Research Report
Fixed Income

2022

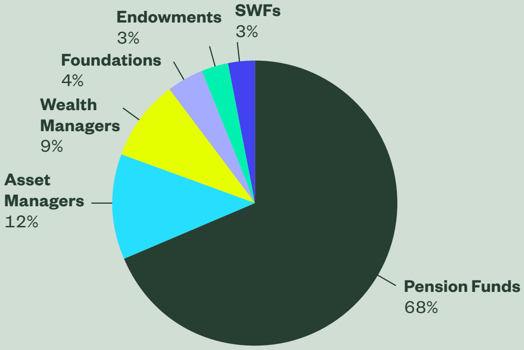
The Future State of Fixed Income

STATE STREET GLOBAL ADVISORS

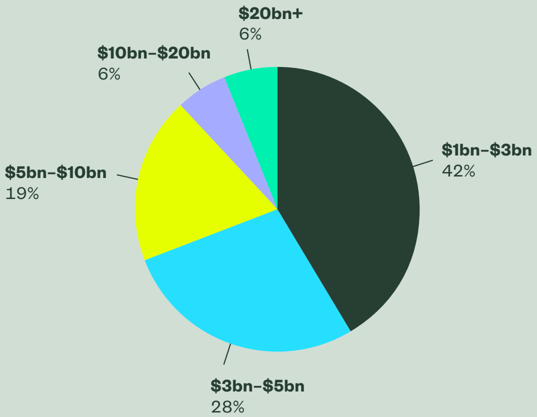
About the Survey

The 2022 State Street Global Advisors fixed income survey canvassed the views of major investors across the globe to help better understand where the fixed income market is and where it is heading. The qualitative and quantitative survey was conducted in mid-2022 and was administered by an independent third-party firm not affiliated with State Street Global Advisors. State Street Global Advisors is identified as the study sponsor. A total of 700 global institutional investors responsible for asset-allocation decisions for top pension funds, wealth managers, asset managers, endowments, foundations and sovereign wealth funds participated in the study.

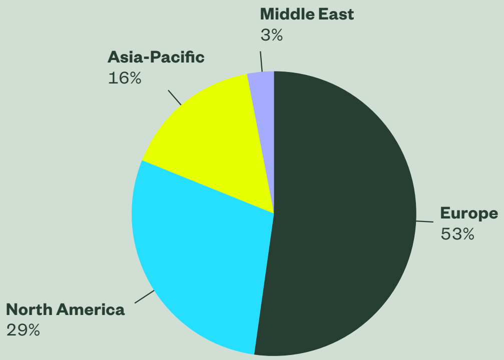
Institution Type



Assets Under Management



Region



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Executive Summary

Inflation, rate rises, war, and crises of various stripes: A lot has changed in the world since we published Preparing for the Big Shift, our 2021 fixed income survey. **Our latest research finds that while investors are indeed adapting their portfolios to the backdrop of inflation and rate hikes in the short term, there are deeper trends shaping the future state of fixed income portfolios.**

Two of the key themes we reported on last year remain very much at the fore. First, ESG continues to rise in investors' priorities, with a growing number of investors now pursuing Paris alignment within fixed income.

Second, indexing continues to prove its value. Fee pressure and continually improving transparency in fixed income markets are two factors causing investors to embrace these strategies and gain efficient access in sectors where they are increasing their exposure.

This year, we report on a group of nascent trends as investors look for new sources of return and new approaches to meeting their objectives. The shift toward private markets is intensifying, with implications for both the size and liquidity profile of public fixed income allocations. Investors are also showing an appetite for new, systematic fixed income approaches.

Collectively, these changes point not only to where fixed income is now, but also to where it is heading — and how investors globally will implement it in the near future.

ESG Tops the Fixed Income Agenda

Whether driven by risk, regulation, or opportunity, ESG is rising to the top of investors' agendas for fixed income. There are clear winners in terms of ESG approach.

1 ESG is investors' highest priority

2 ESG policy foundation is first, then aligning on key priorities such as climate

3 A critical mass of investors is moving toward Paris alignment

ESG is investors' highest priority

Despite the market backdrop, ESG — not managing the effects of inflation and rising rates — emerged as the top priority for institutional investors globally. Well over a third (39%) of respondents say integrating ESG considerations is the most important priority to address through their fixed income allocations over the next 12 months. Managing the effects of inflation and rising rates came up behind, selected by 34% of respondents.

ESG Integration Emerges as a Top Priority to Be Addressed Through Fixed Income

Figure 1
Which of the following priorities will be most important for you to address through your fixed income allocation over the next 12 months?

Source: State Street Global Advisors. Percentage of respondents. Note: Respondents were allowed to select up to two answers. n=700.

There was some geographical variance (Figure 2). Among APAC respondents, 36% chose integrating ESG considerations, making it an equal priority to producing higher portfolio returns (also 36%). Among North American respondents, at 44%, the ESG priority was higher than that for EMEA respondents (38%) and significantly ahead of North Americans' second priority, providing greater portfolio liquidity (34%). While perhaps counterintuitive, the higher priority ascribed to ESG in North America may be attributable to the fact that EMEA respondents have done more in terms of ESG integration already.

Are North American Respondents Catching Up When It Comes to Prioritizing ESG Integration?

Figure 2
Regional breakdown: Percentage of respondents who view ESG integration as a top priority

44%	38%	36%
North America	EMEA	APAC

ESG policy foundation first, then aligning on key priorities such as climate

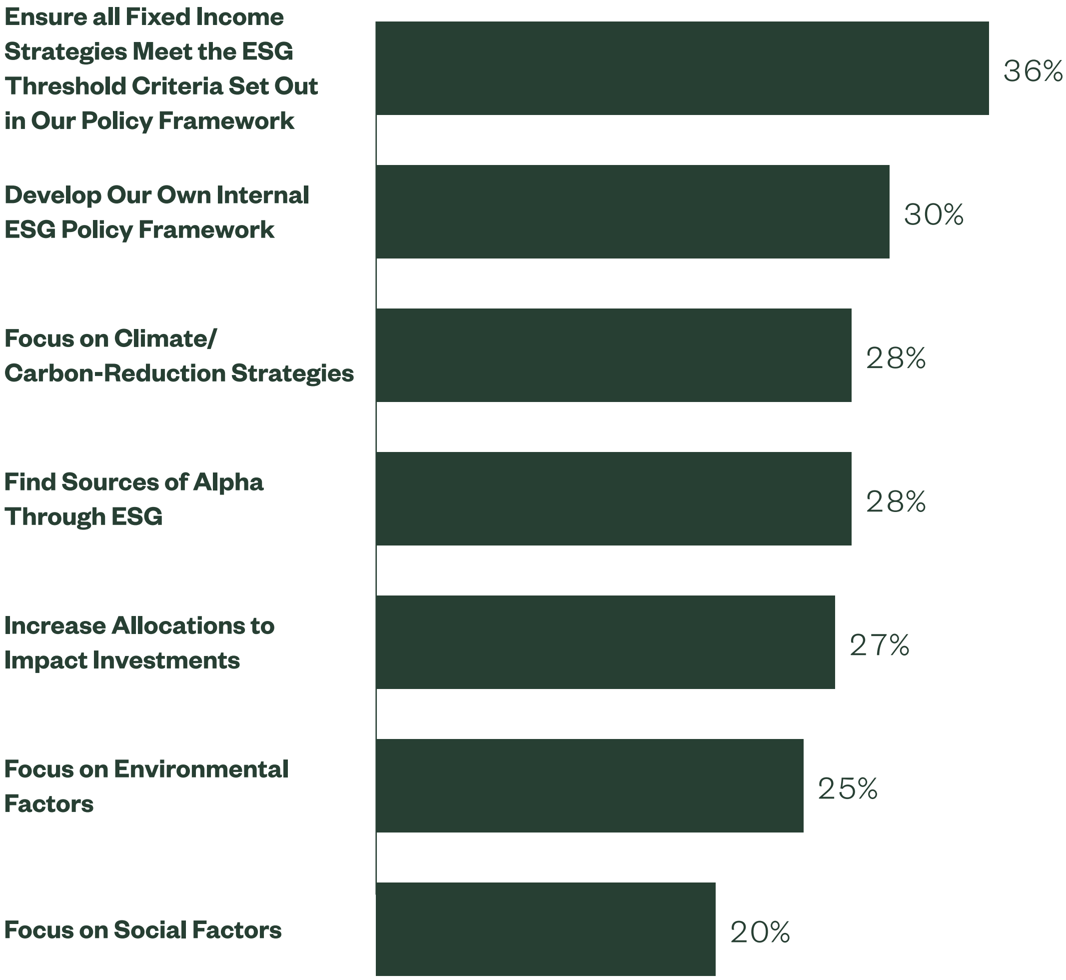
The two most-cited top priorities for incorporating ESG in a fixed income portfolio revolve around setting a policy foundation for ESG integration (Figure 3). Ensuring that all fixed income strategies meet the ESG threshold criteria set out in policy frameworks (36%) was chosen most often as a top priority. The effort of creating those policies in the first place (i.e. developing an internal ESG policy framework) followed closely at 30%.

Other investors appear to have moved on from creating that policy foundation to pursue the ESG objectives that would have been laid out in a policy framework. Among these, it's not surprising that investors are interested in pursuing carbon-reduction strategies in response to climate considerations (28% cite this as one of their most important priorities). In addition, environmental factors, which include climate as well as other considerations like biodiversity, are a top priority for 25% of respondents.

Recent events, including the war in Ukraine and the ongoing pandemic, have also attracted attention to the social dimension of ESG (20%). Interestingly, 28% of respondents also say they're interested in finding sources of alpha through ESG, and 27% see impact investing as an important priority.

Foundational Work on ESG Policy Frameworks Is a Top Priority for ESG in Fixed Income

Figure 3
What are your top priorities for incorporating ESG in your fixed income portfolio over the next 12 months?



Source: State Street Global Advisors. Percentage of respondents. Note: Respondents were allowed to select up to two answers. n=700.

Figure 4 shows the regional priority figures for incorporating ESG. Here we see that across the board ensuring that all fixed income strategies align with the ESG criteria in their policy frameworks is the top priority. NA and EMEA share the second priority of developing an internal ESG policy framework (32% and 30% respectively) while for APAC the second-highest priority is to increase allocations to impact investments (31%).

Regional Breakdown: Top Priorities for Integrating ESG

Figure 4

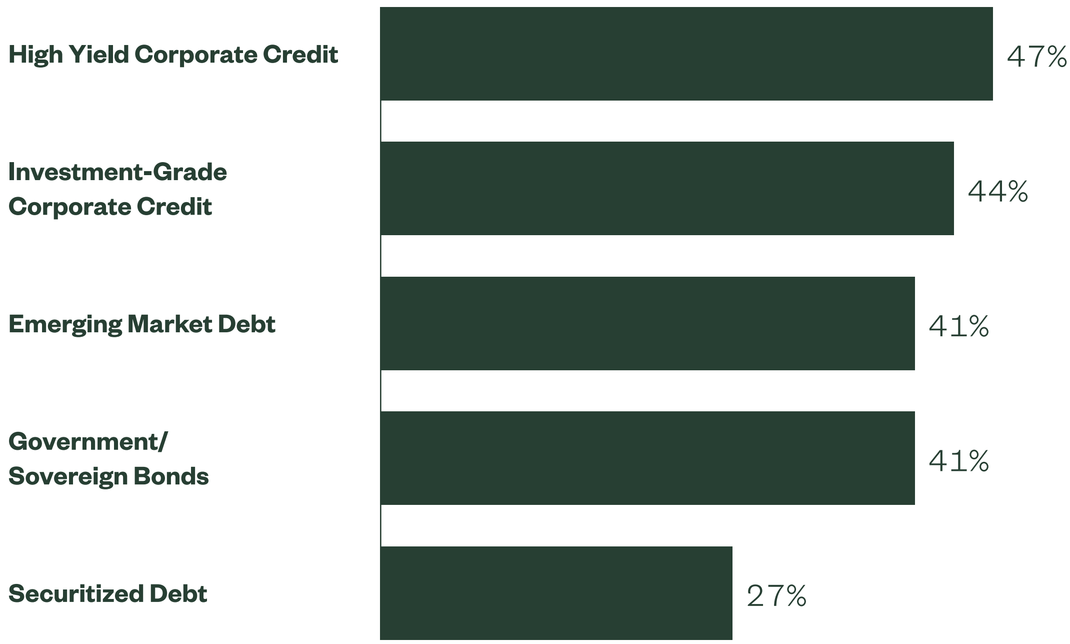
Source: State Street Global Advisors. Percentage of respondents in each region. NA: n=200; EMEA: n=390; APAC: n=110.

ESG Integration Is Deep, but Securitized Debt Lags

Nearly half of investors have now integrated ESG factors within high yield credit (47%); this makes sense, as high yield indexes tend to be carbon heavy. Investment-grade credit (44%), emerging market debt, and sovereigns (each 41%) are also making good progress, but securitized debt (27%) continues to pose a challenge (Figure 5).

Investors Are Most Likely to Have Incorporated ESG Factors in Their High Yield Credit Allocations

Figure 5
In which areas of your fixed income portfolio are you currently incorporating ESG factors?



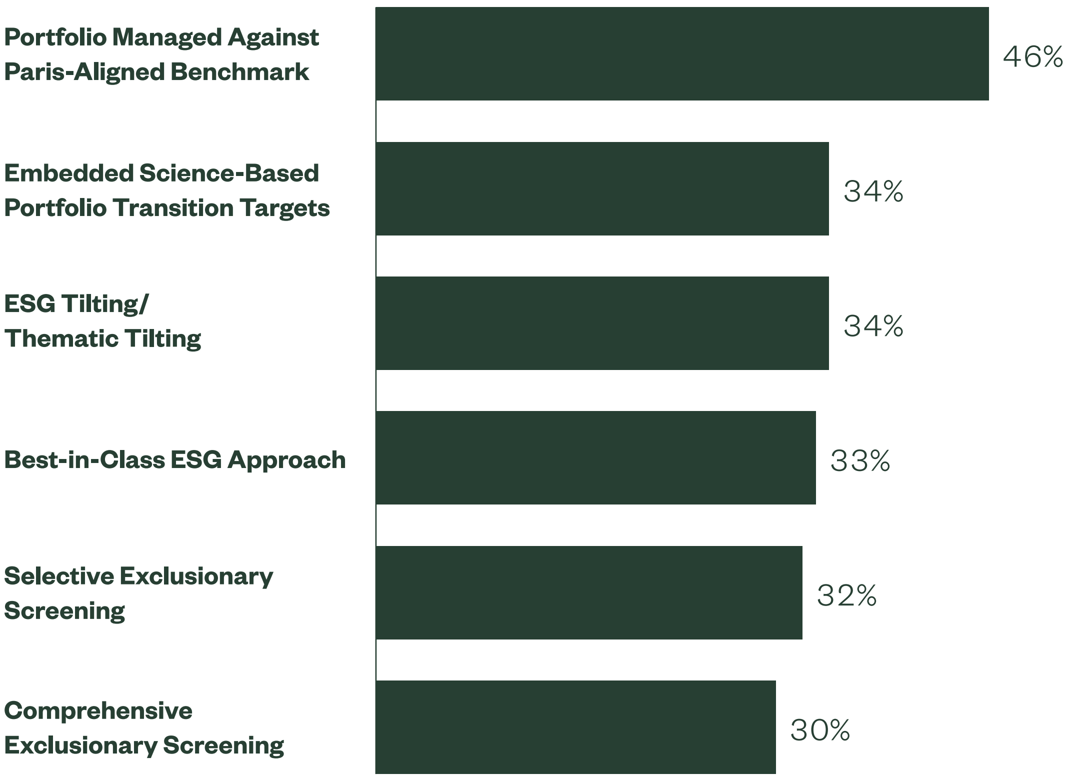
Source: State Street Global Advisors. Percentage of respondents. Note: Respondents were asked to include only investments in specific ESG products/securities and investments where ESG factors are integrated into financial/credit models. They were asked not to include general exclusions that may be applied across their entire portfolios as standard practice. Respondents were allowed to select all that apply. n=700.

A critical mass of investors is moving toward Paris alignment

As to the preferred approach to ESG integration, Paris alignment has finally crystalized as a clear leader. It is easily the dominant approach, with 46% of survey respondents looking to benchmark portfolios against Paris-aligned benchmarks; this makes sense, given respondents' interest in prioritizing climate and carbon reduction in their fixed income portfolios. Science-based transition targets (34%), ESG tilting (34%), and best-in-class (33%) also remain favored approaches (Figure 6).

Paris Alignment Emerges as a Leading Approach to ESG Integration

Figure 6
If you are currently incorporating ESG considerations in your fixed income portfolio, which approaches are you using?



Source: State Street Global Advisors. Percentage of respondents. Note: Respondents were allowed to select all that apply. n=700.

> **"We have a huge program to set the stakes on this [Paris alignment]. We've started with developing narratives for every asset class, to understand: 'What is it that you do to become Paris aligned?' Then we need to measure it. Then we need to steer on it. And some asset classes are further than others in terms of data."**
>
> — Managing Director Fixed Income, European Pension Provider

Indexing Cements Its Place

Active continues to dominate fixed income, but its primacy is being eroded by investor needs, fee pressures, and a changing marketplace. Allocations are changing, and a balanced approach is the order of the day for many.

1. Index investing proves it's here to stay — and the biggest investors are leading the way

2. Resource-pressured investors are more likely to increase index allocations

3. A minority are rebalancing, with a marginal shift toward indexing

Index investing proves it's here to stay — and the biggest investors are leading the way

Fixed income indexing has developed tremendously in sophistication, scope, and delivery over the past few years. Indexing's ability to capture the full performance potential of even the most complex fixed income exposures, in a highly cost-effective way, means that active management is no longer the default choice for fixed income investors. Pandemic-related market disruption shone a spotlight into the myriad risks embedded in active strategies, arguably resolved only by the large-scale interventions by policymakers. This has accelerated the case for incorporating indexing approaches alongside active ones.

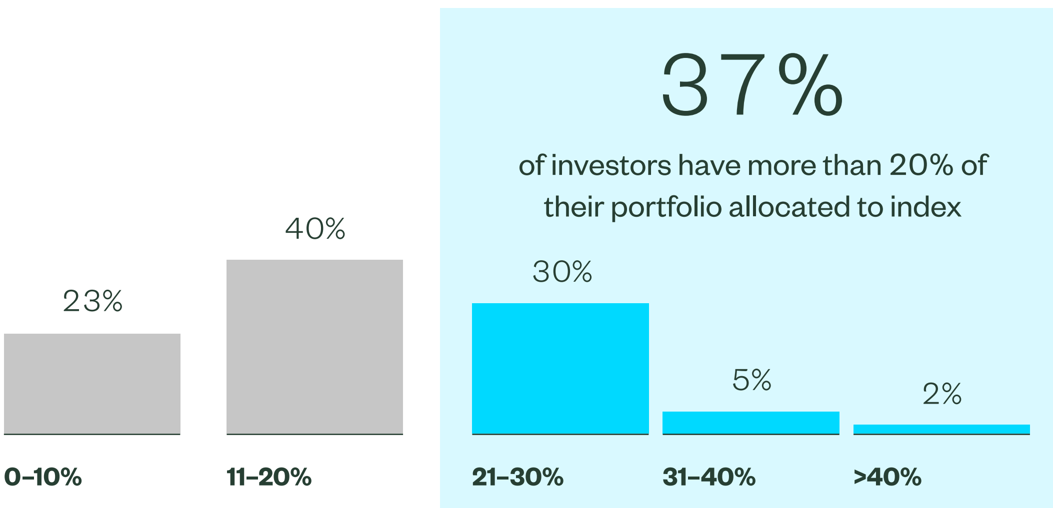
Current Index Adoption

Market volatility, much in evidence over our survey period, is often perceived as a provider of potential opportunity for active investment and a driver of increased adoption of active strategies. However, our survey findings indicate that investors are staying the course on their index strategies.

Active strategies have traditionally prevailed in fixed income, and they continue to dominate portfolios, but the early shifts we've seen in previous surveys[1] are continuing. Now, over one-third (37%) of respondents say that more than 20% of their portfolio is allocated to index strategies. For 7% of respondents, more than 30% of their portfolio is allocated to index strategies (Figure 7).

Investors Show Sustained Interest in Indexed Fixed Income ...

Figure 7
What proportion of your institution's fixed income portfolio is allocated to index strategies?



Source: State Street Global Advisors. Percentage of respondents. Note: Fixed income index strategy is defined as "A portfolio of fixed income securities that seeks to track the performance of a market index, such as the Bloomberg Barclays US Aggregate Bond Index. Index strategies may seek to precisely replicate a market index, or to build a representative sample of an index." Respondents were allowed to select one answer. n=643.

... 57% of Largest Investors (AUM $10bn+) Have More than One-Fifth of Their Portfolio Allocated to Index Strategies

Will the Market Move Toward the Approach Being Used by Larger Investors?

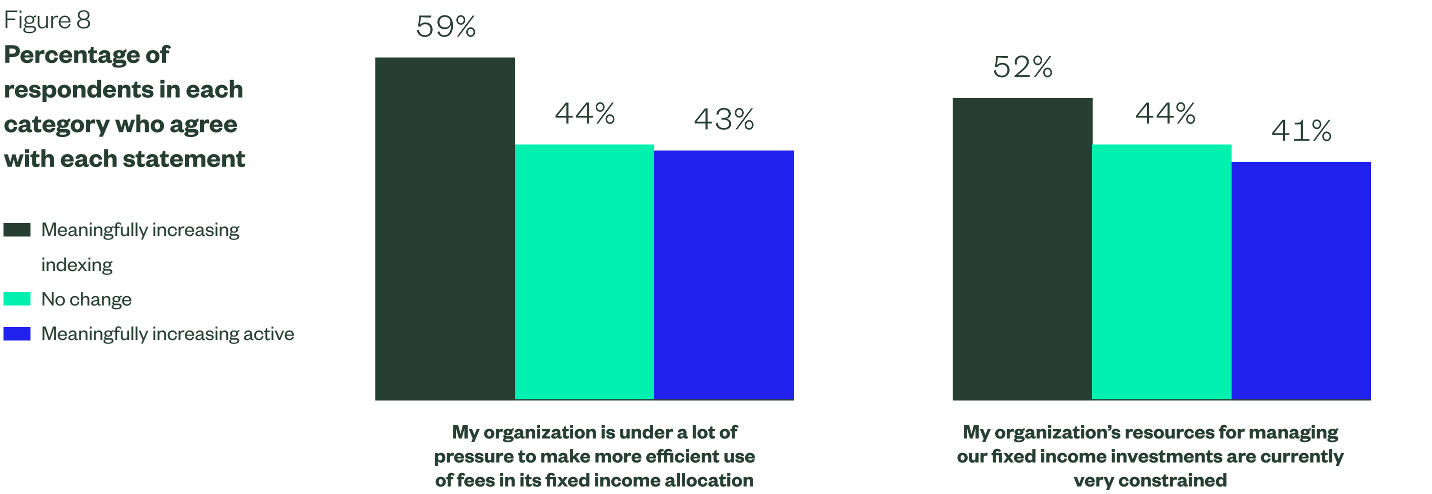
Overall, 37% of investors have more than one-fifth of their portfolio allocated to index, and among the largest investors — those with AUM over $10 billion — that figure rises to 57%. The larger the investor, the more the preference for indexing — which leads to the question: Is this a marker for the future direction of the broader market?

Resource-pressured investors are more likely to increase index allocations

Survey responses reveal that institutional investors are under pressure to make better use of their resources, including fees. Forty-six percent of all respondents, for example, agree that they're "under a lot of pressure to make more efficient use of fees" in fixed income. Along similar lines, 45% agree that their resources for managing fixed income are "very constrained." Respondents seeking to increase their allocation to indexed fixed income are particularly likely to agree that they're under fee pressure and resource constrained (Figure 8).

Investors Who Are Under Pressure to Make More Efficient Use of Resources Are More Likely to Meaningfully Increase Their Use of Indexing

Figure 8
Percentage of respondents in each category who agree with each statement



Source: State Street Global Advisors. Questions: Which of the following best describes how the overall proportion of active versus indexed strategies in your fixed income portfolio is likely to change over the next 12 months? (Respondents were allowed to select one answer for each statement), compared with respondents who agree "strongly" or "somewhat" with the cited statements. Base: Increase index = 73 respondents; No change = 424 respondents; Increase active = 51 respondents.

A minority are rebalancing, with a marginal shift toward indexing

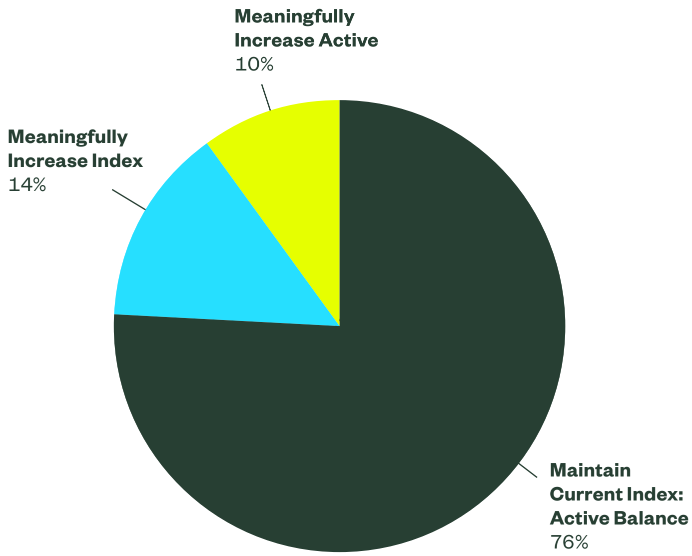
Allocations are likely to remain fairly stable over the coming 12 months; 76% of survey respondents are not planning to make meaningful changes to their balance of index and active strategies. Among those who do expect to make a change, more will meaningfully increase their overall fixed income allocation to index (14%) than to active (10%) (Figure 9).

In open-ended responses, those opting for an index allocation say they are doing so to improve performance transparency, efficiency, and cost-effectiveness. ESG considerations were also cited as a decision factor.

Allocations Between Active and Indexing Are Likely to Remain Fairly Stable, with a Marginal Shift Toward Indexing

Figure 9

Which of the following best describes how the overall proportion of active versus indexed strategies in your fixed income portfolio is likely to change over the next 12 months?



What are the Decision Drivers for Increasing Index Allocations?

"Performance transparency"
—US Foundation Respondent

"Efficiency and cost effectiveness"
—US Endowment Respondent

"Gain early entry to ESG"
—UK Pension Fund Respondent

Source: State Street Global Advisors. Percentage of respondents. Note: Respondents were allowed to select one answer and were given the opportunity to state the reason for planned changes in an open-ended response. n=643.

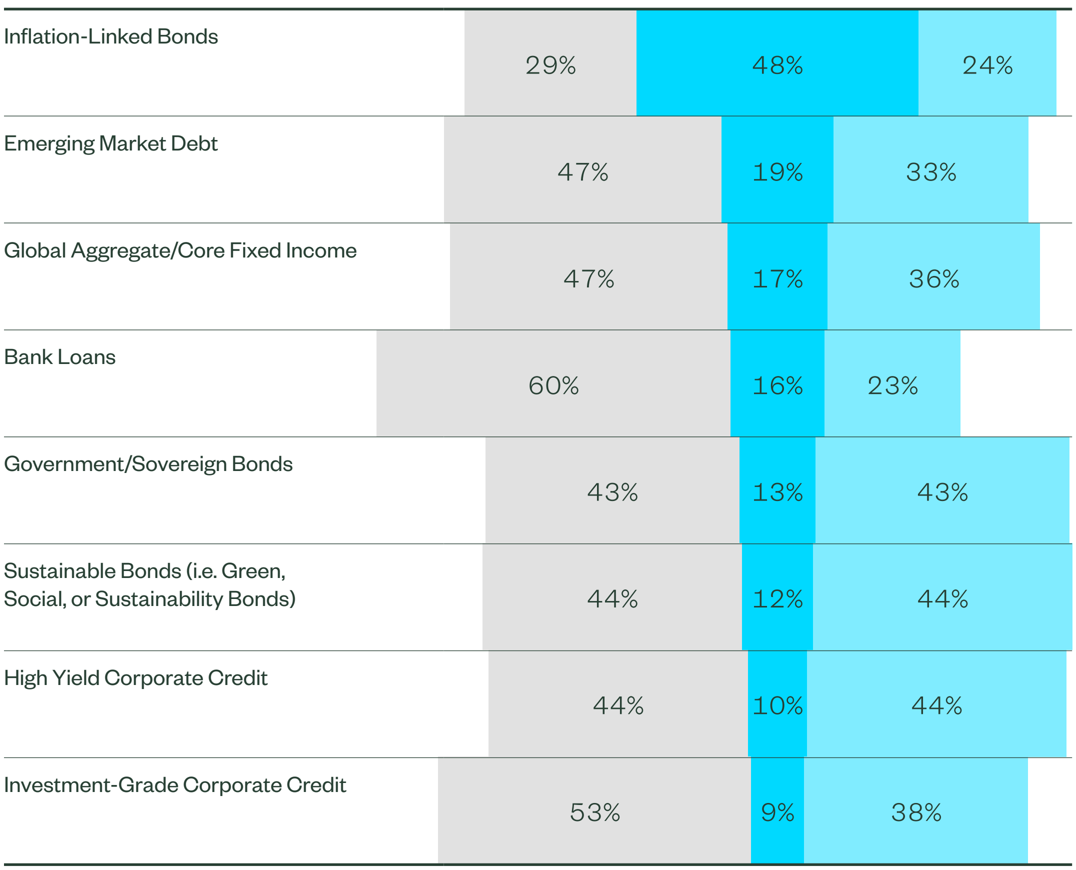
Approach to Exposure Implementation

For survey respondents who plan to increase fixed income allocations, a majority plan to use indexed fixed income — through either a balanced combination of index and active strategies or through dedicated index strategies — to build their exposures in every sector. Respondents are especially likely to include indexed approaches as they build exposures to inflation-linked bonds (Figure 10).

Index Strategies Are Likely to Play a Key Role in Building Exposures Across Sectors

Figure 10
For those fixed income sectors to which you are increasing allocations over the next 12 months, how will you build your exposure?

- Through a Balanced Mix of Active and Index Strategies
- Mainly Through Indexed Strategies
- Mainly Through Active Strategies



Source: State Street Global Advisors. Percentage of respondents. Note: Respondents were allowed to select one answer for each sector; "not applicable" answers omitted. n=636.

New Sources, New Approaches

Faced with a challenging environment, investors are intensifying their consideration of alternative sources of return. This search changes how traditional sectors are viewed, adds liquidity risk into the equation, supports the rise of systematic strategies, and may even disrupt some longstanding preferences for active approaches.

1	The search for new sources of return intensifies
2	The private credit boom has had multiple impacts on public fixed income
3	Larger investors are driving demand for systematic fixed income strategies

The search for new sources of return intensifies

Reflecting market conditions, investors are seeking allocations that might help them tackle inflation and more fully exploit available opportunities in their search for return. As a consequence, many investors intend to explore alternatives to a greater degree.

To the extent they plan to decrease public fixed income in favor of alternatives, private credit may no longer be the alternative destination of choice. Bank loans are in demand as investors respond to the rising rate environment and consider their portfolio duration: 51% of survey respondents plan to increase allocations there, which is the highest of any sector (Figure 11).

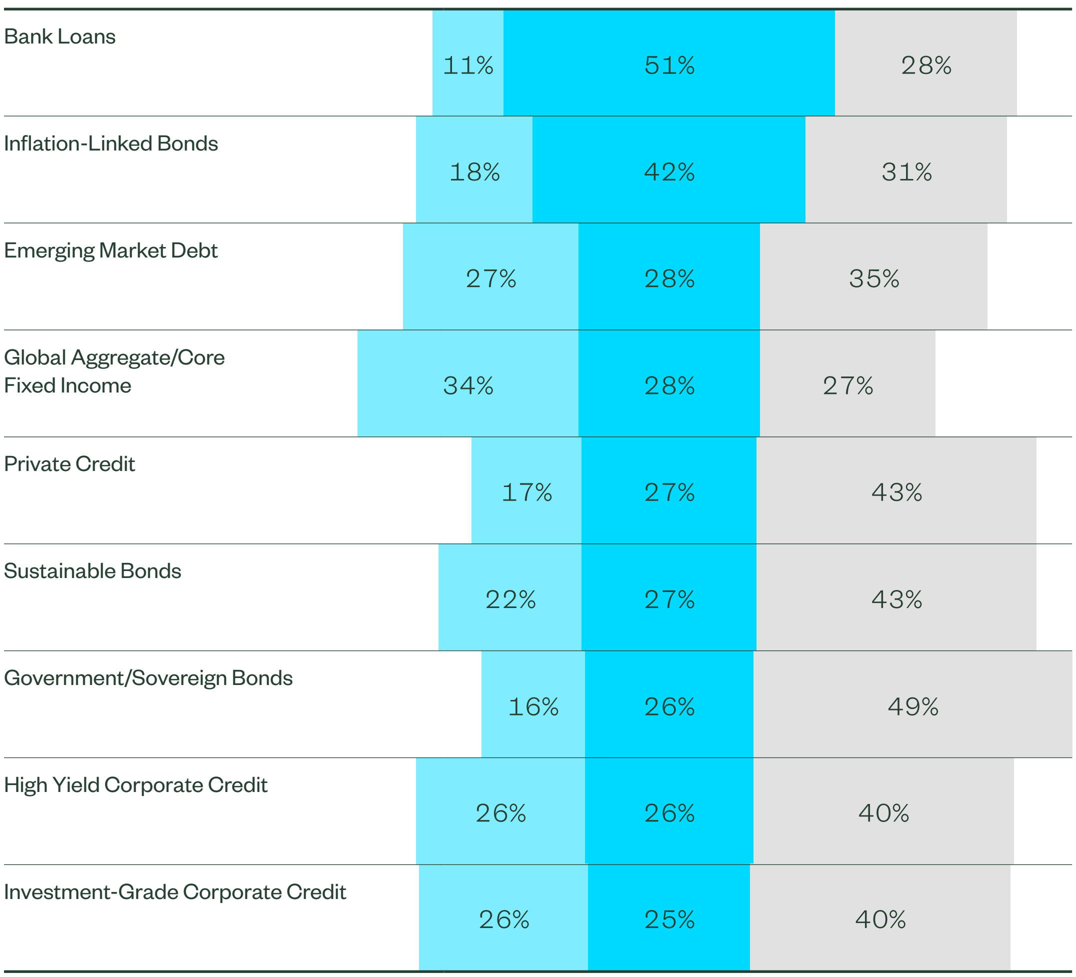
For obvious reasons in an inflationary environment, inflation-linked bonds (42%) are also a preferred sector for increased allocation. Other sectors present more of a nuanced picture. For example, although significantly fewer respondents are increasing emerging market debt (EMD) than we saw in 2021 (42%), across the population expected allocation to EMD is quite stable. More than one-third of respondents plan no change in their EMD allocation, while those planning to increase their allocation to EMD (28%) narrowly edge out those who plan to decrease their EMD exposure (27%).

Interest Is Especially Keen in Bank Loans and Inflation-Linked Bonds

Figure 11

How do you expect to adjust your allocations to the following fixed income sectors over the next 12 months, in order to address your most important priorities?

Decrease (%)
Increase (%)
No Change (%)



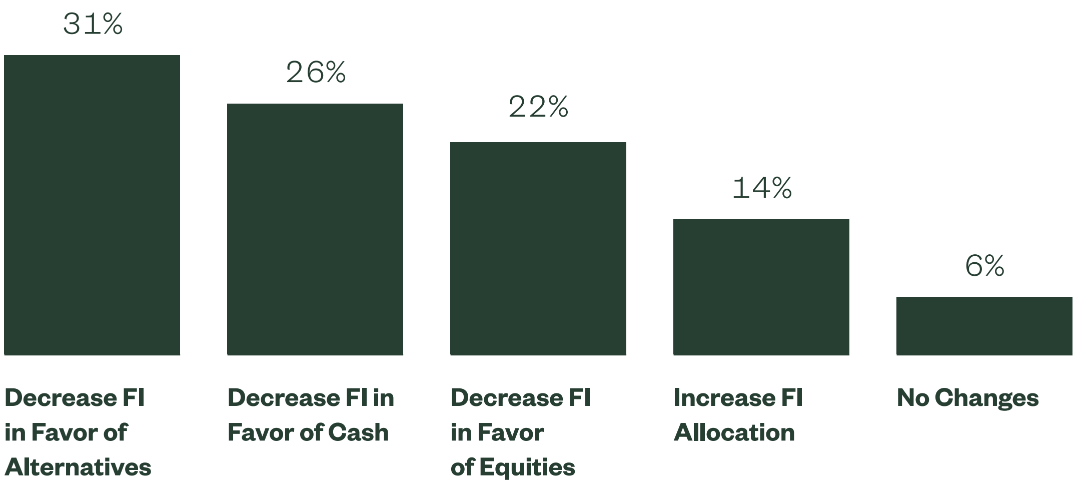
Source: State Street Global Advisors. Percentage of respondents. Note: Respondents were allowed to select one answer for each sector. n=700.

Strong Trend to Alternatives

The trend toward alternatives is continuing, with about one-third of investors (31%) electing to reduce their fixed income allocations in favor of alternatives over the last 9 months, and a further 29% stating they plan to do so over the next 12 months (Figure 12). Those seeking returns in alternatives outnumber those taking risk off the table and going to cash.

In Response to Increasing Bond Yields, Investors Have Most Often Allocated Away from Fixed Income Toward Alternatives ...

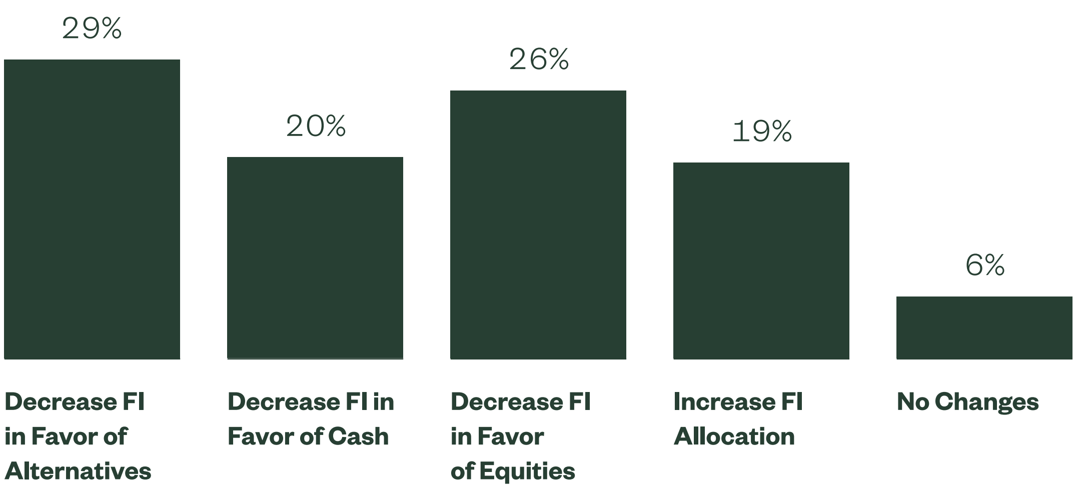
Figure 12
From an asset allocation perspective, have you undertaken any of the following changes in response to increasing bond yields over the last 6-9 months?



Source: State Street Global Advisors. Percentage of respondents. Note: Respondents were allowed to select one answer. n=659.

... a Trend That Looks Likely to Continue

From an asset allocation perspective, which of the following changes are you most likely to make over the next 12 months?



Source: State Street Global Advisors. Percentage of respondents. Note: Respondents were allowed to select one answer. n=659.

> **In terms of asset allocation, if you look at the decision speed of pension funds, that's very slow, and the path towards more private market allocations has been set in motion. That is likely to continue for at least the next five years — I don't see that reversing back towards mainstream public market assets again."**
>
> — Investment Manager, European Asset Manager

At the same time, the survey does hint at the durable, continuing role for public fixed income in institutional portfolios. While only 14% of respondents globally increased their allocations to fixed income in the last nine months, more respondents (19%) say that they are planning to increase allocations over the coming year. Regionally, in the US, 23% of respondents say that they will increase fixed income allocations over the next 12 months, whereas 18% will do so in EMEA and 14% will do so in APAC.

Even as the correlations that investors had come to expect between equities and fixed income sometimes break down in this inflationary environment — and despite historic drawdowns in bond markets — survey results show that institutional investors are taking a long view and will continue to allocate to public fixed income.

A Comment on Emerging Market Debt

The outlook for emerging markets (EM) remains highly uncertain as it is closely tied to the evolution and outcome of the Russia–Ukraine War, which is having a wide-ranging impact on global markets, rather than just on the countries directly involved. The net effect has been higher inflation and lower growth, with further disruption in commodity markets still possible. This is adding further fuel to inflation and applying downside pressure on growth.

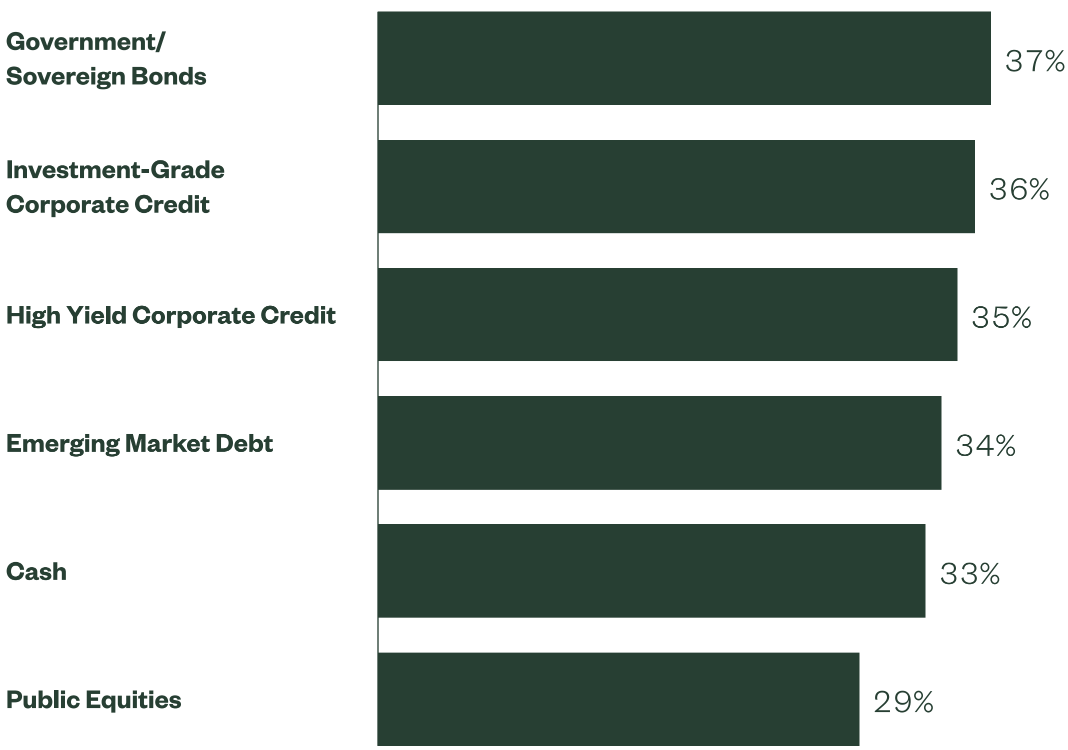
Though intensifying macro headwinds and geopolitical risk have stifled demand for emerging market debt (EMD) in 2022 to date, even amid this perfect storm there are some silver linings for the asset class. Both EMD local currency (LC) and hard currency (HC) offer better value than they have for some time. For investors willing to live with short-term volatility, this could potentially be a good entry point into the asset class. Moreover, yields at an index level for both EMD LC and HC are at their highest levels in a decade, making the asset class potentially attractive for return-seeking investors.

The private credit boom has had multiple impacts on public fixed income

More than four-fifths of investors have increased their private credit exposure over the last three years. Investors have largely been funding private credit allocations from public fixed income over the last three years: government bonds (37%), investment-grade and high yield corporate credit (36% and 35%), emerging market debt (34%), and cash (33%). At 29%, public equities were the least impacted (Figure 13).

Investors Are Most Often Funding Private Credit Exposures by Reallocating from Fixed Income and Cash

Figure 13
If your organization has increased its overall allocation to private credit over the last three years, which asset class(es) have you reallocated from in order to fund it?



Source: State Street Global Advisors. Percentage of respondents. Note: Respondents were allowed to select all that apply. n=476.

> **"If it's done correctly, you're going to have fixed income that's outperforming in down markets. So now we can fund other strategies in equity, small caps, large caps, international, however our investment committee sees fit."**
>
> — Fixed Income Manager, US Asset Owner

Regionally, there was a degree of differentiation. For North America, cash has been the main reallocation source (53%), while for APAC private credit has been predominantly funded from government bonds (56%). In EMEA, investment-grade corporate credit (41%) was the main source (Figure 14).

Regional Breakdown: Top Reallocation Sources

Figure 14
How have investors funded private credit reallocations?

APAC	North America	EMEA
56%	53%	41%
Government Bonds	Cash	Investment-Grade Corporates

Liquidity Risk

Whereas once investors were able to rely on a relatively straightforward fixed income allocation to meet their return and risk objectives, many have moved toward a broader basket of instruments — including private credit — to do so. Many of these instruments, like private credit, offer much less liquidity compared to a combination of more conventional fixed income, cash, and equities. Investors are therefore increasingly pairing private credit allocations with more liquid fixed income instruments and/or adapting core fixed income to compensate.

A variety of approaches are being implemented to address the increased liquidity risk of alternative allocations: Some investors are pairing private credit allocations with high yield (52%) and cash allocations (47%), while others are focusing on higher-quality, more-liquid core allocations (51%) (Figure 15). There appears to be no single preferred approach, but the survey results demonstrate that investors are recognizing, and moving to address, increased liquidity risk.

A Comment on Global High Yield

Like many fixed income sectors, global high yield markets have been hit hard this year,[2] driven initially by the rapid rise in Treasury yields and more recently by the rapid rise in credit spreads.[3] We believe that, at current levels of valuation, a significant cushion has been created for investors that may serve to offset much of the impact of the expected rise in the credit default cycle ahead and also any further impact from spreads widening further.

In the event of a technical recession that is shorter and shallower than usual, i.e. with defaults topping out at 3–5%, it is likely that investors who have been unwilling to allocate to high yield for the last few years — at par dollar price, with tight spreads of 300 bps, and all-in yields of 4% — will be able to see a completely different picture. This picture may translate to a rare opportunity to deploy capital with strong near-term expected returns. On the balance of risks, new allocations to global high yield appear attractive.

Investors Are Taking Action to Manage the Liquidity Risk that Accompanies Private Credit

Figure 15
If your organization has increased its overall allocation to private credit, what actions, if any, have you taken to manage the accompanying increase in liquidity risk?

Source: State Street Global Advisors. Percentage of respondents. Note: Respondents were allowed to select all that apply. n=473.

> **“It has basically meant that we’ve grown less in other illiquid asset classes like infrastructure, where it’s been much harder to find new projects. We had to find a balance on where to reinvest and that has gone more into private credit in the last two years versus some of the other alternative asset classes.”**
>
> —Investment Manager, European Asset Manager

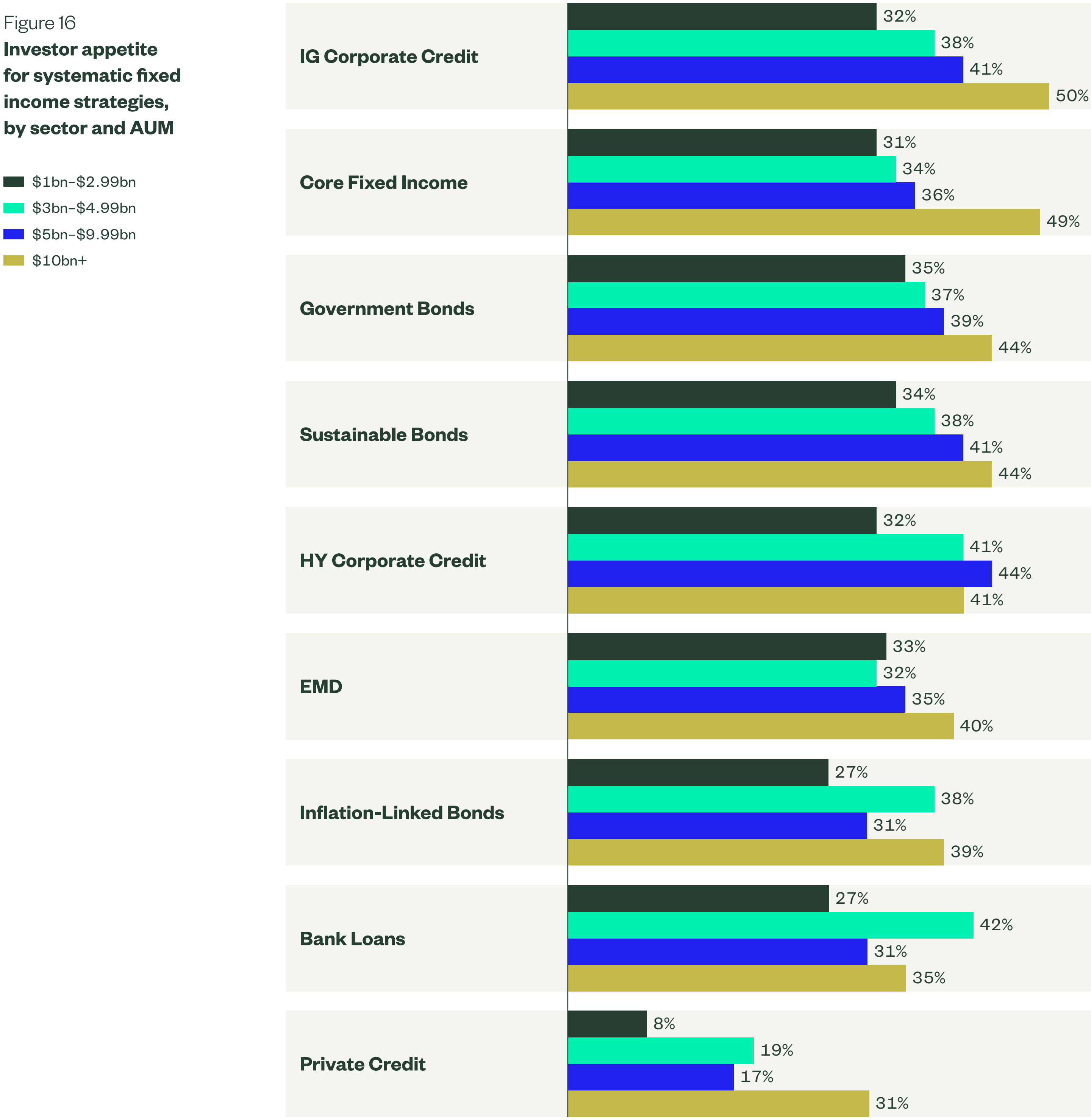
Larger investors are driving demand for systematic fixed income strategies

On the horizon, and perhaps ultimately threatening the traditional dominance of active approaches, investors are showing interest in new, data-driven approaches to fixed income via systematic strategies. (For the purposes of this survey, systematic strategies were defined as investment strategies based on a diversified portfolio, built on repeatable, data-driven, factor-based decisions in a risk-controlled environment.)

Investors appear to recognize that the evolution of fixed income trading toward greater digitalization may be eroding the active opportunity. Forty-three percent of respondents globally agree with the statement that “Increasing efficiency in fixed income markets is reducing active managers’ ability to add value through security selection.”[4] Larger investors are particularly likely to express a strong appetite for systematic fixed income strategies (Figure 16). Among various sectors, larger investors are especially interested in systematic approaches to investment-grade corporate credit and core fixed income.

Larger Investors Are More Likely to Express a Strong Appetite for Systematic Strategies

Figure 16
Investor appetite for systematic fixed income strategies, by sector and AUM

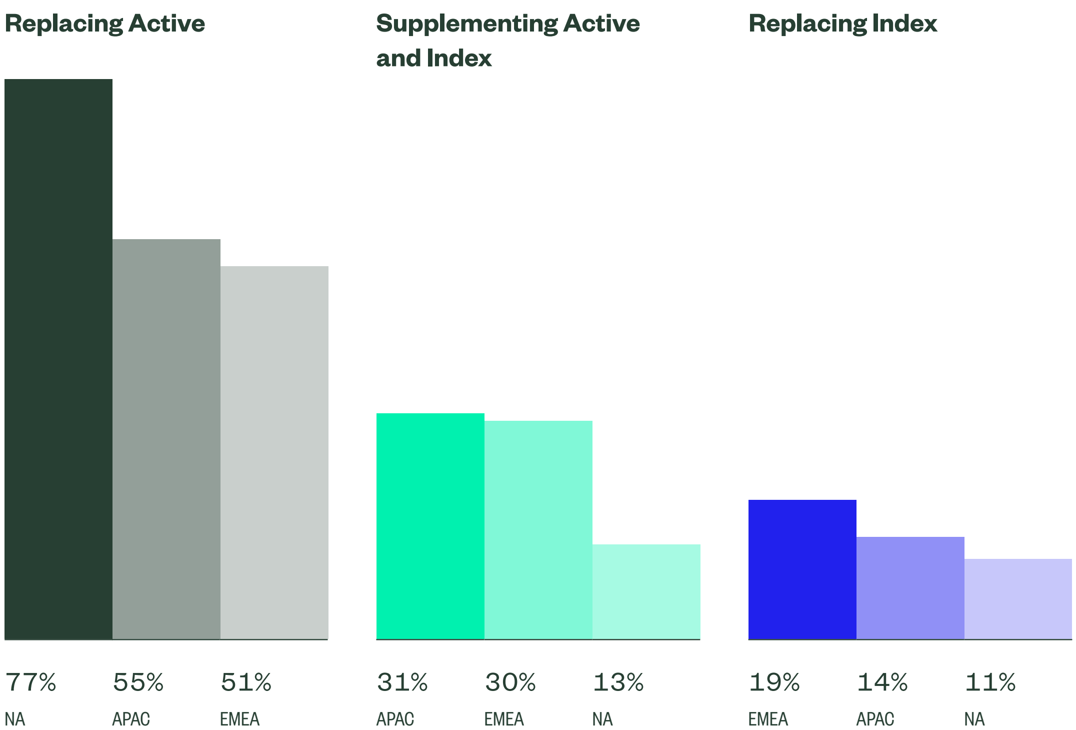


Source: State Street Global Advisors. Question: How would you rate your institution's appetite to use systematic strategies in the following fixed income segments over the next 12 months? Percentage of respondents selecting "very strong" or "somewhat strong." Note: Respondents were allowed to select one answer for each sector. n=700.

Most investors see systematic strategies as a replacement for active management. More than half (59%) of investors who are exploring systematic strategies say they are planning to use them to replace existing active strategies. One-quarter (25%) of respondents say they plan to use them to supplement, rather than replace, existing index and active strategies. Just 16% say they plan to use them to replace index strategies (Figure 17).

Most Investors See Systematic Strategies as a Replacement for Active Management

Figure 17
For those fixed income sectors where you have appetite to increase the use of systematic strategies, which of the following best describes the role you want them to play?



Source: State Street Global Advisors. Percentage of respondents. Note: Respondents were allowed to select all that apply. n=700.

> **“Systematic strategies, if well constructed and well managed, with appropriate portfolio management and risk parameters, will add value over the performance period that we look at. Which is rolling three years. They can be a good, diversified source of alpha.”**
>
> —Head of Fixed Income, Australian Pension Provider

Closing Thoughts

Clearly change is in the air for fixed income, not only in how it is transacted but in what is invested in and its central purpose.

What do the three key findings from our survey mean for investors and what steps should they take to keep their portfolios effective?

Key Finding 1: ESG Tops the Agenda

Our survey shows that ESG has primacy even over recent market events and concerns, such as inflation and central bank decision-making. Given its importance and increasing growth trajectory, we believe that all fixed income investors should have in place an investment plan that reflects their longer-term ESG values, targets, and objectives.

Climate is, for the foreseeable future, the single-most important topic within ESG, making it critical that investors determine how they will reflect climate-related aims, whether in their allocation or selection and inclusion decisions.

The mass movement toward Paris alignment reflects a starting point for investors to start their ESG integration discussions. As more investors establish a climate framework to guide investment policy, we would expect to see further consolidation here.

Key Finding 2: Indexing Cements Its Place

Active remains the go-to approach for much of fixed income, but our survey shows a clear movement toward increasing use of indexed approaches. We maintain that there is room for both approaches and that the decision should be made on the clear merits of each according to circumstances.

Investors should assess the resources involved in the selection and ongoing oversight of active management, and how those managers pair with others in their selection as well as with available indexed options. The question should be asked as to whether there is truly a longer-term advantage to using active exclusively. We see a number of large concerns and multi-asset teams using indexed both exclusively and in tandem with judicious use of active.

Using indexing where oversight or fee resources are scarce can help fund (either with money or time) the highest-conviction active ideas. Where return is the key driver to sector allocations such as with emerging market debt or high yield, indexing is an even more important way to harness this return potential efficiently.

Key Finding 3: New Sources, New Approaches

Investors are increasingly seeking allocations to help tackle inflation and they're expanding their search for return opportunities beyond the traditional. In short, more investors than ever are exploring alternatives to a greater degree.

The search for differentiated sources of return has several impacts on fixed income portfolios. For example, lack of liquidity and transparency in private assets can restrict insight and hamper allocations. We believe it can make sense to pair private assets with liquid publicly traded exposures such as high yield to help with managing allocations and flow.

In terms of new approaches, we observe that larger investors are driving demand for data-driven, systematic fixed income strategies that combine low-cost, broad asset class-pure exposure, with diversifying (from most fundamental) factor-based alpha drivers.

Of note is how systematic, in the minds of many of our survey respondents, is considered a replacement for active, perhaps signaling a forthcoming shake-up in some of the most fundamental fixed income assumptions.

Endnotes

1 See, for example, *Fixed Income: Preparing for the Big Shift*, State Street Global Advisors, 2021.

2 A YTD decline of 16.80%, as of June 30, 2022. Source: State Street Global Advisors.

3 640 bps, as of June 30, 2022. Source: State Street Global Advisors.

4 N=550. Only 12% of respondents disagreed with the statement.

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* Pensions & Investments Research Center, as of December 31, 2021.
† This figure is presented as of June 30, 2022 and includes approximately $66.43 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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In partnership with FT Longitude, a Financial Times company. This survey was conducted in May of 2022 via an online survey instrument (n=700) and telephone interviews (n=5). Respondents were limited to senior leaders and senior portfolio managers who are directly involved in fixed income portfolio construction and investment decisions at pension funds, wealth managers, asset managers, endowments, foundations and sovereign wealth funds.

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