lower than active but may incur costs for model development and data.
Risk Exposure	Higher; depends on investment objectives, portfolio concentration, sector weights, etc.	Lower; diversified across index constituents.	Moderate; carefully designed and risk-controlled such that signals are driving alpha generation.
Transparency	Variable; dependent on manager's disclosures.	High; holdings are typically known and predictable.	High; rules and strategies are clearly defined and disclosed.

Source: State Street Global Advisors, August 2024.

#### The Bottom Line

The sectors that we have covered here can be expanded from single country to multi-region or global exposures. In such mandates, additional alpha can be sourced from country and region selection, and from currency management. Active multi-sector strategies (e.g., income, core, core plus and government/credit) introduce the ability to potentially derive outperformance from overweighting and underweighting major sectors against each other. One frequent practice is favoring spread sectors (such as credit) over risk-free assets (like US Treasuries) as such a position will supply additional carry over time. Skilled active managers may also be able to effectively forecast sector-relative performance trends and select sector overweights accordingly.

Ideally, a firm providing such strategies has a global presence with experts in each major region supplying insights; even then, communication and information sharing processes are key to success.

#### **Key Takeaways**

- Alpha potential exists in almost every sector covered, with opportunities also available for index managers to add value through intelligent indexing, and for systematic investors to capitalize on data-driven strategies.
- Much of the same expertise is needed for active, index and systematic management the primary difference lies in how that ability is deployed.
- The risk factors driving alpha are different between sectors, as are the skills necessary to successfully implement an active, indexed, or systematic strategy. For each sector covered in a mandate, investor preferences and a manager's expertise should be aligned.

Contact your Relationship Manager to learn more about State Street Global Advisors active, index, and systematic fixed income capabilities.

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For four decades, State Street Global Advisors has served the world's governments, institutions, and financial advisors. With a rigorous, risk-aware approach built on research, analysis, and market-tested experience, we build from a breadth of index and active strategies to create cost-effective solutions. As pioneers in index and ETF investing, we are always inventing new ways to invest. As a result, we have become the world's fourth-largest asset manager\* with US \$4.37 trillion† under our care.

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<sup>\*</sup> Pensions & Investments Research Center, as of December 31, 2023.

<sup>&</sup>lt;sup>†</sup> This figure is presented as of June 30, 2024 and includes ETF AUM of \$1,393.92 billion USD of which approximately \$69.35 billion USD is 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 Global Advisors are affiliated. Please note all AUM is unaudited.