STATE STREET GLOBAL ADVISORS

Indexed Fixed Income

Delivering Precise and Reliable Outcomes

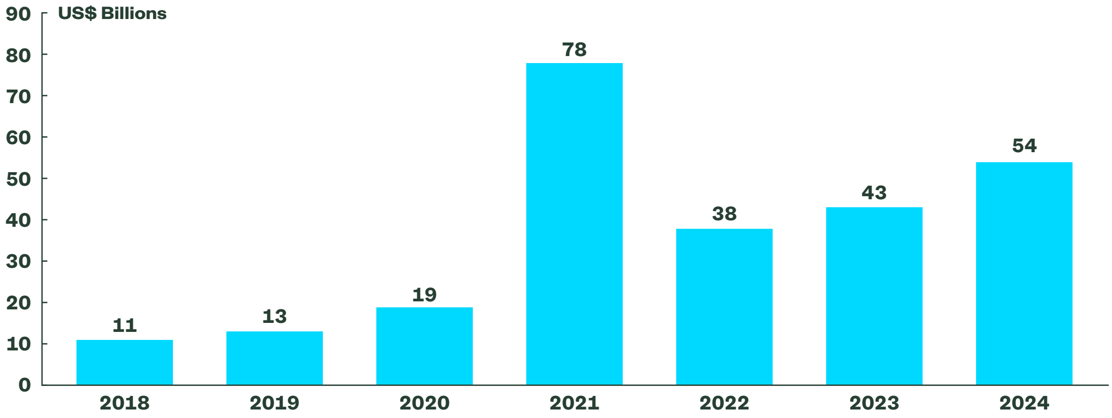
Our Indexed Fixed Income franchise has been a notable highlight for State Street Global Advisors, with exceptional progress achieved over the last five years.

Moreover, we continue to see strong interest in the asset class despite volatile markets and an uncertain economic outlook. We believe that the innovative and systematic approach we take to consistently deliver indexed returns is a key factor in our clients' decisions to partner with us to achieve their fixed income goals.

Strong Flows Across Core Sectors

The strength of demand for indexed fixed income strategies managed by State Street Global Advisors is illustrated by net inflows of over $230 billion over the past five years. Even with an uncertain market outlook and the significant ramifications for an asset class so closely tied to the path of interest rates, we still achieved positive inflows of $54 billion into our indexed fixed income platform in 2024, marking the second highest year on record. These flows were realized primarily within our government and multi-sector strategies, though both investment grade and high yield credit strategies attracted notable interest as well.

Figure 1
Sustained Growth in Indexed Fixed Income Assets Under Management



Source: State Street Global Advisors as of December 31, 2024. Increase in AUM by calendar year.

The breadth of indexed exposures that investors can access with State Street Global Advisors spans the whole fixed income spectrum. Our assets under management (AUM) have been growing across all major segments, with the latest available AUM as of December 31, 2024:

Sovereigns
$299B
- Global Governments
- US Treasuries, STRIPS
- Euro Governments
- UK Gilts
- Inflation Linked
- China Bond

Multi Sector
$166B
- Global Aggregate
- US, Euro, Sterling, Agg
- Asia Bond
- Short, Intermediate, Long Duration Agg
- LDI

IG Corporate
$95B
- Global Credit
- US, Euro, Sterling, Credit
- US High Quality Corporate
- US Long Duration Credit
- Systematic Active Fixed Income (SAFI)
- Municipals

High Yield
$44B
- Global HY
- US, Euro HY
- Short HY
- Preferreds
- Convertibles
- Leveraged Loans
- Enhanced High Yield

EMD
$41B
- EM Local Currency
- EM Hard Currency
- EM Corporate
- EM Inflation
- Enhanced EM (Local)

Securitized
$15B
- Mortgage Backed
- Asset Backed
- Commercial Mortgage Backed

Sustainable*
$147B
- Sustainability-Screened
- Climate
- R-Factor
- Values-Based/ Client Specific

* Estimated and unaudited SSGA Sustainable Investing assets under management as of December 31, 2024 are $147 billion as calculated by SSGA for Sustainable Investing Accounts. Please see additional disclosures at the back of the document.

Why State Street Global Advisors for Indexed Fixed Income?

Precise Exposures As an indexing pioneer with a broad suite of capabilities, we build tailored solutions for exacting client objectives from our expansive suite of transparent and reliable building blocks.

Experience Across the Spectrum We have forged a deep understanding off all aspects of the fragmented, and still evolving, fixed income market — unlocking new ways to add value for clients across the risk and liquidity spectrums.

Cutting-Edge Execution Our highly sophisticated approach to portfolio construction and liquidity management capitalizes on evolutions in fixed income markets, opening new potential sources of value for our clients. As we detail in The Modernization of Bond Market Trading and its Implications, improved liquidity and lower transaction costs stemming from an expansion in electronic trading and the growth of the fixed income ETF industry are paving the way for wider adoption of systematic fixed income investing.

Strategy Innovation

Notwithstanding our historical success in fixed income indexing, we continuously strive to improve and expand our offerings to offer new exposures and deliver solutions for the most complex client needs.

High Quality Corporate Systematic Active

We launched our Systematic Active Fixed Income (SAFI) capability in 2023. This brings together the quantitative research experience of Barclays QPS and State Street Global Advisors' leadership in efficient implementation and precise exposure. Prior to this, the fixed income team was managing two "smart beta" strategies in the 5–20 years and 20+ years high quality segments of the market. These have transitioned to follow a systematic investment approach and are now available in the more popular maturity profiles of intermediate (1–10 years) and long (10+ years).

Our SAFI strategies combine three factor signals — **value, sentiment**, and **momentum** — in the security selection process and have alpha and annual tracking error targets of 95 basis points (bps) and 61 bps, respectively. Launched at the end of 2023, both strategies now have one full year of measured performance and have exceeded their alpha targets while remaining well within their TEV thresholds. While we acknowledge the short reference period, this strong start is a proof of concept that the quantitative research and implementation experience underpinning the strategies are very effective in the live environment. Furthermore, the strategies' low observed alpha correlation with fundamental peers highlights the complementary role that a systematic active approach can play within an overall credit allocation. This speaks to the differentiated alpha profile of a systematic approach versus existing, and primarily fundamentally driven, active credit managers.

	State Street Systematic USD High Quality Intermediate Corporate Bond Strategy	State Street Systematic USD Investment Grade Long Corporate Bond Strategy
2024 Alpha	99 bps	125 bps
2024 TEV	36	45

Source: State Street Global Advisors as of December 31, 2024. Past performance is not a reliable indicator of future performance.

In addition to the live Systematic Fixed Income Strategies that are already open for investment, we are constantly researching and establishing additional systematic strategies to make available for seed investors. These include the below listed strategies:

- US Investment Grade Corporate Bond
- US Investment Grade Long Corporate Bond
- Euro Investment Grade Corporate Bond
- US Investment Grade Corporate Climate Bond
- US Long Corporate Bond
- Euro Investment Grade Corporate Climate Bond
- Global Investment Grade Corporate Bond
- Global Investment Grade Corporate Climate Bond
- US High Yield Corporate Bond
- US High Yield Corporate BB -B Bond
- Global High Yield Corporate Bond
- Enhanced US Core Bond

Indexed Leveraged Loans

Leveraged loans closed 2024 on a strong note. As measured by the Morningstar LSTA US Leveraged Loan index, loans were up 2.5% in the fourth quarter, bringing full-year returns to 8.6%. As of December, leveraged loans have provided positive returns in 14 consecutive months. Loan yields increased by 38 bps during the quarter to end 2024 at 8.33%. Market sentiment and conditions in credit markets generally continue to be very buoyant and loans were no exception. Gross new issue volume totalled $1.3 trillion in 2024, up 259% compared to 2023. Net new issuance for the year was $170 billion, up 108% from 2023.

In recognition of this demand and numerous client inquiries, we created an institutional vehicle for indexed leveraged loans that provides investors with reliable exposure to the loans market at a fraction of the cost of active approaches and/or popular exchange traded funds (ETFs). Our new indexed loans strategy has grown to $1.0 billion in AUM,[1] a notable accomplishment given it only launched in April of 2024. To drive this new initiative, we assembled a team with deep loan experience from our parent State Street Bank. This team is comprised of specialist loan portfolio managers and research analysts who have been integrated with our proven investment team's capabilities and implementation experience in indexed high yield. We believe that our indexed loans strategy offers a compelling alternative to established active approaches. We look forward to building on this highly successful launch that has unlocked yet another complex fixed income exposure in index form for our clients and prospects.

1 Source: State Street Global Advisors as of December 31, 2024.

Thought Leadership

We publish relevant and timely thought leadership on an ongoing basis, sharing insights on markets and investments and how we adapt and innovate to deliver best-in-class outcomes for our clients. Some of these publications are listed below:

Exploring the Full Spectrum of Fixed Income Strategies Bond investing is so much more than just active vs. passive. In this paper, we take a look at the full continuum of fixed income investment styles.

Implementation Alpha: Adding Value in Indexed Fixed Income Complexity within fixed income markets means that skilled index managers can add value by pursuing an approach that is more than just "passive."

The Fixed Income Side of Factor Investing Factor investing is popular within the realm of equities, but only recently has come to the fore in fixed income. This piece takes a look at the factors we consider within our SAFI strategies.

The Rise in Systematic Credit Investing This three-part article provides an overview of systematic investing as it applies to active management of credit portfolios including data-driven signals, risk management and implementation techniques.

Our Approach to Leveraged Loan Indexing: A Q&A We discuss our process for leveraged loan indexing and our management of some of the most pressing challenges in indexing for this asset class.

Private Credit Allocations vs Leveraged Loans and High Yield Private credit assets have grown sharply. Alongside leveraged loans and high yield, we look at the factors informing allocations in sub-investment grade assets.

The Evergreen Case for a Strategic Allocation to High Yield High yield bonds have evolved into a globally diversified, high-income asset class. Offering shorter recovery times, resilience, and cost-efficient access, high yield serves as a strong portfolio diversifier with lower volatility than equities.

GCC Fixed Income: An Alternative Diversifier to Core Allocations Growth in major Gulf Cooperation Council (GCC) countries has stoked demand for their highly-rated debt. For investors seeking to diversify fixed income portfolios, the bonds of these countries have become increasingly attractive options.

A Capital Efficient Approach for Managing DB Plan Assets In this article, we explain a capital efficient approach that could allow DB plans to better accomplish hedging objective and improve their risk/return profiles.

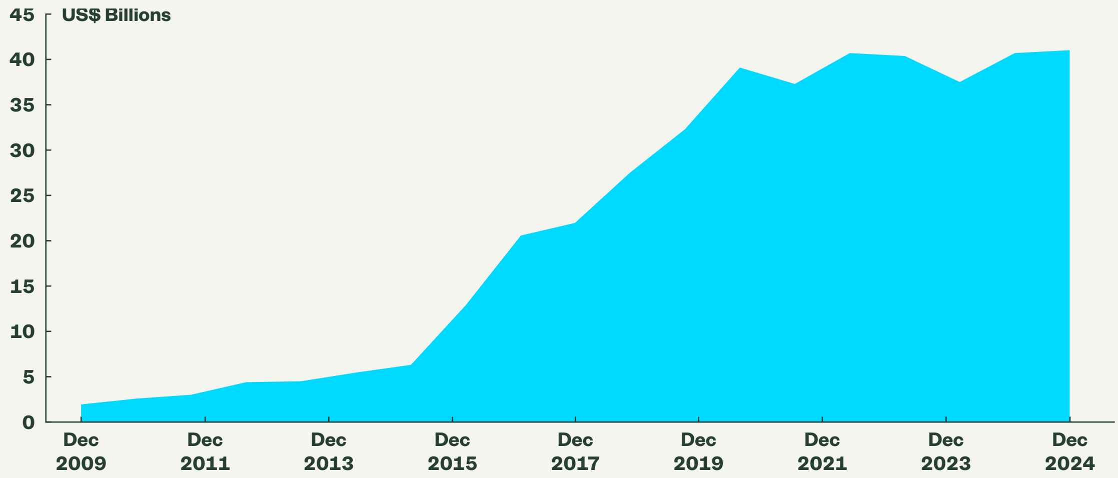
In Focus: Emerging Market Debt

We are one of the world's largest managers of indexed EMD with about $41 billion of dedicated assets at the end of December 2024.

Although global inflation, high interest rates, and ongoing geopolitical conflict have presented headwinds for emerging market debt, our conviction in an emerging markets allocation remains strong. This is particularly true for EMD hard currency, which in our view offers attractive carry.

- Risk management and cost minimization are keys to success in this asset class, and we have continuously improved our processes to track the index more effectively, from tax lot planning and control of all FX trading to sampling techniques that add value in portfolio implementation.
- We are focused on continual process improvements in how we assess and implement the optimal portfolio through time, and where we take advantage of technical inefficiencies and our insights around index events to add value for our clients. This is all controlled within the tight risk and benchmark constraints of an index approach, and overseen by our independent investment risk management team.

Figure 2
EMD Assets Under Management Exceed $40 Billion



Source: State Street Global Advisors as of December 31, 2024. Figures provided in USD.

For more information on our emerging market debt capabilities, please see the following thought leadership article: Emerging Market Debt at State Street Global Advisors.

Developments in Our Investment Process and Business

The fixed income team at State Street Global Advisors has developed a proprietary portfolio optimizer that is now being used in the management of our fixed income strategies. This powerful tool uses a multitude of inputs, including live bond level liquidity and pricing data to drive the buy and sell lists used for rebalancing after large client flows and index changes. While we still rely heavily on the knowledge and experience of our specialist portfolio managers to make the final decision, this quantitative engine enables rapid, consistent, and efficient portfolio rebalancing by proposing trades to the portfolio manager to evaluate and ultimately approve or amend.

We view our optimizer as a highly effective tool that helps our portfolio managers process flows effectively, consistently and rapidly across multiple portfolios simultaneously. This enables our fixed income portfolio management team to implement at scale and speed, for the benefit of our client portfolios and to exploit market liquidity and opportunities as they arise in the market.

What's Next?

Looking ahead, we plan to publish more thought leadership that we expect will stimulate discussion around all things indexed fixed income.

For more information on our indexed fixed income offerings and insights, please visit our website: Fixed Income.

If you would like to schedule a meeting with our fixed income indexing experts, please reach out to your relationship manager.

About State Street Global Advisors

For over 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, and 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 $4.72 trillion† under our care.

* Pensions & Investments Research Center, as of December 31, 2023.
†This figure is presented as of December 31, 2024 and includes ETF AUM of $1,577.74 billion USD of which approximately $82.19 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 Global Advisors are affiliated. Please note all AUM is unaudited.

ssga.com

Marketing Communication.

State Street Global Advisors Worldwide Entities

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Diversification does not ensure a profit or guarantee against loss.
Bonds generally present less short-term risk and volatility than stocks, but contain interest rate risk (as interest rates raise, 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.
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Past performance is not a reliable indicator of future performance.
This document provides summary information regarding the Strategy. This document should be read in conjunction with the Strategy's Disclosure Document, which is available from SSGA. The Strategy Disclosure Document contains important information about the Strategy, including a description of a number of risks.
The returns on a portfolio of securities which exclude companies that do not meet the portfolio's sustainable strategy criteria may trail the returns on a portfolio of securities which include such companies. A portfolio's sustainable strategy criteria may result in the portfolio investing in industry sectors or securities which underperform the market as a whole.
R-Factor scoring is designed by State Street to reflect certain sustainability factors and does not represent investment performance. Results generated out of the scoring model are based on sustainability dimensions of a scored entity.

SSGA defines a "Sustainable Investing Account" as a client account (i.e., fund or separately managed account managed by SSGA) that utilizes an investment strategy that falls into one of the following three categories, which are not mutually exclusive:

1. Negative Sustainable Investing Screen: A "Negative Sustainable Investing Screen" (also known as an exclusionary screen) is a screen incorporated into the investment strategy utilized for the management of a portfolio that results in the exclusion from the portfolio of securities of issuers that fail to satisfy certain sustainability criteria (e.g., because the issuers comprise part of a sector or industry). Negative Sustainable Investing Screens include but are not limited to SSGA Point of View ("POV") screens, norms-based screens, Socially Responsible Investing (SRI) screens, and screens provided by other third parties (including client-directed screens). Where a client's investment agreement and/or investment guidelines specify, or the client otherwise communicates to SSGA that the application of a negative screen is to satisfy a purpose other than sustainable investing (e.g., diversification), such screens do not qualify as a Negative Sustainable Investing Screen. Note: There are several ways in which a company can be considered to be involved in a particular product or service, and a screening methodology, along with coverage limitations, may result in a negatively screened portfolio having some exposure to the screened criteria.

2. Positive Sustainable Investing Screen: A "Positive Sustainable Investing Screen" is a screen incorporated into the investment strategy utilized for the management of a portfolio that intentionally includes securities of issuers identified as having positive sustainability characteristics relative to the issuer's industry or sector peers. Positive Sustainable Investing Screens target an improvement of a portfolio's sustainability profile as compared to a benchmark or stated investment guideline, measured by a sustainability score or a sustainability metric, or invest only in issuers within an industry or sector that score higher within that industry or sector than the issuer's peers.

3. Third-Party ESG/Sustainable Investing Index Investment Strategies: An index-tracking client account qualifies as a Sustainable Investing Account if it tracks a Third-Party ESG/Sustainable Investing Index. An index is deemed to be a "Third-Party ESG/ Sustainable Investing Index" if the index methodology incorporates ESG/sustainability factors or characteristics that are utilized by the third-party index provider to determine which securities and/or how much in weight are included as index constituents. A client account that utilizes a Third-Party ESG/Sustainable Investing Index as a reference benchmark for performance or reporting purposes, but does not seek to track such index as an investment strategy, does not qualify as a Sustainable Investing Account unless it meets at least one of the first two prongs of the definition of "Sustainable Investing Account" set forth above.

The methodology used by SSGA to identify Sustainable Investing AUM (see page 3) may differ from the methodology used under certain classification and disclosure regulatory regimes. SSGA makes no representation that an account identified as a "Sustainable Investing Account" satisfies all Sustainable Investing categories under the SSGA Sustainable Investing Account Identification Policy. A Sustainable Investing Account may satisfy only one of the three categories described above, and within that category it may incorporate a single sustainability factor or exposure. SSGA's Sustainable Investing AUM may include AUM of client accounts for which a negative screen is applied at the request of the client for regulatory or other purposes, which may not be disclosed to SSGA, that SSGA believes results in the exclusion from the client's portfolio of securities based on sustainability criteria.

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ID2731852-5077025.4.1.GBL.INST 0325
Exp. Date: 03/31/2026