

The Role of Active and Indexing in Fixed Income Portfolios

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In the world of investment management, the active versus indexed debate is a longstanding one. The discussion has evolved over time, and one of the most enduring questions we field is whether active management or indexing 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 of indexing and the lower costs inherent in such strategies. Investors have shifted their allocations accordingly, particularly in equities. Unlike equities, however, the fixed income market is incredibly diverse and complex. Often, pockets of this market are illiquid or virtually impossible to access. As a result, investors in bonds can benefit from the experience and skills of investment professionals.

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

- Market expertise is required for both indexed and active fixed income investing.
- Asset managers that possess expertise across a breadth of capabilities and investment disciplines 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 and indexed 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 or indexed approach to bond investing makes sense can be invaluable for investors.

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 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 bps (or more), before fees, are possible — assuming moderate discretion — in these sectors due to structural inefficiencies, cyclical fluctuations and security selection opportunities.

When it Depends

The decision to employ index or active strategies in sectors such as US Credit can depend on investors' objectives and risk appetite — not all investors in fixed income markets are profit-maximizers. For some, like insurance companies and defined benefit pension schemes, the need to exceed the benchmark or hurdle rate may not be that great; their priority may be risk-minimization rather than benchmark outperformance.

Furthermore, the line between active and indexed begins to blur within an investment management firm with vast market knowledge. At State Street Global Advisors, our index process does not concede to blindly attempting to replicate as much of the benchmark as possible — it is possible to deliver reliable performance by tracking results in credit markets within an indexing framework. While transaction costs are higher than in Treasury strategies, we employ techniques and strategies that can help to offset this impact and outperform the benchmark over the medium term; these include reducing turnover, highly efficient trade execution, security selection, and relative value trades between issuers.

In addition, harvesting the primary market premium is a very important element of adding value for corporate index strategies. We will generally participate very actively in new issues, recognizing that it is a highly effective way to build portfolio exposure over the long run.

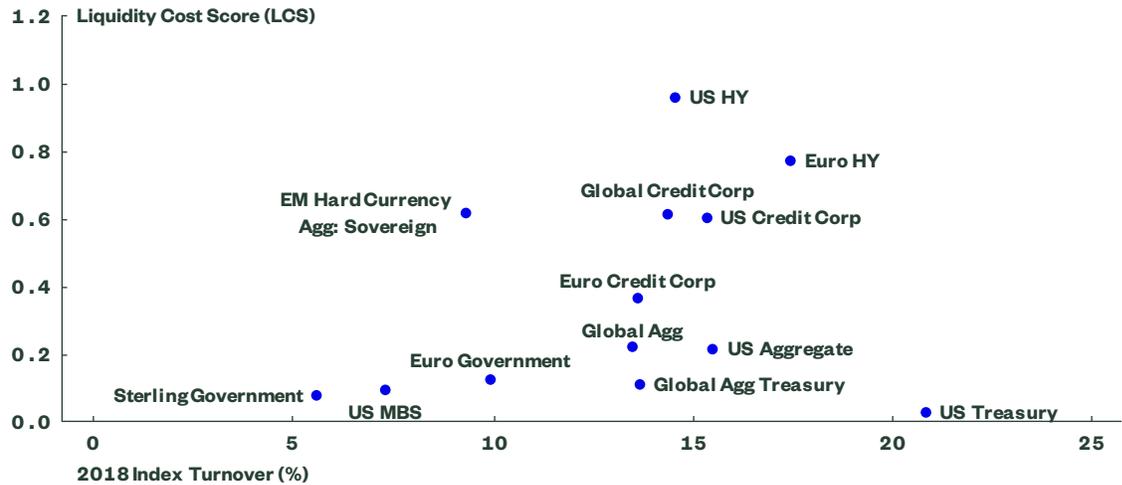
Where Expertise Matters

The following chart illustrates the general cost in managing against various fixed income benchmarks, providing a cross section of 2018 turnover (in percentage terms) and liquidity cost scores from Barclays. 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.

These costs are incurred by both active and indexed strategies; indexers must re-allocate according to new benchmark weights, while active managers must trade either to maintain their preferred positions through benchmark changes, or to align portfolios with their latest views. Active managers navigate these issues through careful security selection, strategic timing of when they buy and sell securities, and sometimes unit crossing between products where available. In addition, active managers may take advantage of new issue premiums in corporate bond markets.

The best indexers also utilize these methods. Stratified sampling, strategic hedging, unit crossing, and capturing new issue premia apply to indexers as well. An indexer must also incorporate much of the same market expertise required and deployed by active managers for many fixed income sectors.

Figure 1
Sector Liquidity Cost Scores & Turnover



Source: Barclays as of December 31, 2018. Liquidity Cost Score — The Bloomberg Barclays POINT 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, L.P. Index Turnover — absolute total of the percentage of buys and sells in the index per Bloomberg Barclays, divided by two (annualized).

Our Sector-by-Sector Synthesis of Active and Indexing Management

While duration and yield curve management can be utilized to drive alpha in virtually every fixed income market, there is a spectrum of other methods used throughout the 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. 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, as we outline below, there are still opportunities for active managers to add value 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 TIPS), 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 carry. 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 defined 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. Improvements in market efficiency over time, however, have made it more difficult to overcome transaction costs to meet outperformance expectations.

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 TBAs and 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, 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.

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 55,000 securities in the Bloomberg Barclays 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 actually perform active credit analysis to avoid potential downgrades and defaults.
- **Emerging Market (EM) Debt** It seems intuitive that EM sovereign debt, with its inherent idiosyncratic risks and frequent episodes of volatility, should provide opportunities for active managers to perform and add value. After all, the magnitude of performance divergence across issuer, country and currency is such that a variety of avenues to exploit these opportunities to find alpha should be expected to be plentiful. However, managers with long experience of managing 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) in order 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 objectives. 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.

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 derive outperformance from overweighting

and underweighting major sectors against each other. One common practice is favoring spread sectors (such as credit) over risk-free assets (like US Treasuries) as such a position will provide 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 providing insights; even then communication and information sharing processes are key to success.

In Summary

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

Our Capabilities

State Street Global Advisors is well positioned to provide a straightforward and balanced response to investors' fixed income requirements, having served our clients' index and active investment needs and objectives for over 40 years. We have a broad suite of fixed income, cash management, and currency solutions, which combined with the depth of talent in our investment management, trading and research teams, has supported the growth of our business. We are now one of the largest institutional managers in the world, with \$932 billion in fixed income, cash, and currency assets under management. In aggregate, our fixed income desks traded \$360 billion in 2019.¹

Indexing Management

We have a long track record across a broad array of US and global sectors, with gross performance typically in line with, and sometimes ahead of, the benchmark return. This is achieved through a value-additive investment approach designed to minimize costs in a tightly controlled tracking process.

The key features of our approach are included below:

- Our investment teams specialize by asset class. Deep subject matter expertise is key in each of these segments, and the teams partner with specialist traders to garner considerable market insights. This knowledge is enhanced by the ETFs that they manage, where flows are often sizeable and frequent.
- Stratified sampling is applied to manage most of our indexed fixed income exposures, as we seek to minimize costs and risks by matching the key risk features of the underlying index. In this sampling approach, we resist expensive trading, where practical, provided we can design a portfolio that is consistent with the benchmark's risk characteristics.
- We use the primary market to access liquidity and to extract the new issue premium.
- We aim to minimize portfolio turnover relative to index turnover by making informed decisions about the value or impact that this turnover may have on risk and returns.

- We believe our experienced global trading desk gives us clear advantages that accrue to clients in terms of tighter spreads and better access to primary markets. This is evident in both the tight tracking we have consistently delivered over both medium- and long-term time horizons.

Active Management

Supported by a deep knowledge of fixed income markets and the opportunities to outperform within particular sectors, our fixed income team also manages active strategies in US Government, MBS, and Credit. Within these markets, we believe that fixed income returns are driven by three primary sources:

- Structural risk premiums which are generally driven and supported by longer-term trends.
- Cyclical opportunities which arise due to deviations from fair value or trends in various markets.
- Tactical opportunities where events may cause temporary market dislocations. We believe these opportunities can be identified from both a top-down and bottom-up investment process incorporating fundamental investment research complemented by quantitative rigor.

Our fixed income offering is underpinned by a highly talented credit analyst team, sector specialist traders, and experienced portfolio managers who maintain a strong focus on risk to exploit market correlations and protect assets in down markets. We believe that leveraging state-of-the-art technology, including proprietary tools, is critical in assessing, monitoring, and attributing the risk positioning versus the benchmark in order to deliver on client objectives.

Endnote

1 As of June 30, 2020.

**Appendix: eVestment
Universe Results**

eVestment Universe	Report Field	25th Percentile	Median (%)	75th Percentile
US Government Fixed Income	5-Year Excess Return	0.16	0.39	0.46
	5-Year Tracking Error	0.49	0.61	0.79
	5-Year Beta	0.85	0.91	0.96
	Fees*	0.18	0.21	0.24
US Corporate Fixed Income	5-Year Excess Return	0.48	0.74	1.08
	5-Year Tracking Error	0.74	1.05	1.60
	5-Year Beta	0.98	1.04	1.11
	Fees*	0.21	0.23	0.26
US TIPS/Inflation Fixed Income	5-Year Excess Return	0.03	0.12	0.45
	5-Year Tracking Error	0.38	0.54	1.11
	5-Year Beta	0.98	1.00	1.04
	Fees*	0.12	0.16	0.21
US Securitized Fixed Income — Mortgage	5-Year Excess Return	0.19	0.38	0.80
	5-Year Tracking Error	0.46	1.08	1.80
	5-Year Beta	0.82	0.91	0.97
	Fees*	0.18	0.22	0.27
US High Yield Fixed Income	5-Year Excess Return	-0.82	-0.18	0.43
	5-Year Tracking Error	1.20	1.64	2.30
	5-Year Beta	0.86	0.95	1.04
	Fees*	0.39	0.43	0.48
Global Government Fixed Income	5-Year Excess Return	0.03	0.50	1.10
	5-Year Tracking Error	1.29	2.03	3.20
	5-Year Beta	0.82	0.95	1.02
	Fees*	0.21	0.24	0.31
Global High Yield Fixed Income	5-Year Excess Return	-0.64	-0.06	0.40
	5-Year Tracking Error	1.52	1.83	2.55
	5-Year Beta	0.88	0.98	1.04
	Fees*	0.40	0.43	0.48
Global Credit Fixed Income	5-Year Excess Return	0.39	0.83	1.41
	5-Year Tracking Error	0.95	1.21	1.60
	5-Year Beta	0.99	1.08	1.14
	Fees*	0.26	0.28	0.32
Global Inflation Indexed Fixed Income	5-Year Excess Return	-0.22	0.23	0.48
	5-Year Tracking Error	0.50	0.77	2.42
	5-Year Beta	0.98	0.99	1.01
	Fees*	0.17	0.22	0.29
Global Emerging Mkts Fixed Income — Local Currency	5-Year Excess Return	-0.13	0.37	1.10
	5-Year Tracking Error	1.53	2.13	2.87
	5-Year Beta	1.01	1.07	1.11
	Fees*	0.40	0.47	0.54

eVestment Universe	Report Field	25th Percentile	Median (%)	75th Percentile
Global Emerging Mkts Fixed Income — Hard Currency	5-Year Excess Return	0.40	0.89	1.25
	5-Year Tracking Error	1.45	2.21	3.15
	5-Year Beta	1.04	1.12	1.20
	Fees*	0.39	0.44	0.48
US Floating-Rate Bank Loan Fixed Income	5-Year Excess Return	-0.39	-0.06	0.30
	5-Year Tracking Error	0.90	1.22	1.64
	5-Year Beta	0.84	0.92	1.01
	Fees*	0.42	0.46	0.50
US Municipal Fixed Income	5-Year Excess Return	-0.19	0.08	0.58
	5-Year Tracking Error	0.57	0.86	1.62
	5-Year Beta	0.87	0.96	1.13
	Fees*	0.18	0.21	0.26

Source: eVestment as of December 31, 2020.

* Assumes a separate account size of \$250 million.

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* This figure is presented as of December 31, 2020 and includes approximately \$75.17 billion of 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.

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