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# ESG Investing Combining Performance and Impact in Fixed Income

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ESG considerations are becoming increasingly relevant in fixed income investment portfolios.

Challenges around ESG-related data are prevalent but solvable.

Indexing techniques are enabling more sophisticated, cost-effective targeting of multiple ESG parameters.

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While ESG is at the top of many institutional investors' agendas today, the focus has primarily been on the equity portion of their investments; but this is changing. Investors are now putting more thought into how to successfully embed ESG into their fixed income investments.

We outline the approaches investors can take to integrate ESG into fixed income investments, what the challenges are and how State Street Global Advisors can help.

## ESG integration and application

New technology, big data and factor-based strategies are creating new opportunities for investors and disrupting conventional approaches to portfolio management. As investors redefine their objectives beyond traditional portfolio metrics and look at the broader impact of their investment choices, ESG is increasingly gaining importance. The move is being underpinned by regulatory and policymaker initiatives as well as the launch of the European Commission’s sustainable finance action plan.

ESG (Environmental, Social and Governance) investing — also known as Responsible Investing — is now a mainstream topic and investors are increasingly examining the impact of their investment decisions on ESG issues. However, the extent of ESG incorporation has differed across asset classes (Figure 1).

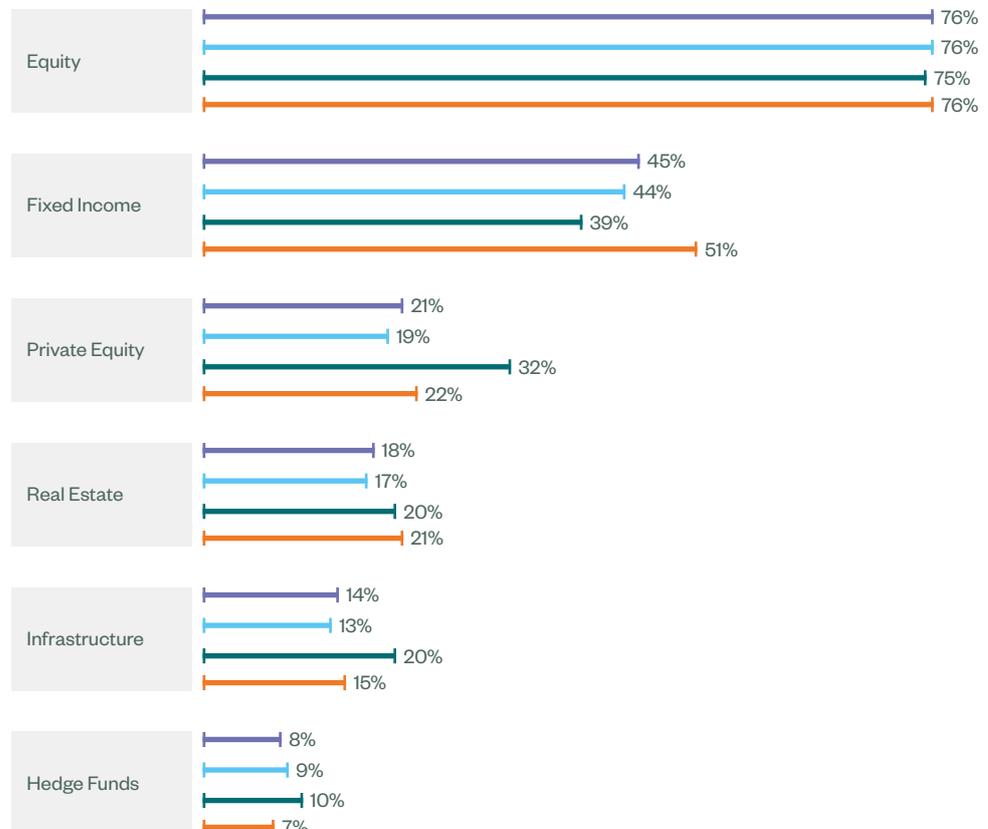
Research conducted by the CFA\* showed that equity has the highest degree of ESG integration globally (76%) while the number is significantly lower for fixed income (45%).

The investment community is increasingly putting its faith in research produced by ESG vendors such as Sustainalytics, ISS-Oekom, Trucost and MSCI to incorporate ESG into the investment decision-making process.

Data is available from a growing number of vendors and in forms that allow investors to apply it in a systematic manner by using, for example component scores, percentile scores versus sector peers and red flags highlighting involvement in controversial industries or practices.

Figure 1  
Investor integration of ESG

- Global
- America
- APAC
- EMEA



Source: CFA Institute, Environmental, Social and Governance (ESG) Survey, 2017.

\*Survey is the source mentioned above. Commissioned by the CFA Institute. Details as of May 2017. 1,588 CFA members that are portfolio managers and research analysts. Of the 1,588 respondent 64% (1,016 respondents) were from the Americas, 23% (365) from EMEA, and 13% (207) from the APAC region.

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## Common approaches to incorporating ESG into investments

Some investors have concerns that incorporating ESG will negatively affect returns. In our view, ESG investing is not an either/or proposition – investors can achieve their financial objectives while influencing positive ESG-related changes.

There is no one standard approach to incorporating ESG into a portfolio. Methodologies vary from strictly excluding potential investments on ethical or value considerations, through to ESG integration skewed devoid of any negative screening. However, there are some common applications and these approaches to sustainable investing can be broadly grouped into seven key categories:

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### ESG Tilt

The inclusion by investment managers of ESG risks and opportunities into traditional financial analysis using a weighting scheme or optimizer with constraints.

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### Thematic

Investment in themes or assets specifically aimed at solving social or environmental problems e.g. clean energy and green technology.

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### Norms-Based

Screening of investments against minimum standard of business practice, based on international norms.

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### ESG Tail-Risk

Monitoring ESG scores through time and imposing constraints when there is a reduction in ESG performance.

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### Negative Screening

The removal of certain sectors or companies based on specific ESG criteria.

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### Best in-Class

Investment in issuers selected for stronger ESG scores relative to industry peers.

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### Impact

Targeting a measurable positive social and/or environmental impact. Investments typically align to the United Nations Sustainable Development Goals (UN SDGs) and are generally project specific.

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## ESG bond types

Within fixed income there are securities which have specific responsible investment guidelines and strict requirements about how the proceeds of those investments are used.

The bonds finance projects targeted at generating climate, social or other environmental benefits. These typically fall into one of four categories:

**Green bonds** started in 2007 with issuance from the EIB and World Bank. The push for more transparency within the green bond market has encouraged the development of indices that track the green bond universe. These indices have provided the means to track market developments, evaluate performance and assess market risk. Commonly used benchmarks include the Bloomberg Barclays MSCI Green Bond Index, the S&P Green Bond Select Index and the Bank of America Merrill Lynch Green Bond Index.

**Social bonds** are another segment of the sustainable bonds family. Their first issuance came from the Spanish Instituto de Credito in January 2015. Social bonds follow a similar set of principles and quality-of-information requirements as green bonds but, as the name suggests, the proceeds are used to support social programs. Project examples include access to essential services (e.g. health, education and financial services), affordable housing and microfinance.

**Sustainable bonds** Starbucks issued the first-ever US corporate sustainability bond in 2016. The bond raised \$500 million dedicated to sourcing coffee that meets the company's standards on measuring the environmental and social practices of its suppliers. Sustainable bonds differ from green bonds in that they offer issuers a broader mandate of acceptable environmental, social and governance uses for the proceeds of the bond.

**Blue bonds** are the youngest member of the sustainable bonds family. The first issuance was made in October 2018 with the Seychelles, in partnership with the World Bank, issuing a US\$15 million bond. Blue bonds are issues made to finance marine and ocean-based projects that have positive environmental, economic and climate benefits.

With green, social, sustainable and blue bonds investors can demand, influence and have better views into the use of proceeds and ESG dimensions at the issuer level.

## How does incorporating ESG affect a Fixed Income portfolio?

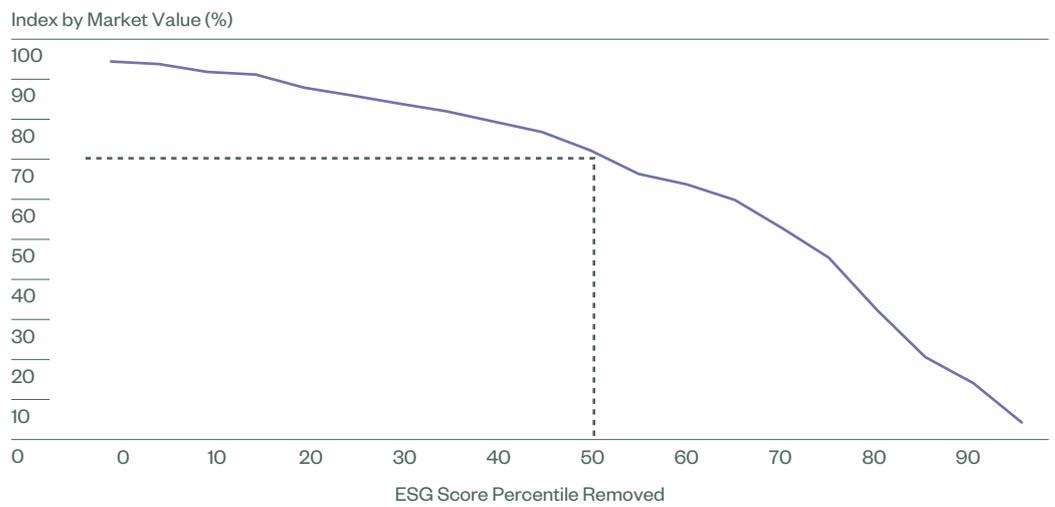
To help illustrate the impact of incorporating ESG into a fixed income portfolio, we assess below the impact on key bond portfolio characteristics of implementing an ESG screen on the US investment-grade corporate bond universe.

Coverage of the index is good, at 95% coverage by Sustainalytics. The index is comprised of over 5,820 securities, issued by over 750 issuers (as at December 2018). Even with a typical and commonly used best-in-class approach it is important to define how you wish to apply it as this will affect characteristics such as yield and duration.

Figure 2 illustrates that removing 50% of the securities with the lowest ESG scores would equate to removing around 27.7% of the index (as a percentage of the market weight).

Figure 2  
Effect on index weight

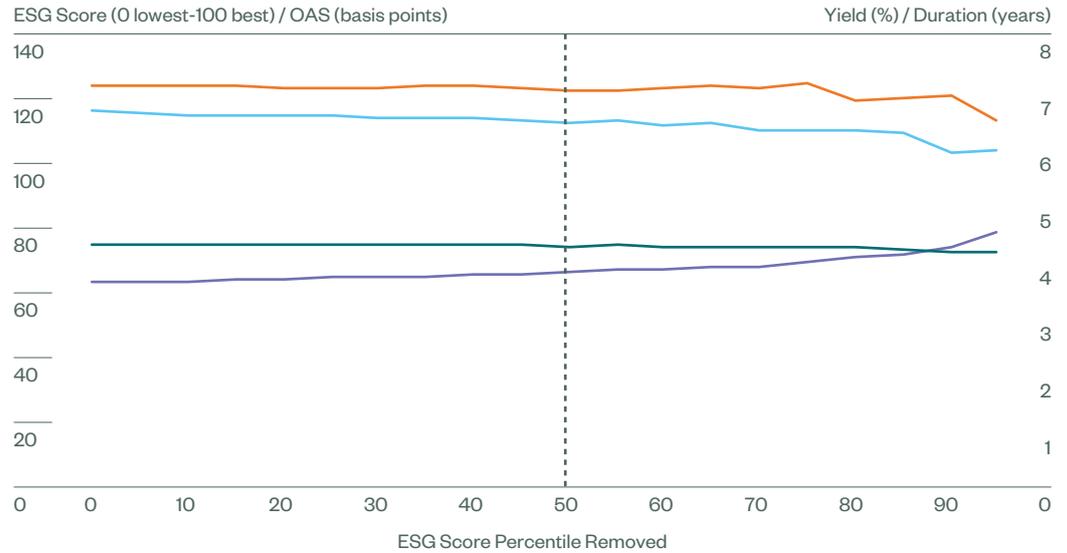
— US IG Corporate Bonds



Source: SSGA; Sustainalytics. As of 3 December 2018

**Figure 3**  
**Effect on key bond characteristics**

- ESG Score
- OAS
- Yield (RHS)
- OAD (RHS)

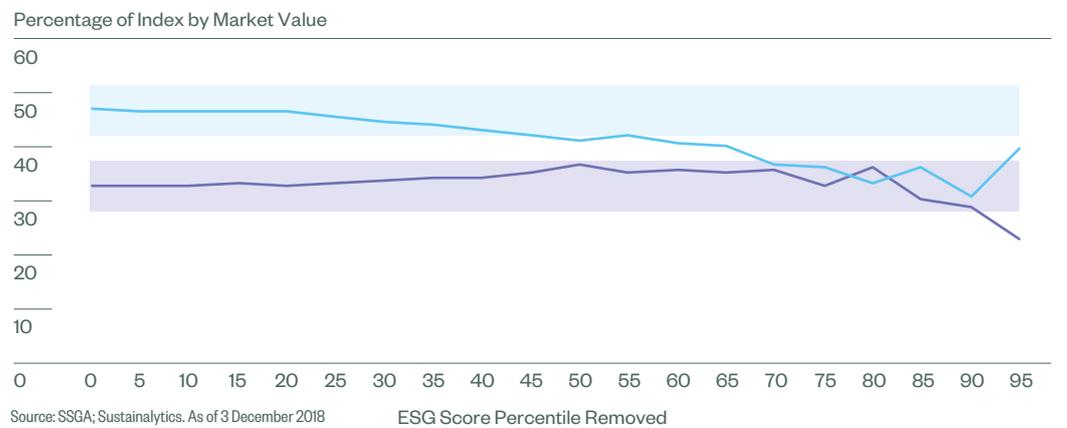


Source: SSGA; Sustainalytics. As of 3 December 2018. Past performance is not a guarantee of future results.

Despite removing over a quarter of the index, the change to key characteristics is relatively small — the yield is reduced by 4 bps and duration is reduced by 0.08 years. Material changes to key characteristics only occur after removing at least 75% of the lowest-rated ESG securities.

**Figure 4**  
**Effect on financials and BBB-rated securities**

- Financials (%)
- BBB (%) Average of S&P, Moodys and Fitch ratings



Source: SSGA; Sustainalytics. As of 3 December 2018

However when the 27.7% of issuers by market weight are removed, the exposure to financials increases by 3.9% and there is a bias towards high credit-quality-rated securities as the exposure to BBB-rated issues is reduced by 5.9%.

Material changes to the exposure of BBB-rated securities occurs at the 45th percentile; while for financials it is at the 90th percentile and above.

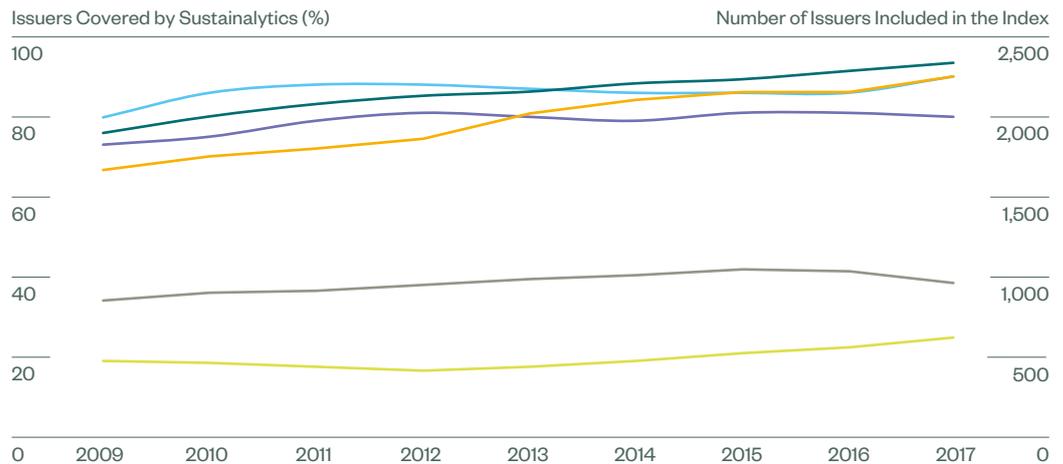
## Challenges in ESG Fixed Income

ESG data vendors are seeking to improve the transparency of a business's operations and the impact it is having on the broader environment and society. However, there are limitations which investors should consider, the most obvious of which is the limited issuer coverage.

ESG data vendors have traditionally only evaluated publicly listed companies, ignoring smaller companies and those that only issue bonds. Within the fixed income universe US and euro investment-grade corporates typically have high coverage while it is typically much lower for the high-yield universe and emerging-market corporates.

Figure 5  
Issuer coverage

- Global IG (Issuer Coverage)
- US IG (Issuer Coverage)
- Euro IG (Issuer Coverage)
- Global IG (Number of Issuers)
- US IG (Number of Issuers)
- Euro IG (Number of Issuers)



Source: Bloomberg Barclays; Sustainalytics. As of 23 November 2018.

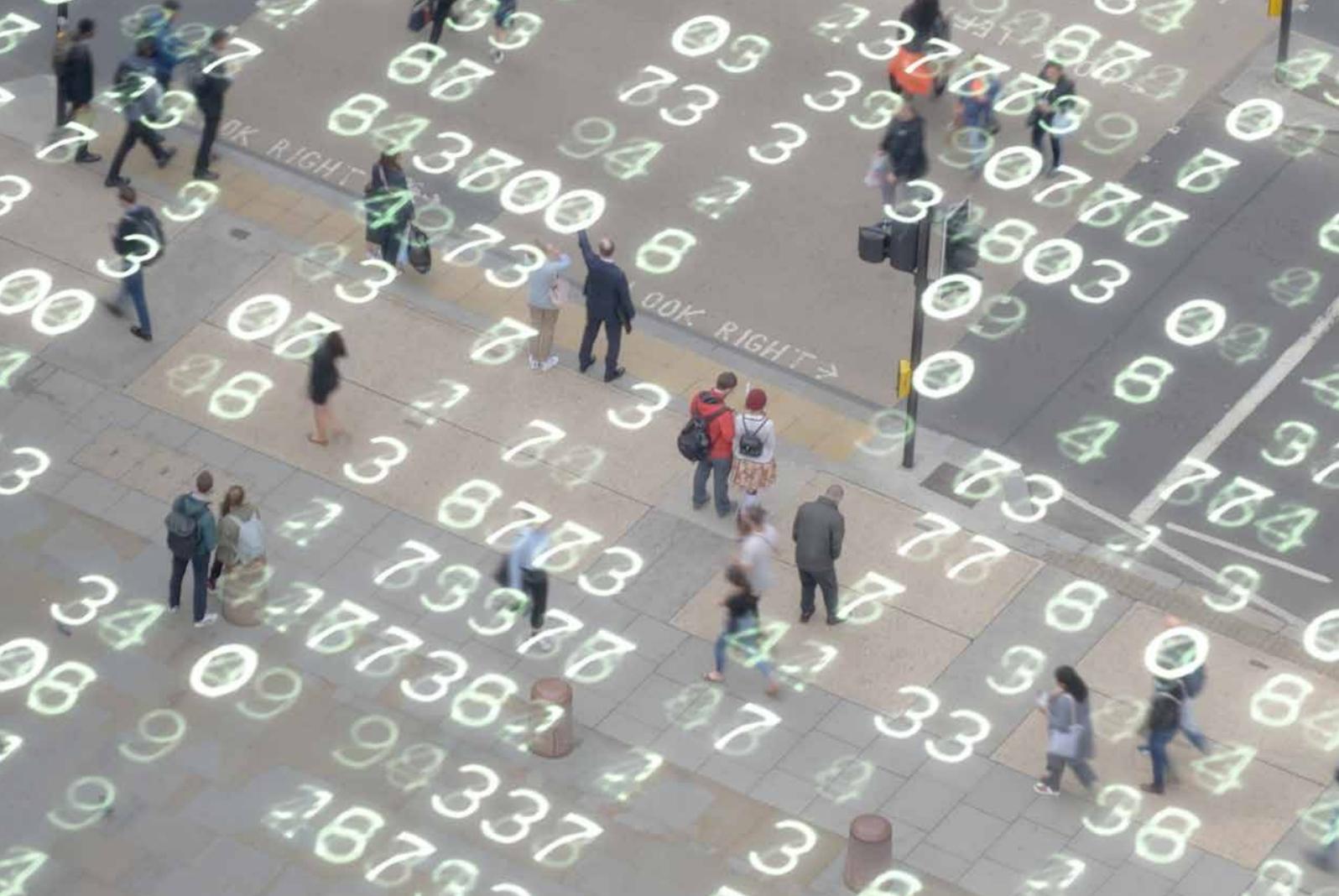
### Data availability

Another challenge is the ability to procure data for companies, government-related entities and nations given that ESG data vendors typically rely on publicly provided information. While ESG vendors may also try to engage with the companies directly and ask them to provide additional information, typically in the form of a questionnaire, these have often (at least historically) been ignored or poorly completed.

However, as the investment community increasingly sources and integrates such data into their investment framework, companies' attitudes are changing. Larger companies especially are paying more attention to ESG-related surveys. Oil refiner Total, for example, has established a dedicated ESG division to better monitor, collate and report the data demanded by ESG agencies.

### Data relevance

Obtaining the data is one thing but ensuring it continues to be relevant and regularly updated is another. Typically, the fundamental data used relies on reporting cycles – quarterly or annually. However, faster forms of data are becoming available which utilise big data techniques. These can systematically combine a vast array of ESG metrics with news signals from over 50,000 sources and across 15 languages allowing real-time data updates.



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## Meeting the Data Challenge

To help overcome these challenges, SSGA has designed an ESG data architecture that's transparent and open, allowing us to add or remove data providers as well as make adjustments to improve the proprietary score. We currently source data from a panel of nine market-leading ESG and carbon data providers that meet our strict standards.

Not being reliant on a single third-party methodology and index provider gives us more control over the quality of the data and the ability to scrutinize the ESG score on any given dimension. The reliance that some asset managers place on a single provider may create systemic risk due to the lack of diversity in viewpoints.

Insights from engagement and proxy voting are typically not captured in third-party indices but thanks to our internal analytics, we are able to integrate our stewardship insights directly into our investment process.

## Case Study

### Low-Carbon Footprint Credit Fund

To illustrate the ESG investment process, we can use the case study of an investor whose objective is to halve the carbon exposure in their euro investment-grade corporate bond portfolio. To develop such a portfolio, there are two key stages in the construction of the low-carbon investment universe:

## Stage 1

Defining the data inputs

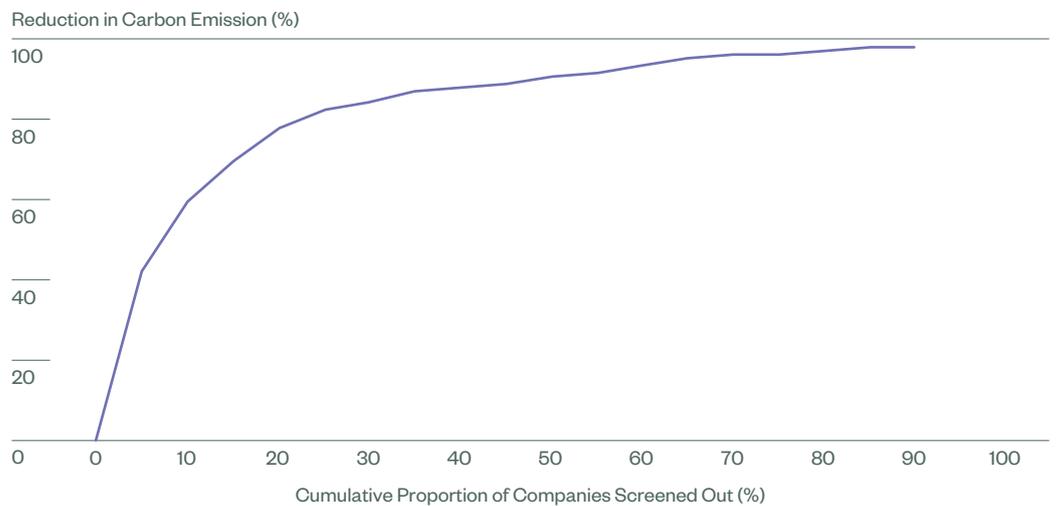
The carbon factor for each issuer is sourced from two industry-leading carbon emission data providers — Sustainalytics and Trucost. We focus on greenhouse gases emitted per dollar of revenue by the operations of the company and its direct suppliers. The available data covers 85.3% of the euro corporate investment-grade universe in terms of market value.

## Stage 2

Establish carbon scores

Companies not scored by the data vendors are removed. For the remaining universe we analyse the relationship between the exclusion of the most-polluting companies and the effect on carbon-emission reduction. As the chart below illustrates, a desired 50% reduction can be achieved by removing the top 10% of the most-polluting companies. Removing the top 30% would reduce the emission by 82%.

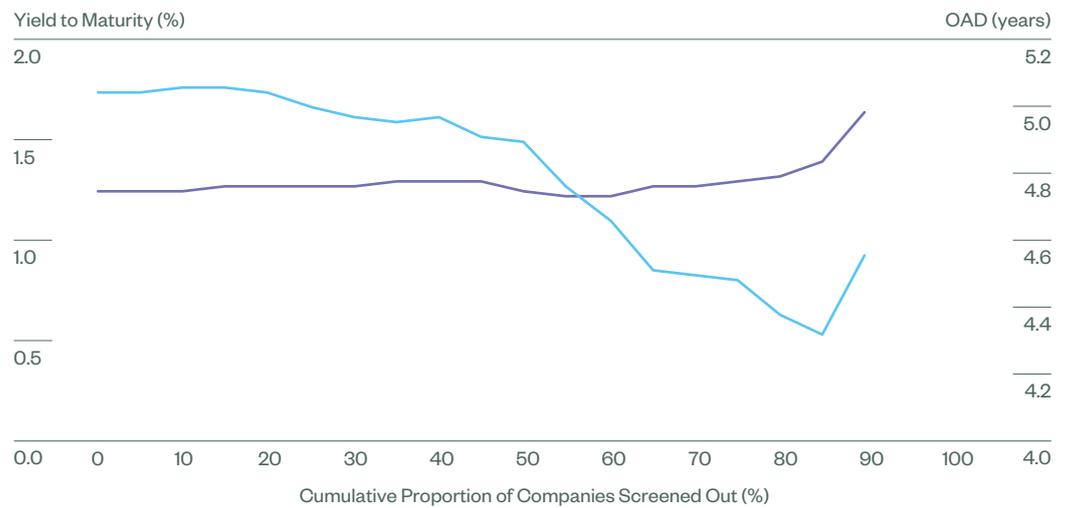
Figure 6  
**Carbon reduction  
resulting from %  
exclusion of the most  
polluting companies**



Source: SSGA; As of 03 December 2018. The above information is for illustrative purposes only.

**Figure 7**  
**Effect on Duration and Yield from % exclusion of the most polluting companies**

— YTW  
 — OAD

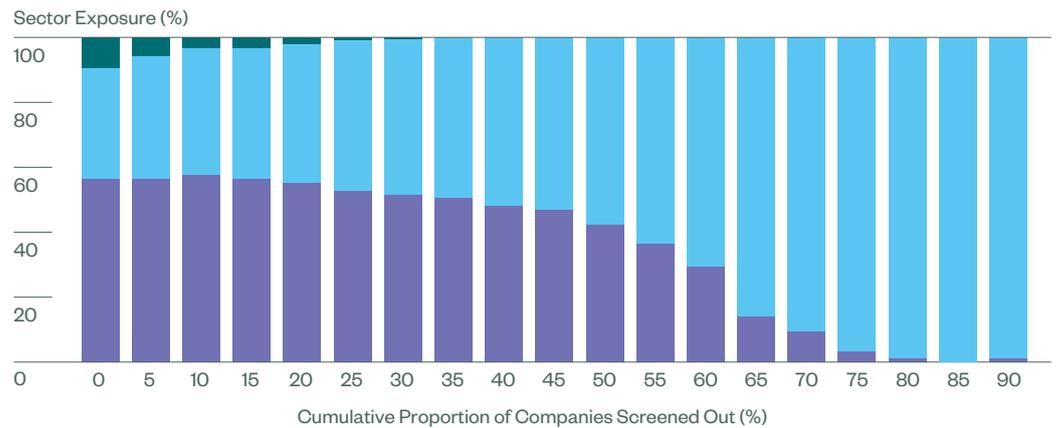


Source: SSGA; As of 03 December 2018. Past performance is not a guarantee of future results.

The removal of the top-polluting companies has a moderate effect on duration and yield all the way to the 50% screening level. However, 50% screening would be excessively aggressive from the carbon performance management point of view.

**Figure 8**  
**Removing the most-polluting companies increases the bias towards financial**

— Industrials  
 — Financials  
 — Utilities



Source: SSGA; Sustainalytics. As of 3 December 2018. Past performance is not a guarantee of future results. Sectors shown are as of the date indicated and are subject to change. This information should not be considered a recommendation to invest in a particular sector. Sector exposure are as of the date indicated, are subject to change, and should not be relied upon as current thereafter.

Finally, above we show how excluding the most polluting companies increases the exposure to financials. Once again, a 50–70% reduction in carbon emissions results only in a relatively modest increase to the financial sector.

**Alternative approaches**

Another way, although less optimal in our opinion, of achieving similar results would be to take a best-in-class approach. In each sector we could remove a particular percentage of the top-polluting companies. In this approach the sector exposure is controlled somewhat better; however, as per simple math, to achieve the 50% reduction means removing around 50% of the universe leading to greater issuer concentration risk.

Targeting carbon emissions is only one example of what can be achieved for portfolios. We are able to target many other parameters such as share of green revenue or other ESG factors.

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## How SSGA can help clients integrate ESG

We believe companies that are managed responsibly deliver better financial results over the long term. Environmentally efficient, socially aware and well-governed firms are better positioned to withstand emerging risks, black swan events and capitalize on new opportunities. ESG strength can signal that a firm is in good health, well managed and future-oriented. ESG weakness can be an early warning signal, as poor ESG evaluations indicate increased potential for scandals and distracted or unfocused management. We see the importance of paying attention to these signals in our investment processes.

Index investing is an ideal way to minimize ESG risk and capitalize on ESG opportunities. Indexed approaches can help meet both the data and scale challenges that are vital to successful ESG investing in fixed income portfolios. We have built the multi-source ESG and climate data architecture necessary to help our clients implement a comprehensive range of ESG investment solutions.

We began managing ESG portfolios in 1986 and are now one of the largest ESG managers in the world, with over \$176 billion\* in ESG assets under management.

\* As of February 2019.

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## Sophisticated Screening

We regularly build indexes from the ground up, with incredible precision. These same techniques allow us to accommodate whatever ESG screening our clients require. Some of the common core exclusions in both equities and fixed income portfolios include:

|   |                                  |                       |
|---|----------------------------------|-----------------------|
| Fossil fuel reserves                                  | Tobacco exclusions               | Controversial weapons |
| Faith-based e.g. Catholic values and Sharia compliant | UN Global Compact non-compliance | Child labour          |

More dynamic exclusions, where issuers are temporally excluded due to business practices that may be misaligned with ESG values, are easily accommodated, for example:

|                                     |                              |                           |
|-------------------------------------|------------------------------|---------------------------|
| Business fraught with controversies | Poor environmental practices | Weak corporate governance |
| Disputed labour practices           |                              |                           |

As markets, companies and investment objectives become more complex, ESG screens are becoming increasingly sophisticated. Our flexible systems allow us to deliver portfolios that are closely tailored to specific client values and aims.

We can also employ ESG metrics to tilt portfolios or gain exposures to a particular theme (e.g. low-carbon investment-grade corporate bond strategies) with the aim of achieving market-like returns.

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## A Flexible Approach

Our ESG experience covers portfolio management, investment research, proxy voting and engagement, as well as valuable relationships with third-party research providers.

While most clients' custom ESG criteria require a separate account, SSGA has created pooled funds that address many of the more common client approaches. Pooled vehicles may offer advantages such as economies of scale and lower fees and administrative costs.

We apply a multi-dimensional approach to ESG investing for fixed income. Over more than thirty years of ESG investing we have advanced our investing and stewardship capabilities to deliver value to our clients and continue earning the trust they place in us.

Through our extensive ESG data and research we can help develop and implement investment solutions for our clients that align policy, principles and values yet seek maximum performance or minimum tracking error within the constraints.

**For more on how we can help you incorporate ESG into your fixed income portfolio, please contact your relationship manager or visit us at [ssga.com](https://www.ssga.com)**

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### Key stages in the ESG investment process:



The process is built with both performance and ESG impact in mind by combining SSGA's ESG experience, advanced portfolio implementation techniques and corporate engagement capabilities.

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Build from breadth  
Invest as stewards  
Invent the future

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