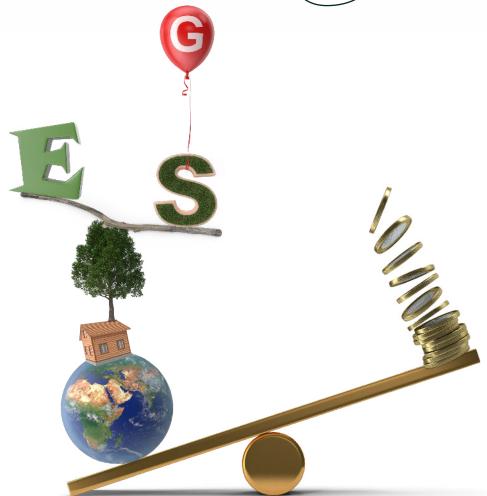


insights



SUSTAINABLE FIXED INCOME

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Credit: NordSIP©

How time flies! Five years ago, we published our first ever edition of the Sustainable Fixed Income Handbook, upon request from one of our Nordic readers working for a Stockholmbased pension fund. "Do you know of any asset managers integrating ESG into fixed income?" she asked. "I've only met one or two, but surely there must be more out there?" We successfully convinced a number of managers to answer our call and contribute to the first issue of the magazine.

At the time, the green bond market hadn't really taken off yet and fixed income managers were still hung up on the idea that, yes, 'G' was a determining factor in credit performance, but the 'E' or 'S' considerations were too long-term to be relevant, especially for short maturity issues.

Nevertheless, slowly but surely the ball started rolling and gathering speed. A prolonged period of low interest rates meant little action for the fixed income crew. More and more managers decided that, if one basis point here or there wasn't going to move the needle on the bottom line, they might as well invest sustainably.

Today, as volatility has re-entered the game, ESG seems to be well entrenched. It has become "business as usual". Moreover, sustainability-labelled bonds have proved much more resilient than expected. In fact, the green bond market functions better than the traditional market in times of crisis, we heard.

So, all is well then? Not quite! The world still needs way more money to fund the solutions to the climate crisis, let alone a just transition. Also, whoever claims to have achieved ESG integration should still be scrutinised for traces of greenwashing. There is a fine balance between the different components of the investment process, from data sourcing to engagement, while watching out for inflation and geopolitical risk. In the end, what Sustainable Fixed Income requires is expertise, and this is what our Handbook aims to bring forward, year after year.



Aline Reichenberg Gustafsson, CFA Editor-in-Chief NordSIP

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Sovereign bonds are a major component of the fixed income market. They represent the largest single group within the fixed income investment universe and therefore the largest share of global assets under management. Within the Bloomberg Global Aggregate index, for example, Treasuries and sovereign bonds represent nearly 54% of market value. Agency, local authority and supranational issuers account for a further 9%, 3% and 2% of market value, respectively. By comparison, industrial bond issuers account for just 10% of this index. Other major indices are not too different: In the Bloomberg Pan-Euro Aggregate index, Treasuries and sovereign bonds represent nearly 61% of market value, and agencies, supranational and local authorities' bonds account for an additional 15%.

The world of sovereign issuers is often divided into emerging markets (EM) and developed markets (DM). This division reflects, among other things, the riskiness of the issuer and the type of analysis undertaken by investors. DM sovereign bonds are the focus of this paper. These bonds have historically been viewed as having relatively low credit risk, especially those issued by large countries such as the US and Germany. The credit quality of many developed market sovereign issuers has deteriorated over the past two decades, however, as public sector borrowing has risen in almost every country. The deterioration has led the credit rating agencies to downgrade many DM sovereigns.

For example, until 2013 the United Kingdom was rated Aaa by Moody's, but since then its rating has declined to Aa3. In 2001, Spain's rating was raised to Aaa by Moody's, but in 2012 in the wake of the Eurozone debt crisis, it was downgraded to Baa3 (the lowest investment-grade rating); although it has recovered since then to Baa1, it is still a far cry from a triple-A rating. The most noteworthy recent example among DM sovereigns is Greece, which was upgraded to A1 by Moody's in 2002 and then, following the GFC and the Eurozone debt crisis, downgraded several times: to A3 in April 2010, to Ba1 (sub-investment grade) in June 2010 and to C in March 2012. In a reversal of fortune, Greece's credit rating improved to Ba3 in November 2020.

The importance of integrating ESG into sovereign debt analysis

During the Eurozone debt crisis, bonds issued by Greece, Ireland, Italy, Portugal and Spain experienced much higher volatility than anticipated, leading investors to place greater importance on thorough analysis, including areas related to ESG factors. While it is true that considering some ESG factors has been an integral part of sovereign bond analysis for many years, the explicit integration of these factors is still in its relative infancy. Historically, DM sovereign bond analysis has considered factors such as population profile, stability and policy of governments, and labour market structure as part of the macroeconomic and fiscal analysis of the

issuer. This has been combined with valuation considerations to result in an investment decision. In recent years, there has been an increased focus on integrating the consideration of ESG factors into DM sovereign debt analysis more explicitly because of the experience of the Eurozone debt crisis and other reasons.

The impetus for explicit ESG inclusion in DM sovereign analysis can be categorised into three broad areas:

- Seeking to improve investment performance: With the increasing effects of climate change on countries' economies around the globe, focusing solely on macroeconomic and fiscal data indicators can lead to suboptimal investment decisions. Greater awareness of the impact of climate change as well as social factors on the performance of DM sovereign bonds is driving investors to seek additional factors for consideration. Independent research suggests ESG scores have been drivers of sovereign credit spreads; countries with high social and governance scores in particular have tended to have tighter credit spreads. The relationship between ESG scores and credit spreads is especially strong in EM where there is additional risk premium relative to DM.
- **Investor demand:** Asset owners' desire to address climate change as well as the social and governance aspects of their portfolios, alongside increased awareness of the potential performance implications of these factors, has further driven the explicit integration of the consideration of ESG factors into investment analysis.
- **Regulation:** Regulatory bodies are increasingly emphasising the disclosure of ESG factors as it relates to both the research process (e.g., integration of ESG considerations in identifying investments and portfolio construction) and product development and marketing (e.g., investment product categories).

The above factors, among others, make it challenging to accurately use the one-size-fits-all approach most ESG ratings providers employ when evaluating securities or funds. As a result, many ESG ratings providers disagree with each other on their views of certain companies.

Barriers to integrating ESG

While the drivers of the further integration of ESG into sovereign debt analysis are known, there are also some very significant barriers to the approach gaining traction. The first obstacle relates to the consistency of data in this area. Although rating agencies and other data providers are developing many measures related to ESG factors, most of the data with a

longer track record relate to governance and some social trends as measured by the OECD, the World Bank and the European Commission. There is very little data a sovereign debt analyst can access when examining a broader array of factors that could have an influence on performance and how to measure it.

The second obstacle is that ESG factors are often connected to other factors. A country's credit quality over time depends on a range of macroeconomic factors, such as economic growth, policy decisions, governance standards and the ability to withstand external shocks, as well as social trends and environmental changes. Such considerations are often intertwined, and it is impossible to identify and select material ESG factors that affect bond performance in a statistically significant manner. The nature of a country's governance can impact social trends as well as its ability to withstand external shocks such as droughts, floods and fires while a country that is less affected by climate change can maintain credit quality with poorer governance.

The third obstacle is the characteristics of the asset class. DM sovereign bonds, as mentioned, is the largest asset class in fixed income, and its importance as a benchmark for pricing other higher risk securities and the range of investors that buy government bonds for a variety of different reasons mean that performance is often affected by government policy, bank regulation, risk-on/risk-off sentiment in other markets, currency fluctuations and macroeconomic expectations.

A range of ESG factors can influence DM sovereign debt performance. Despite the obstacles, it is worthwhile identifying, monitoring and incorporating them into the investment analysis since ignoring them can lead to suboptimal performance.

ESG Integration in DM sovereign bond analysis

ESG integration in the research process requires that investors consider ESG-related factors in an explicit way as an integral part of the investment analysis process. In doing so, it is important to recognise the unique characteristics of sovereign issuers as compared with issuers of corporate bonds or company equity.

First, there are different positions of influence. While corporate bond issuers and listed companies are law abiders, issuers of sovereign bonds are law setters: They decide on the legal frameworks in which they operate.

Second, while the management and boards of companies have various legal responsibilities with respect to their shareholders and creditors,

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governments are beholden to the people of the country they govern. Consequently, investors should not seek to influence government behaviour in the way they might seek to influence the management of a company if they are not satisfied with the company's strategy or performance.

Third is the issue of measurement and data. While companies can measure or model their emissions levels, it is much harder to do this with any degree of accuracy at a country level, so goals to reduce environmental impact, for example, are quite different from those of private entities. The influence that investors can exert over private companies has also spurred the development of ESG-factor reporting initiatives such as the Global Reporting Initiative, the Task Force on Climate-Related Financial Disclosure (TCFD) and the Sustainability Accounting Standards Board (SASB). These exist because investors want to assess ESG factors in a systematic manner and exercise influence over companies. The same does not hold true for sovereign bonds, although there are some supernational bodies, such as the World Bank, the IMF and the United Nations, that measure some items that fall under the rubric of ESG.

As a result, most investors in sovereign bonds must develop their own frameworks to integrate ESG factors into their research process, based on their particular investment goals. Some advocate mapping material factors and then assessing their timeliness to try to judge their influence on a country's creditworthiness. Often the aim is to apply a rigid systematic approach, with each country assessed according to predetermined criteria and scales, resulting in an ESG score that enables comparisons. At MFS, our DM sovereign bond analysts recognise the importance of explicitly integrating ESG factors into the research process. They also recognise that this is a challenge, given the data available, the fluid nature of the influence such factors have on credit quality, and the need for regular reviews of materiality and timeliness.

MFS' approach to DM sovereign analysis and engagement

At MFS, our purpose is to create long-term value for our clients by allocating capital responsibly. We view sustainability as synonymous with long-term active investing—and long-term active investing is precisely what MFS has been doing for almost a century. Our investment approach requires remaining adaptable and changing with the times, combining collective expertise with thoughtful risk management built on a foundation of shared values and collaboration among teams of diverse thinkers. This approach and the underlying culture shape the way in which we integrate ESG into our DM sovereign bond analysis process.

Our objective when integrating ESG into our research process is to produce a single investment recommendation rather than separate ESG and economic (or valuation) scores.

When considering the effects of ESG factors on sovereign bond performance, our analysts recognise that ESG factors may have a relatively stronger influence on long-term performance, while in the short term, many other factors, including central bank policy, government policies, currency fluctuations and market conditions, may have a relatively greater impact.

Some examples of ESG factors considered include:

- Environmental: Climate risk, resource management and environmental performance and vulnerabilities
- **Social:** Income inequality, educational quality and intensity, health provisions, demographics
- Governance: Various measures such as the World Bank's Governance Effectiveness and Rule of Law rankings

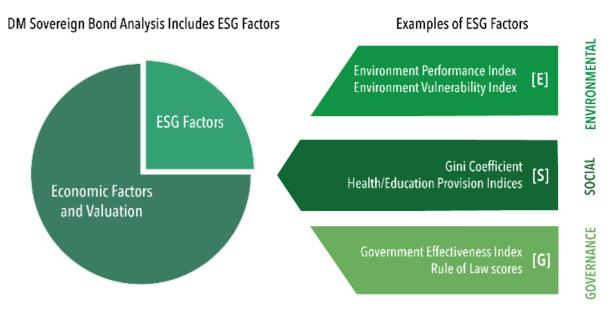
These factors are assessed alongside more traditional metrics to reach an active investment decision (see Exhibit 1).

The list of factors is long, and rather than rate them for all the issuers in the same way (e.g., 60% governance, 20% social and 20% environmental), we focus on the those we judge to be the most relevant for a specific issuer. In determining these, we start with a common set of factors; each of them is assessed in terms of materiality and timeliness — what will be the likely effect on credit quality and is there a time horizon associated with this, or is it something that could happen at any time?

The assessment of both materiality and timeliness feeds into the way we seek to engage with issuers as well as the investment recommendation. For example, a country might become more prone to flood damage due to climate change; this may be a long time in the future, but flood defences need to be built now and this requires funding. The country needs to decide whether it can afford the defences without harming its credit quality. The analysis of materiality and timeliness is designed to highlight what poses a near-term risk or opportunity and what needs to be addressed over time, as well as the costs involved and whether the issuer can afford to fund mitigation without damaging its credit quality.

As highlighted above, engaging with sovereign issuers is very different from engaging with companies. The purpose of our engagement in the DM sovereign bond world is to gain further insight and a better understanding of how issuers plan to address the

Exhibit 1: Developed Market Sovereign Bond Analysis Factors



areas we might be concerned about. There are many ESG-related initiatives in the DM sovereign bond universe nowadays: the UK Government's Green Financing Framework (June 2021); the EU Recovery Fund, where one third of funds must be directed to green objectives; and many others. These enable us to monitor progress against goals and targets, and to better understand the priorities of each government.

The level of engagement with sovereign issuers is increasing, but it is still significantly below the level of corporate engagement. MFS' sovereign analysts engage with issuers through calls with the relevant officials in a country's treasury and/or finance ministry, by meeting officials during country visits and by initiating calls to explore topics deemed relevant and important.

The goal of integrating ESG into our research process is to ensure the analysts' investment recommendation contain the ESG factors they deem relevant. The fluid nature of ESG factors means that we need to allow analysts plenty of discretion. They are best positioned to determine what is important and what isn't. The nature of the distribution of returns in fixed income investing is such that we are more concerned about the downside than the upside. We want our analysts to focus more on what could go wrong than on what could go right.

Rather than assigning the same weight to an ESG factor for all issuers, our analysts decide which factors are most relevant for a particular issuer by considering a wide range of factors. For example, in a country with strong, stable institutions and the regular, peaceful transfer of power, election results are less likely to affect bond yields than election results in a country where the government is less representative and the transfer of power disorderly.

Similarly, in countries where income inequality is high, fiscal policies that raise taxes are more likely to lead to civil unrest or government instability than in countries where income inequality is low.

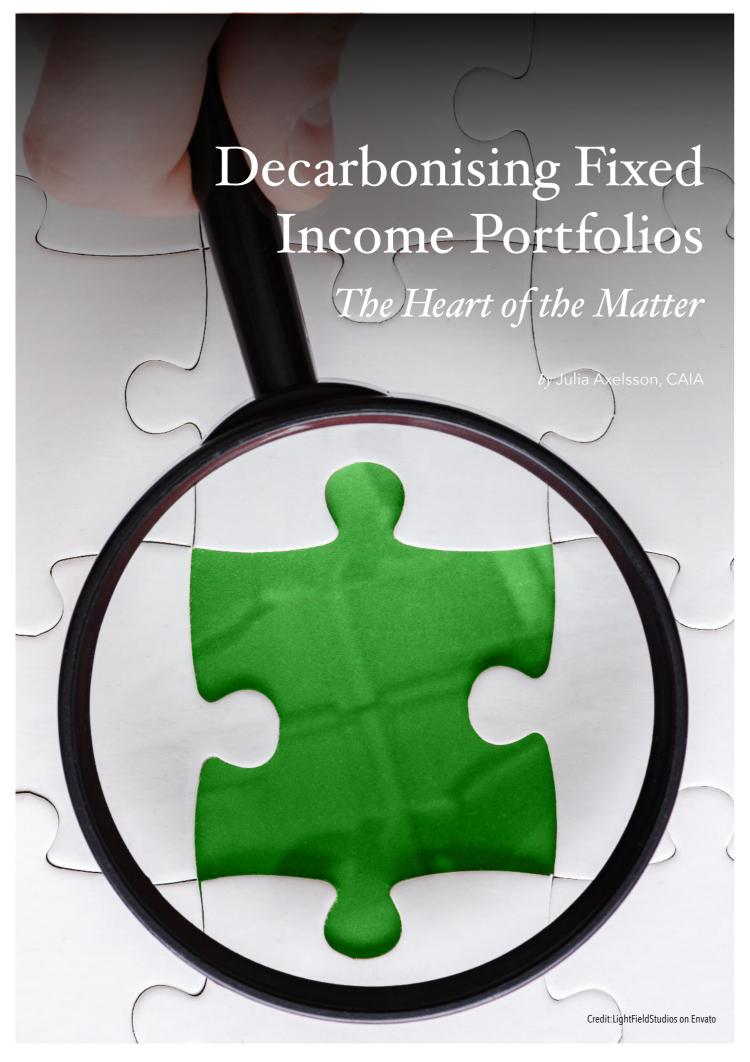
Once our analysts determine the relevant factors to incorporate into their research process, they assess these together with economic factors and valuation and arrive at a single investment recommendation.

Conclusion

Explicitly integrating ESG into the sovereign debt analysis process is gaining momentum, driven by investors' desire to address climate change and other social and governance factors, along with a greater awareness of the implications of these factors for investment performance. This trend is being further propelled by regulators' increasing emphasis on standardised ESG disclosure.

The MFS approach to incorporating ESG analysis into the research process focuses on producing a single investment recommendation that takes account of economic, valuation and ESG factors. This is a flexible approach that allows analysts to decide which factors among many are most relevant to an issuer. Integrating ESG in an explicit way as an integral part of the sovereign bond research process is consistent with MFS' mandate to create long-term value by allocating clients' capital responsibly.

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"In the design of the FTSE Fixed Income ex Fossil Fuels Enhanced Index Series, we have started from the premise that there is no single right way to approach the sustainability and fossil-fuel exposure challenge in fixed income."

While it is nowadays a well-accepted fact investors must manage their exposure to fossil fuels and carbon-intensive assets, opinions might still vary as to the degree of carbon cleansing that portfolios need to undergo. Whether they want to exclude, reduce, or simply calibrate their exposure to fossil fuels, asset owners and asset managers need access to the right tools. Environmentally aware equity investors have plenty of alternatives to choose from. Finding the right solutions in the fixed-income space, meanwhile, can still present a challenge.

To help investors meet their net-zero greenhouse gas emissions targets, FTSE Russell has developed the FTSE Fixed Income ex Fossil Fuels Enhanced Index Series. By employing a transparent, rules-based exclusion policy, the architects of the index series attempt to meet the rising demand for fixed-income benchmarks that efficiently screen out a wide range of fossil-fuel-related activities such as generation, refining, transportation, storage, distribution, ownership and sales.

Many roads to net zero

Asset owners and asset managers differ considerably regarding their investment philosophy and ethical positions. Consequently, they tend to adopt different strategies even when pursuing a net-zero strategy. Some investors might choose to simply 'tilt' their portfolios away from carbon-intensive assets, i.e., invest less than the relevant benchmark in such issuers and securities. Others might opt for

maintaining their exposure to carbon-intensive assets while seeking to invest only in those companies that can demonstrate that they are making a significant effort to transition away from fossil fuels.

Perhaps the most common practice for investors determined to decarbonise their portfolios, however, is to exclude securities directly linked to fossil fuels. Despite being a relatively straightforward approach, exclusion, too, implies a variety of considerations and different practices. Some investors might, for example, define their exclusions relatively narrowly, focusing only on companies that produce the most carbon-intensive fossil fuels, such as coal or tar sands.

Others look more broadly, excluding all types of fossil fuels ranging from conventional oil to gas production. Still others might choose to go further, wishing to exclude even the whole fossil-fuel-enabling value chain. Such investors would stay away from fossil-fuel dedicated transport infrastructure such as pipelines, oilfield services companies or refineries.

Once they have decided on the exclusion approach best suited to their investment philosophy, investors still need to calibrate the degree to which they intend to apply it. Should they categorically exclude any exposure to the fossil-fuel categories that they want to avoid? Or should they perhaps apply a materiality threshold by defining, for instance, a minimum revenue exposure to an excluded activity?

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Zarina Nasib Senior Product Manager, Sustainable Investment FTSE Russell

Alan Meng Sustainable Fixed Income Research Lead FTSE Russell



When it comes to decarbonising a fixed-income portfolio, there are some additional complications to consider. Investors need to identify the links between the issuer of a bond and its parent corporate entity, for instance. And mapping entities within corporate issuer trees is far from a trivial task.

Screening out fossil fuel

Given the multiple choices and considerations that fixed-income investors determined to decarbonise their portfolios need to make, it is clear that creating a suitable index that is both robust and flexible is challenging. Acknowledging the complexity of the task at hand is a good start.

"In the design of the FTSE Fixed Income ex Fossil Fuels Enhanced Index Series, we have started from the premise that there is no single right way to approach the sustainability and fossil-fuel exposure challenge in fixed income," explains Zarina Nasib, Senior Product Manager for Sustainable Investment Product at FTSE Russell.

Choosing a relatively conservative approach, the designers of the index series have opted to exclude issuers exposed to the fossil-fuel sector either through direct involvement or through company ownership. Achieving this ambitious goal requires robust, granular datasets that can ensure the accurate representation of companies by their business activity and ownership. Recognising that there is no single sustainability source that fits the purpose, FTSE Russell uses a combination of three datasets: Product Involvement Research, a proprietary Corporate Bond Sector database, and The Refinitiv Business Classifications.

Product-related exclusions

Applying the primary filter of product involvement research helps to screen out companies involved in the production of fossil fuels and related products or services, as well as their distribution, retail, power generation, etc. The screening process removes companies that have any involvement in the following categories: oil and gas, oil sands, Arctic oil and gas, shale energy, and thermal coal. In addition, in accordance with FTSE Russell's Baseline Exclusions Consultation, the index excludes companies involved in tobacco production, controversial weapons and those violating the UN Global Compact through controversial conduct.

Product-related exclusions are determined by calculating companies' involvement in controversial activities and then excluding those bond issuers whose revenues in a particular product category exceed a maximum permissible revenue threshold. This threshold is set at zero per cent in all fossil fuel categories, effectively ruling out issuer involvement. The product categories and exclusion thresholds are set out in the index ground rules.

Adding on extra filters

Using two more datasets adds further robustness to the screening process. One of these is the proprietary FTSE Russell Corporate Bond Sector (COBS) FTSE fixed-income indices. FTSE Fixed Income ex Fossil Fuels Enhanced Index Series use the subsectors defined by the COBS to screen the constituents of the underlying universe and identify fossil-fuel issuers.

The other additional dataset is the Refinitiv Business Classification (TRBC), a global, comprehensive industry classification system owned and operated by Refinitiv. In the index series, TRBC is one of the sources for identifying bond issuers' product involvement.

"While no dataset is perfect, these three screens help filter out bond issuers with involvement in fossil fuelrelated activities and provide additional assurances to index users," says Nasib.

Ownership matters

The FTSE Fixed Income ex Fossil Fuels Enhanced Index Series recognises that decarbonising fixed income portfolios means excluding not just those issuers directly involved in the production or distribution of fossil-fuel-related products or services but also companies with indirect involvement, exposed to fossil fuels through ownership. Mapping corporate issuer trees and sifting through opaque structures, such as special purpose vehicles classified as financials, adds an extra layer of complexity to the exclusion process.

scheme, which is maintained for all bonds tracked by FTSE Russell follows some simple principles to help inform the additional exclusions based on indirect involvement. Suppose an issuer owns a majority stake, i.e., more than 10%, in a company involved in fossilfuel-related activities. In that case, it is considered part of the same category and thus excluded from the index. In the case of a minority stake, however, the revenues of the subsidiary are not attributed to the parent company. Still, the percentage of the ownership stake is captured in order to signal the level of control present in the relationship.

> This enhanced granularity and comprehensiveness of the index series, capturing both direct and indirect involvement in fossil-fuel-related activities, is part of the index design. It aims at reassuring even investors with ambitious decarbonisation targets.

> Developing a transparent and robust solution to meet the increasing needs of fixed-income investors to decarbonise their portfolios is undoubtedly a daunting task. There are many details to keep in mind and complex relationships to consider.

> The FTSE Fixed Income ex Fossil Fuels Enhanced Index Series rises to the challenge, offering a tool that both asset owners and asset managers can use to manage their carbon exposure in an efficient way. Ultimately, adopting the enhanced index series should support the global push toward net-zero greenhouse gas emissions.

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For the past few years, NordSIP has been taking the pulse of ESG integration into fixed-income investments in the Nordics on a regular basis. While discussing the topic with experienced practitioners, it becomes increasingly clear that the days when fixed-income investors were sustainability laggards compared to their equity peers are long gone.

For this year's issue of the Sustainable Fixed Income Handbook, we reached out to three fixed income managers based in Sweden: Maria Ljungqvist, Fund Manager of Aktie-Ansvar's fixed income funds; Julia Stålbro, a Fixed Income Portfolio Manager at Öhman Fonder; and Charlotta Sjölander, Portfolio Manager, Swedish Fixed Income at Nordea Asset Management. There is a common thread running through what all three managers tell us: ESG is now an integral and inherent part of the investment process. It provides a richer understanding of the creditworthiness of issuers and improves a managers' ability to price risks adequately.

ESG among other important factors

"It is our belief that investing in a company with sustainable and ethical business models and active community engagement is simply a better investment," says Ljungqvist. "We look at ESG factors along with other factors of importance for the creditworthiness of a company. The analysis could lead to identifying large ESG risks that we are not compensated for in the credit spread. On the other hand, we also try to find companies that are well-positioned to capitalise on sustainability trends and transformations. There is a higher likelihood that we will invest in those companies than in others since we think that will drive company performance. Furthermore, when faced with two otherwise equal investment opportunities, we will choose the more sustainable alternative of the two," she explains.

Stålbro describes Öhman Fonder's approach in similar terms. "Sustainability analysis is a natural part of the analysis carried out prior to an investment in a new company and on an ongoing basis after making the investment," she says. "Within the sustainability analysis framework, we evaluate how companies work with their greatest sustainability risks and opportunities. By considering the overlap between credit risk and ESG-related risks, we avoid companies with high sustainability risk that can have a negative effect on returns and detract from creating a sustainable future and instead invest in companies that seek to solve the ESG challenges we face while also having a positive effect on returns," she adds.

"Good corporate governance has always been important for a company's creditworthiness. Nowadays, we also think that governance is a prerequisite for a good execution on the E' and 'S' targets."



Maria Ljungqvist
Fund Manager, Fixed Income
Aktie-Ansvar

"For all our actively managed portfolios, ESG aspects are integrated into our investment processes throughout the credit and ESG analysis in order to be on top of tail risk and avoid investing in companies with unsustainable business models," explains Sjölander. "By having a Nordic and Swedish investment focus, many of the material environmental, social and governance risks are already regulated, providing a basic comfort in this area. The environmental and social impact of the activities of all our investee companies is also assessed on an ongoing basis through our firm-level principle adverse indicators (PAI) integration."

Part of a manager's job

"It is worth noting that we do not count on specialised ESG analytical personnel in-house," points out Ljungqvist. "This is not because we don't think it is important, but rather the opposite. To truly integrate the ESG factors, we need to treat this analysis in the context of the overall analysis and decision-making. This means that I, in my role as a fund manager, continuously need to enhance my knowledge in the ESG field."

Sjölander, too, maintains that assessing an investment's sustainability is part of her job as a portfolio manager. "Nowadays, we do have a specialised ESG analyst

on the team, but that wasn't the case when we first started integrating sustainability in the analysis," she recalls. "For many years, as portfolio manager, I was responsible for doing the ESG analysis alongside the credit analysis, which was valuable for building up expertise and experience in the field. Our approach is very much team-based, so we tend to discuss all the important aspects of an investment decision together."

Disentangling 'E', 'S', and 'G'

"Each ESG aspect presents its own challenges, and some are tougher to integrate than others, depending on the company or sector in question," comments Stålbro. "So far, there has been more focus on the 'E' from investors, companies, and politicians, which has put the 'E' issue at the forefront regarding ESG analysis. The 'E' is easier to measure and more objective than the 'S'. Yet the 'E' can still be difficult to evaluate for a company or a sector that isn't reporting its Scope 3 emissions despite it being their largest contributor. Corporate governance, on the other hand, is the ESG factor that we have seen add the greatest value in the analysis from a risk and assessment perspective."

For Ljungqvist, as well, the 'G' of the trio is of utmost importance. "Good corporate governance has always

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"The challenge we face regarding data is both the lack of data available and poor data quality. We experience that the coverage is less for the fixed-income universe as data analysis companies seem to put a greater focus on equities."



Julia StålbroFixed Income Portfolio Manager
Öhman Fonder

been important for a company's creditworthiness. Nowadays, we also think that governance is a prerequisite for a good execution on the 'E' and 'S' targets. In that sense, it is actually the most important aspect of ESG and maybe the one that is most naturally integrated. Governance was a natural piece of any fundamental credit analysis way before it was labelled ESG," she adds.

Although essential, measuring some of the 'G'-aspects can be rather problematic, according to Sjölander. "We find the evaluation of measurable ESG factors, such as GHG emissions, for instance, somewhat easier to integrate and evaluate whereas the integration of some governance-related issues more challenging," she says.

According to Ljungqvist, 'G' may be particularly complicated to understand by just looking at data. "I would point out that 'G' in certain ways may be very difficult to analyse if you include the risk for fraud. I think it may be extremely challenging to detect as the very nature of fraud involves covering things up. If you do not know what you are looking for, it is a daunting task," she says.

The data issue

Speaking of challenges, the managers all share a similar frustration over the scarcity and quality of ESG data. "Lack of data for ESG factors is a key challenge," says Sjölander. "Some of our fixed income investments are into bonds that are issued by non-listed issuers, on which available ESG data in many databases is quite limited despite the fact that they are provided in company reports."

According to her, part of the problem is that many companies, especially the smaller ones, are better at doing the right thing than communicating what they are doing, quantifying their ESG work and reporting it to databases.

"The lack of standardisation when it comes to sustainability reporting makes it difficult to compare different companies," comments Stålbro. "The challenge we face regarding data is both the lack of data available and poor data quality. We experience that the coverage is less for the fixed-income universe as data analysis companies seem to put a greater focus on equities. To solve some of these issues, we work internally with our business technology team to find automated solutions that can help us in the data collection process, enabling us to do a more rigorous sustainability analysis."

Rather than dreading the wave of sustainability regulation mounting in the EU, the managers we interview seem to welcome the development. "With the creation of a social taxonomy and companies having to start reporting according to the green taxonomy, our expectation is that some of the data challenges will ease over the next few years," says Stålbro.

Ljungqvist, too, is optimistic that the new legal requirements in the EU may change the situation soon. For the time being, however, the challenges remain. "We are very dependent on what the companies choose to report or are capable of reporting," she says. "Some smaller companies that are not on the stock exchange generally offer less information and sometimes have not formulated their ESG work in words and policies or presentations. However, today



"We find the evaluation of measurable ESG factors, such as GHG emissions, for instance, somewhat easier to integrate and evaluate whereas the integration of some governance-related issues more challenging."

Charlotta Sjölander Portfolio Manager, Swedish Fixed Income Nordea Asset Management

if they want to issue bonds in the Nordic market, they are advised to communicate what they do in this field even if they are just starting."

Fixed-income investors as stewards

Engagement is another area, previously reserved for shareholders, that seems to be gaining momentum amongst fixed-income managers nowadays. "An important part of our sustainability analysis is to interact and engage with companies through management meetings and systematic engagement," points out Sjölander. "Sustainability issues are always a part of our discussion when meeting with company representatives."

"We believe we can be part of a company's transition," agrees Stålbro. "We strive to help our portfolio companies improve on certain KPIs that we set up prior to starting a dialogue. It is a way to add value as well as achieve a higher return."

ESG in tough times

Recently, the combined impact of inflation, interest rate rises, and expectations of recession has been devastating for fixed-income portfolios. As bonds continue their downward spiral, the losses are disturbing, particularly for an asset class that is supposed to offer some stability to investors' portfolios. It seems, however, that the current macroeconomic environment hasn't negatively affected ESG integration.

"We find that the current environment supports our case for solid corporate governance and continued investments in green technology as we need to accelerate the move from gas and oil into renewables," comments Stålbro. "2022 has been a year with lower

issuance volume in the fixed-income market, which has resulted in less money flowing into sustainable investments. On the positive side, we have seen several industrial companies issue their first ESG label bond. Despite the ongoing macroeconomic environment, the response has been positive, and the interest among investors has been big."

The current market environment has put governance issues on top of Ljungqvist's mind. "Bonds issued by some Nordic real estate companies, where crossownership is blurring the picture and elevating the risk of conflicts of interest, have performed among the worst this year. Hopefully, this has led to a higher awareness among company executives that these things matter."

"From a market perspective, we experience that in a tougher market environment, and especially in the Nordics where liquidity can be strained, it has been easier to sell bonds issued by companies with a good ESG profile and bonds with an ESG label," adds Stålbro. "These bonds also tend to have a slightly better performance compared to conventional bonds as the interest among investors is greater."

"Given the current macroeconomic environment, having a sustainable business model cannot be emphasised enough," according to Sjölander. "The importance of a healthy credit and sustainability profile is, in our view, essential." Ljungqvist agrees with her wholeheartedly. "I do think that this macro environment has magnified the effect of some ESG factors on market performance and, in certain cases, made the need for change more immediate."

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Florian Cisana Head UBS ETF & Index Fund Sales Nordics UBS Asset Management

2022 has been characterized by unstable geopolitical dynamics which have spilled over into the real economy via commodity prices. From this trigger, instability has spilled onto financial markets. According to Florian Cisana, Head UBS ETFs & Index Funds Strategic Markets Nordics, France & Israel at UBS AM, investors have been looking for products that provide safety, hedges and decreased duration to tackle these new contingencies via the fixed income ETF and passives market.

Given these trends, Cisana expect the sustainable fixed income ETF and passives market to continue to grow in response to demand from clients.

Current Market Environment

The shift from a low to a high inflation regime witnessed this year has led to a parallel shift in interest rates. "In 2022 we have witnessed an inversion of the low-interest rate environment that had established itself in recent years. In order to battle inflation major central banks increased their reference rates and generally put an end to their extremely loose monetary policies. This shift resulted in a higher starting point of risk-free rates, which substantially improved the return profile for coupon-bearing assets (e.g. government bonds and credit) with expected return now being positive," says Cisana.

"Thanks to the switch from low interest rates to the current rising rates environment, we have seen clients driving back demand into fixed income ETF. Given the improvement on expected returns we also foresee fixed income ETFs to increase in importance within clients' portfolios, not only for diversification "Thanks to the switch from low interest rates to the current rising rates environment, we have seen clients driving back demand into fixed income ETF."

purposes but also from a pure risk-return perspective," he adds

The move from a context of low rates to a higher rates environment also changed investor demand in 2022, when compared to previous years. "In particular, we noticed a shift from riskier exposure to relatively safer options within the fixed income market. One driver of this change was surely the risk-off mood that dominated 2022 but, in addition to that, another factor for this shift has been the higher interest rates environment," Cisana argues.

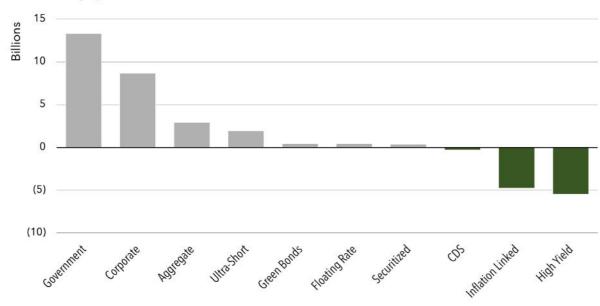
"In order to harvest an acceptable yield, clients no longer need to invest in the riskier parts of the fixed income market (e.g. high yield, EMD), because now credit and government bonds offer attractive yields on an absolute basis. As shown in Exhibit I, this shift resulted in additional demand for 'Government' and 'Corporate' funds both in USD and EUR denominated debt, and outflows in riskier segments like 'High Yield'," he explains.

One additional trend in ETF demand we noticed in 2022 is the increase interest toward currency hedged products, according to Cisana. "In a year like 2022, where currency volatility rose to historically high values and the USD appreciated significantly against all the major currency pairs, clients realized the importance of understanding and managing the currency risk of their portfolio. In this regard, many clients became less prone to taking currency risks, and opted for the currency-hedged version of the ETFs."

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Exhibit I: YTD Flows UCITS ETFs by segments

YTD Flows UCITS ETFs by segments



Source: etfbook.com Data as of 30th September 2022

ESG Fixed Income ETF demand vs non-ESG

"Inflation and rising rates have been the elephant in the room in 2022, and a lot of attention was put on how these variables impact the performance of the various fixed income segments," Cisana argues. "When looking at how these trends have impacted the integration of sustainability it is interesting to note how, as shown in the figure below, sustainable ETFs have been constantly in demand even in a challenging year like 2022," he continues.

"As the next figure shows, there has been a large tactical shift in the non-ESG exposure, which signals how the 'core' fixed income ETFs are the instruments used by clients to reflect their tactical views, but ESG ETFs were less impacted by these tactical moves," Cisana says. "This could potentially prove that clients are not willing to compromise their ESG-values despite market conditions, and the sustainability integration continues regardless of the market sentiment," he adds.

Portfolio Mitigation of Rate Hikes

Due to a combination of the pandemic measures, supply chain shocks and the Russia-Ukraine conflict, central banks had to try to control an inflation not seen in the last four decades by increasing policy rates. "With inflation reaching these historical levels, global central banks shifted to tighter monetary policies and implemented rate hikes," Cisana explains.

"Given this environment, in 2022 many of our clients have been looking for instruments to shorten

the duration of their portfolios. In order to satisfy this demand, in 2022 UBS ETF launched two new strategies targeting the short part (1-5 Years) of the US and Euro credit market, with a sustainability overlay," he adds.

According to Cisana, these two new strategies give clients the opportunity to reduce the duration of their corporate exposure while aligning with their sustainability objectives. "These new products complete our existing UBS ETF Fixed Income shelf where, as one of the key principles, we allow clients to tactically play duration offering funds with different maturity buckets, across Corporates and Treasury, Developed Markets or Emerging Markets, sustainable or standard," he says.

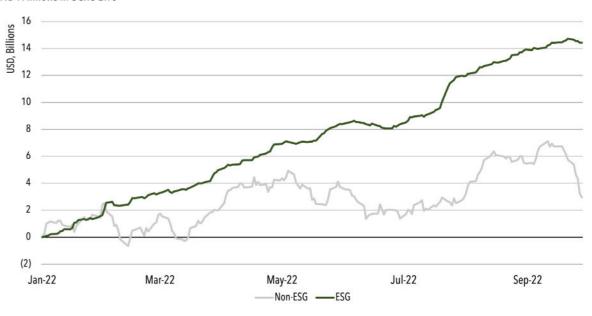
The Intersection of ESG and Traditional Fixed-Income?

Unstable conditions often drive investors to safe haven assets. The ongoing crisis has not been an exception. "In many client's fixed income portfolios, the Sovereign part is usually the largest component. In this regards we have seen growing demand for sustainable products and, over the years, we expanded our UBS ETF offering in this space," Cisana explains.

"A first example of an interesting solution found at the intersection of ESG and fixed-income is our ETF tracking the J.P. Morgan Global Government ESG Index. Such index offers a broad exposure to sovereign bonds, while excluding issuers that have a ESG Score below a certain threshold and reweighting

Exhibit II: YTD FI Inflows in UCITS ETFs

YTD FI inflows in UCITS ETFs



Source: etfbook.com Data as of 30th September 2022

the remaining constituents in order to increase the weight of issuers with high ESG Score. The aim of this exposure is to have an index with similar risk-return properties as the Global Government Index, but with improved sustainability characteristics," Cisana argues.

"An additional example of an interesting ESG fixed-income solution is our Sustainable Development Bank Bonds ETF. This fund tracks a Solactive index which targets bonds issued by Multilateral Development Banks (MDBs). It offers a unique sustainable investment opportunity because the capital raised through these bonds is used by development banks to fund high impact development projects in developing countries. Thanks to their unique capital structure and because they are backed by G7 countries, MDBs receive a very high credit rating, making them a candidate for the safest part of the portfolio. MDBs can be considered a liquid and low-risk form of impact investing, and can be seen as a sustainable alternative to US Treasuries," he adds.

Selecting FI ESG Index Providers

Indices are at the core of fixed income ETF products, and their reliability is crucial according to Cisana. "When selecting index providers in the Fixed Income ESG space our key focus is to be confident in their sustainable approach as well as ensure that the fixed income index can be replicated by the ETF."

"When looking at fixed income indices, UBS ETF approach has always been to incorporate certain

liquidity criteria directly in the index construction. This ensures lower turnover, better liquidity and makes the benchmark more easily trackable. In this sense, when working with index providers on new sustainable Fixed Income solutions, we not only analyse the ESG data coverage, reporting capabilities and ESG data quality, but always keep and eye on how to merge the sustainability considerations with the liquidity criteria," he continues.

"Aprime example in this regard is our Liquid Corporate Sustainable ETF range that track Bloomberg MSCI indices. In this family of exposures we leverage MSCI ESG data along with the Bloomberg customized liquidity criteria that characterize our UBS Liquid Corporates offering," Cisana says.

The Path Ahead

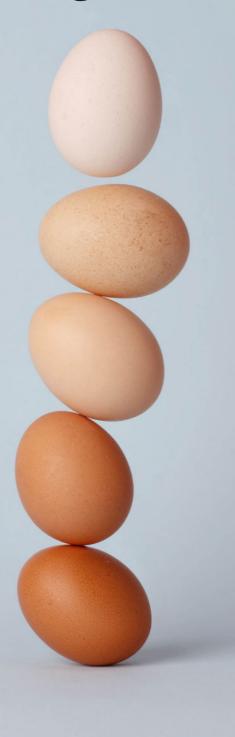
"In recent years we have seen how the role of ETFs in the Fixed Income part of a client's asset allocation is expanding a becoming more predominant. Within the category of fixed income ETFs, sustainable funds are clearly on the rise," Cisana says.

"This led to an increase in the share of AuM of Sustainable Fixed Income ETFs which now stands at 18% of the total Fixed Income ETF assets. Considering that clients are becoming more and more aware of the importance of integrating sustainability in their allocation, we expect this trend to continue in the future," Cisana concludes.

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Investing in Engagement, Income and Avoiding Defaults

by Filipe Albuquerque



Although ongoing macroeconomic and financial conditions have created room for investors to find higher returns from fixed income assets, the recent past has been characterised by such a low yield environment that investors have increasingly ventured down the credit rating spectrum in search of income.

"Combining high levels of income and sustainability has been an appealing solution for our clients in recent years. Given the growth prospects and the size of many of these companies, the opportunity to engage with them and help them navigate the transition is very attractive to investors," says Christopher Kocinski, CFA, Co-Head of US High Yield & Senior Portfolio Manager at global asset manager Neuberger Berman

The High Yield Market

"The high yield (HY) market is dominated by developed western countries. It is about 60% US, 20% Europe and only 20% emerging markets (EM). The Neuberger Berman Global High Yield SDG Engagement Fund is about 90% developed markets, 10% EM. Right now, we're about 60-65% US. Europe is the next largest region and EM is about 10%. Although that fund complies with the EU's Sustainable Finance Disclosure Regulation (SFDR) and is classified as an Article 8 fund, we also offer more dedicated sustainable solutions along similar classification," Kocinski explains.

"All of our HY products integrate ESG, and we seek to engage with all of the companies we are invested in. But for other funds, we make an explicit commitment to UN SDG targeted engagement," he continues. "Interest in funds with sustainable characteristics is predominantly European, but global interest is growing fast. We have three HY funds that have specific sustainability goals, including the Neuberger Berman Global High Yield SDG Engagement Fund, the Neuberger Berman Global High Yield Sustainable Action Fund and the Neuberger Berman Short Duration High Yield Bond Fund, all of which have a dual-focus on income and engagement."

Two Objectives - Engagement and Income

Discussing what appeals to investors in the sustainable HY fixed income market, Kocinski highlights two factors as dominating. "The most fruitful partnerships we've had have been focused on the dual objective of engagement and income generation, without sacrificing one for the other," Kocinski says. "We are able to achieve this by leveraging our size and access to management. The scale of our traditional non-investment grade credit business and our wider Fixed Income business gives us access to companies' management teams that a small asset manager just would not have.



Christopher Kocinski, CFA Co-Head of US High Yield & Senior Portfolio Manager Neuberger Berman

When we invest in a HY company we are typically one of the largest bond holders and we are able to get an audience with the senior management of the company, which is very helpful for credit underwriting and to understand a business, but also for access to engage with companies on ESG topics. When we engage with companies on ESG topics, roughly half the time we are talking to the CFO or CEO of the company," Kocinski argues.

"ESG is integrated at the portfolio management and credit research level. We don't have a separate team conducting our ESG research. Our senior research analysts already have a dialogue with the CFO, therefore it makes sense to extend that dialogue to incorporate ESG. This way we are able to best leverage our access to senior management. While most asset managers may be able to engage CEOs and CFOs of 15% to 20% of their investment portfolio, we have 50% access because our research analysts have already interacted with the senior management for a significant amount of time. We prefer not to send letters. We focus on authentic senior level engagement," Kocinski continues.

"Our other critical objective is to reliably generate income for our clients. This is a crucial part of our offering which addresses our clients' concerns that a lot of the sustainable options available in HY were sacrificing a significant amount of yield. We wanted to create products with a robust engagement platform while maintaining an income level that is competitive with the rest of the market," adds Kocinski, who is

redit: Jiang Xulei on Unsplash

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"Making sure that one understands how an energy company is handling the climate transition by helping them tackle the 'E' in ESG is crucial. But it is also important to distinguish between long-term risks and cyclical effects."

also a member of the firm's Credit Committee for Non-Investment Grade Credit as well as the ESG Advisory Committee.

ESG Integration and Default Rates

Kocinski believes there are extremely good business reasons for caring about ESG integration. "Prior to becoming a senior portfolio manager, I ran the Non-Investment Grade Credit Research division. In that role, I helped develop our ESG integration process, how we engage and how we track all those activities, in partnership with our ESG investment team. The main lesson I took from that experience as a HY investor is that ESG integration helps avoid defaults," he explains.

"ESG integration is a critical part of due diligence from a credit underwriting stand point. Six years ago we started to track companies we had avoided for ESG reasons, comparing them to those we had invested in. The default rate of that cohort of companies was approximately three times higher than the broader HY market. The driver of that extraordinarily higher default rate varies by industry and specific circumstances but can generally fit within the parameters identified by a sustainable investment approach," Kocinski adds.

According to Kocinski, the relationship between ESG assessment and default appears to apply beyond the sample analysed at Neuberger Berman. "The relationship between ESG score and default risk holds in general. Companies that are an outlier to the downside on ESG risks have a higher risk of default overall. But the data in HY is binary. There's no in-between. If there is an ESG issue but the company is doing well financially, it might not materialise into a default risk. But if the company is already overleveraged, and on top of that there's an ESG problem, then it could trigger a bankruptcy," Kocinski says.

"Making sure that one understands how an energy company is handling the climate transition by helping them tackle the 'E' in ESG is crucial. But it is also important to distinguish between long-term risks and cyclical effects. For an energy company, the risk of default is also associated with the commodities cycle. When oil and coal prices were low, companies with worse ESG profiles are at a higher risk of defaulting. When the prices of commodities are higher, it would be possible to reach the opposite conclusion," he explains.

Engagement Targeting and Tracking

Once ESG integration is built, having a dialogue with companies is just a natural extension of this process. "Considering the ESG profile of a company helps identify weaknesses, which can be highlighted to the management team. We have been engaging with companies since our HY business was founded in the late 1990s.

"With time, we've become more sophisticated in how we track our engagement with companies. What started out as a culture that focused on having regular catch-ups with a company about anything and everything 20 years ago, has now become a targeted dialogue," Kocinski adds.

"Over the last decade, we started systematically tracking engagements based on ESG targets, how often they are met, what our goal with that specific company might be, to ensure that we understand and track what progress is being made. We have a scorecard for every company, which was one of the elements I helped develop at Neuberger Berman. The scorecard has customised criteria for 'E' and 'S' for every industry. However, we apply the same framework for governance (G) for every industry. The ESG integration is part of a credit review document where we talk about the industry, its vices, virtues, valuation, ESG coefficient, etc," he says.

"We have our own internal data sources and analysis, but we are also informed by third-party data, be it on raw CO2 emissions, external views on how a company should score on governance or other metrics, and ESG ratings. We incorporate these insights into our information set, but we are not bound to their assessment, particularly considering that we have better and more direct access to management," Kocinski argues.

The Right KPIs

Tracking the ESG journey of companies requires setting key performance indicators (KPIs) that appropriately capture this transformation.

"We try to think about what environmental, social and governance issues are material for a company. We'll weight E, S and G differently, depending on what industry we are considering. We will often approach a company and warn them that we believe that their ESG risk profile is too high and that we might not be comfortable investing in them. Those are often the type of companies with a default rate three times above the market," Kocinski explains.

"For our SDG Engagement funds we try to align our funds with at least 12 SDGs, which we group into themes. The process of setting KPIs is a partnership between the research analysts, our engagement team and our ESG investing team. Our research analysts have a dialogue with our ESG experts and they help set the KPIs. Over time it is necessary to show that the engagement is actually bearing fruit and helping you drive change. Without specific criteria set to drive accountability around those engagements, they can become 'fluff'. KPIs are the only way to overcome this concern," he continues.

The Power of Fixed Income Investors

"One of the misconceptions in the market is that as a fixed income investor it is impossible to reach management teams, and that they are only available to equity investors. That has not been our experience. These HY companies are issuing in the market regularly. They value their access to capital and know that they need it," Kocinski says.

However, Kocinski argues investors have to be firm. "We don't think it's a good idea to invest in high yield rated companies that won't talk to us. Should a company prove unresponsive or if a dialogue we were expecting does not materialise, we have the option to divest, even though this is not our preferred route. That is what accountability looks like and we have used this tool several times in the past," he adds.

"If after two years of trying we were unsuccessful, we may move on. It is very uncommon nowadays for companies to be unresponsive on ESG inquiries. These are higher leveraged companies who understand that they are going to need to interact with investors. It's just common sense for them to engage in a dialogue with investors," Kocinski argues.

"Anyone can say that they engage with a company, but the value is in being able to prove, transparently that this engagement is taking place and facilitating change and progress, and anchoring our process around these proof points is something that we are proud of," Kocinski concludes.

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The Confidences of a Green Bond Investor

by Aline Reichenberg Gustafsson, CFA

While sustainable investors are continuously reminded of the USD 2.5 trillion annual funding gap¹ facing the UN Sustainable Development Goals (SDGs), it is easy to forget the opportunity costs and constraints undermining the efforts to bridge this chasm. For all its benefits as one of the most direct and popular approaches to channel capital to support a more sustainable future, fixed income, especially the USD 1.9 trillion2 green bond market, is not without such issues.

The green premium, or greenium, that investors have to pay to enter this market is often claimed to be an unwelcomed burden, potentially significant enough to disincentivise investing altogether. Imposing further constrains on institutional investors, such as macroprudential risk limits and scrutiny of the credit rating of investments, could also be considered a systemic concern for pension funds and insurance companies, among others. These issues undermine the ability of ESG investors to fulfil their mandates as stewards of sustainability while at the same time complying with their fiduciary obligations to balance risk and returns in an efficient manner. A good argument can be made that many of the solutions to our environmental, social and governance problems require new and untested approaches or strategies to finance unknown but inevitably risky projects.

According to Alexander Gusterman, Investment Strategist and Green Bond Portfolio Manager at Länsförsäkringar, one of Sweden's largest insurance companies, the green bond market is not all that complicated. With about SEK 24 billion worth of green bonds, Länsförsäkringar's opinion matters. Gusterman argues that the greenium is traditionally a relatively small cost an investor has to pay to participate in this market. It is also a cost worth paying for the good that the investment can achieve. "I don't mind giving up one basis point for a more sustainable issue. We are long-term investors and for us, the assurance that our capital is well invested is definitely worth it," he says.

Moreover, Gusterman does not view the limitations facing institutional investors as a real constraint in a market so widely dominated by large and relatively high-rated sovereigns, subnational agencies, municipalities and international organisations such as multilateral development banks (MDBs). For Gusterman, who has been involved from the start in building Länsförsäkringar's institutional green bond portfolio, the decision to go "all green" is a "no brainer". "Given the risk level we have chosen, we don't have to worry about the diversification of our sustainable bond portfolio. There are plenty of issuers to choose from," he says. Indeed, with capital requirements restricting Gusterman's universe to issues rated AA- and above, he doesn't face the same trade-off as commercial fund managers do.

Until recently, a low interest-rate environment was forcing green bond funds to chase issues with riskier ratings if they were to offer a return to their investors that was attractive enough, net of fees. With a limited universe to choose from, many funds ended up with

https://unctad.org/press-material/developing-countries-face-25-trillion-annual-investment-gap-key-sustainable

ordsip.com/2022/08/12/sustainable-bond-issuance-down-during-2022h1/

"For us, adding the impact dimension to the risk/ return trade-off is the right choice. That is why we have decided to switch all the capital we can to green or sustainable bond issues."

an over-exposure to the real estate sector, as well as a limited ability to pick and choose among the varying quality of green bond frameworks. Gusterman wasn't impacted in the same way. "We have no exposure to the real estate sector. With the ratings we are interested in, we have plenty of other choices. We actually sold all real estate bonds 18 months ago and with that exit, we reached our current strategy which we feel suits us well," he adds.

Now that the interest rates have taken off, will the equation change and what will happen to the greenium? As far as Gusterman is concerned, the effect of higher rates is currently rather favourable. "We are not seeing much of an impact currently. If anything, the greenium is proving to be quite stable, and with rates increasing, it has less of an effect, as the discount decreases proportionally to total return," he says.

Given the current more volatile market environment, Gusterman is positive that sustainable issuances are a more compelling choice than ever. "Green bonds have proven to perform far better in stressed market conditions. At times, while the liquidity in the plain vanilla bonds vanished, the green bond market continued to function. This has enabled us to find investment opportunities in these otherwise difficult times, as we could provide financing to new bonds coming to the market, thanks to the sale of shortermaturity bonds in the secondary market," he explains.

Meanwhile, ESG integration is also gaining terrain in fixed income generally. For sovereign issues, green bonds are not always available, but sustainability has become a more important aspect in this otherwise quiet area. At Länsförsäkringar, "ESG as a concept has grown and different levels of political aspects have increased in relevance," Gusterman confirms.

In the AAA-rated part of the market, however, Gusterman has a pronounced taste for the more impactful issuers. "While we don't provide direct financing to impact projects, we know that we can finance them via AAA-rated issuers such as the World Bank, or Multilateral Development Banks. For us, adding the impact dimension to the risk/return tradeoff is the right choice. That is why we have decided to switch all the capital we can to green or sustainable bond issues. We haven't quite invested all our capital in sustainable bonds yet, but we have decided to be far more aggressive than comparable institutions. In the long run, it seems reasonable to simply ensure our bond portfolio is sustainable," he explains.

For 2023, Gusterman expects that the proportion of sustainable bonds will continue to increase within Länsförsäkringar's fixed income allocation. "The relative resilience of green bonds, which was higher than expected, and the high elasticity of demand in volatile times have provided another layer of value-added to the portfolio. We expect to continue to grow their contribution in percentage of AUM at the expense of sovereign bonds and equivalent issues with maturities longer than two years," he foresees.

For the moment, however, and given a calmer market environment, Gusterman takes a chance to demonstrate how social priorities can be applied in practice. "I have a great opportunity to do my job while taking care of my baby daughter," he says. "The market is winding down towards the end of the year, so it's the right moment to be able to go on part-time parental leave." Nevertheless, the busy bond manager continues to work whilst providing his wife the time to pursue her own fast-paced career. This offers us an occasion to complete our interview in the charming company of a well-behaved baby, before Gusterman takes her to the next important meeting.

Public-to-Private:

Arbitrage of a Lifetime?

by Ulf Erlandsson

When the CEO of the world's biggest asset manager calls something "the arbitrage of a lifetime," one listens. In his speech during COP26 in November 2021, Larry Fink was referring to the shift of public assets to private hands, taking certain assets out of the public eye and into the relatively opaque private markets. The cost of capital for certain particularly dirty asset projects, such as coal, have risen as investor demand has waned. This makes the potential gain from concealing the negative characteristics of those assets and obtaining much lower cost of capital quite significant.

Allow us to travel across the world to illustrate how fixed income markets are – willingly or not – involved in fostering these types of transaction flows. Let us start in Asia with the recent Sembcorp coal divestment, then move west to Aramco's pipeline network being packaged through a Luxembourgian special purpose vehicle (SPV), then on to see how the nationalisation of a Russian coal exposure becomes an issue for a key AAA bond issuer, and lastly to look at how coal plant buy-outs land in collateralised loan obligation (CLO) structures.

Balance sheet jumble - from operational to financed assets

Singaporean company Sembcorp (a public entity) recently announced that it is selling its coal power units in India (called SEIL) to a private Omani

consortium and thereby deconsolidating its carbon footprint from the coal, estimated at around 16 million tonnes of CO2 per annum. However, Sembcorp is in fact lending the Omani consortium the money to make the purchase through a "deferred payment" (in kind) note that can be extended up until 2047. Moreover, the company retains financial liabilities for the India unit and will be providing technical services to its operations for the foreseeable future. To many observers, it looks as if Sembcorp is just shifting the coal from the operational asset side of the balance sheet to the financed assets side. As Kelvin Law, an associate professor of accounting at Singapore's Nanyang Technological University expresses it in a Bloomberg interview: "It's the same facilities, same group of employees, same polluting activities, just under a different name."

Where does this impact the fixed income markets? Recent capital raising on behalf of the company has been in sustainability-linked bond and loan formats. Interestingly, in Sembcorp management's letter to shareholders, ahead of the EGM where the transaction was to be voted through, the SLB financing is specifically singled out as the key motivation for the transaction. The company simply avoids paying the higher step-up interest rate on the bonds if the SEIL carbon footprint is deconsolidated. This has real negative financial implications for bond investors, as the potential step-up represents

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real financial value. This is because it can be viewed as an option on the discounted additional coupon payments, which has now more or less been fully voided. This is a clear example of where the carbon footprinting has genuine financial consequences.

Public-to-private-to-public transactions

Another area in which this "arbitrage" has come to light in 2022 is in public-to-private-to-public transactions, whereby a "dirty" asset is bought out from the public space by a private investor, who in turn relies on public fixed income markets to finance the purchase. The motivation is simple: the assets may have a non-leveraged expected return of 5%, but if you borrow money and leverage up you can start hitting those multi-digit return bogeys you promised to investors.

In an example of this practice, US-based private investment firm EIG Energy Partners led a consortium to lease-and-lease-back Saudi Aramco's oil pipeline network, which was already announced in 2021. The private consortium then went back to the public markets to raise the funding for it. The deal in itself was valued at USD 12.4bn, and it was reported that the bank loans — to be eventually refinanced through bonds—amounted to around USD 10.8bn.

As part of the EIG transaction, a Luxembourg-based SPV called EIG Pearl is set up and starts issuing

bonds. The benefit of this set-up from a sustainability reporting angle is that even though the rating agencies clearly identified this as Saudi Aramco subsidiary risk, ESG ratings did not follow through to reflect this. Indeed, we noted that several investors that have restrictions on Aramco investments invested in the EIG Pearl bonds. It is also difficult to obtain an accurate carbon footprint of those SPV bonds, even though they are similar to a direct loan to the parent company.

Leveraged loans for PE coal buy-outs

Another case in point is a private equity transaction in 2017 around coal and gas generation assets in Ohio, where American Electric Power (AEP), a public utility company, sold its assets to ArcLight Capital Partners and Blackstone, operating through a joint-venture named Lightstone. Lightstone first raised financing for the purchase through a bank consortium but eventually refinanced that through the leveraged loan market in a transaction that priced in May this year at a relatively modest spread of 575 basis points over. The buyers consisted of literally hundreds of CLO funds. From a carbon accountancy perspective, the question is as simple as it is difficult to answer: where does AEP's carbon footprint of AEP finally land?

Fossil bailouts: public-to-government

Finally, investors will also need to consider how to deal with fossil fuel assets that get bailed out by "The cost of capital for certain particularly dirty asset projects, such as coal, have risen as investor demand has waned. This makes the potential gain from concealing the negative characteristics of those assets and obtaining much lower cost of capital quite significant."

governments, which is also a form of going private. Germany's Kreditanstalt für Wiederaufbau was rallied by the German government to not only bail out Uniper ("Germany's Uniper reports one of the biggest losses in corporate history"), a utility dependent on Russian coal and gas, but also to finance the construction of a swathe of new fossil gas terminals ("Energy security: Suppy with LNG"). With over EUR 440 billion of outstanding debt, and a considerable amount of that in 'green' format, many investors may need to think about how to actually calculate the carbon footprint these AAA assets.

Maybe not so risk-free after all

All of this may paint a challenging picture for investors to get to grips with of their portfolios' carbon footprint. There seem to be many sophisticated attempts to avoid actual decarbonisation. This is a natural process as ESG pressures are starting to lead to higher financing costs . Consider Sembcorp management's letter to shareholders explaining the SEIL transaction: "Given the limited availability of funding for coal-related projects due to ESG considerations of financial institutions globally, bidders were given the option of vendor financing via a deferred payment note."

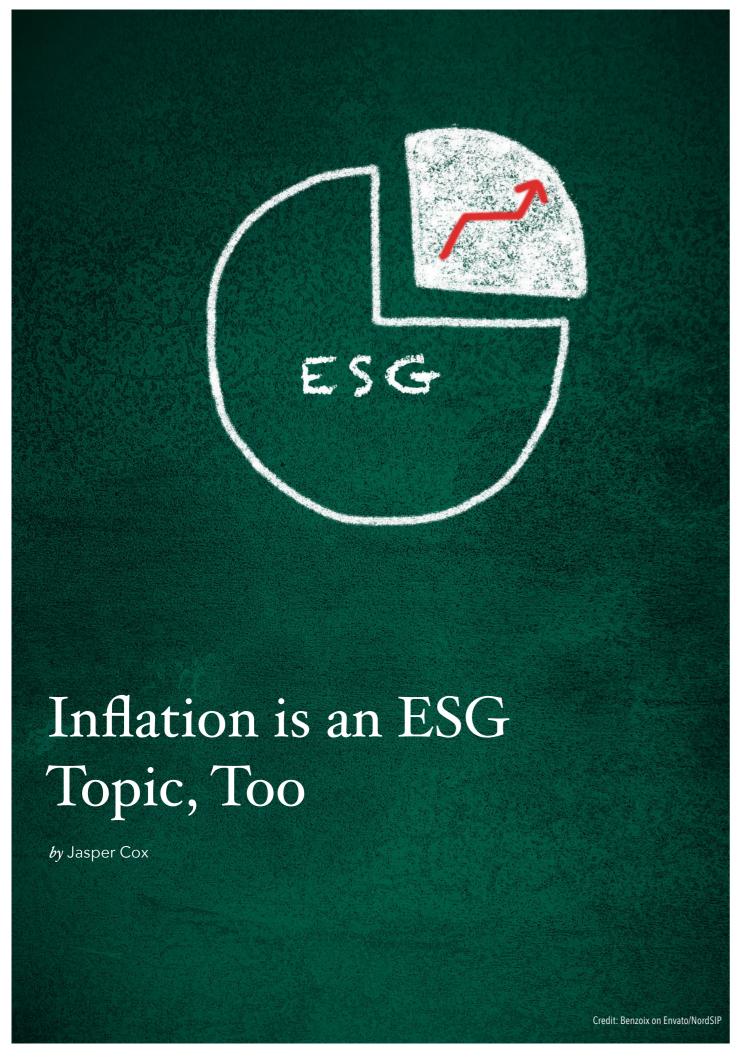
If we look at the EIG/Aramco pipeline transaction, the SPV actually struggled to get public finance in the first bond issuance. It was <u>reported</u> that the

company only raised around USD 2.5 billion of a targeted USD 4 billion. The Lightstone transaction was also dependent upon banks providing bridge loans before getting refinancing through the CLO market. A particular sizeable bridge loan in late 2022 may apparently have reduced banks' appetite for more bridging activity going into 2023.

There are few things as precious in portfolio management as a strong reverse indicator: Someone who consistently says buy when prices are about to fall and vice versa. Germany's bet on lignite in the 90s, on Russian gas in the 00s and to dismantle nuclear in the 10s certainly provide an interesting backdrop for a discussion of the expected success rate of the 20s bet on LNG.

There certainly seem to be some risks involved in this "arbitrage of a lifetime," which may seem oxymoronic, as we learn in school that an arbitrage is only an arbitrage if it involves no risk. Indeed, we would argue that pressures to adhere to ESG investment imperatives will also move the cost of financing dirty assets substantially higher in private markets.

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Jasper Cox Investment Practices Analyst, Fixed Income, Principles for Responsible Investment PRI

This year has been a tough one for fixed income investors, amid persistently high inflation and interest rate hikes across major economies. On the face of it, this backdrop may not look very compelling for greater incorporation of environmental, social and governance factors in investment decisions: aren't other topics more pressing right now?

Yet in fact, holistic analysis of ESG themes helps to assess inflation and interest rate trajectories. This area of responsible investment in fixed income has not received enough attention. While bondholders have increasingly sought to incorporate ESG factors in their decision-making and other activities in recent years, this has traditionally focused on the level of the individual security or issuer.

One area of work has centred on credit analysis: ESG integration can shine a light on otherwise neglected risks that could increase the probability of an issuer defaulting. Another has focused on the growing labelled bond market, including green, social, sustainable and sustainability-linked bonds (and various other permutations). Investors and other market participants have been exploring and debating the extent to which these bonds' proceeds or targets help achieve sustainability goals.

But recent market developments demonstrate the value of zooming out and linking ESG factors to trends in inflation and interest rates, too.

Central bankers are already doing this, after all. As Christine Lagarde, president of the European Central Bank, said earlier this month¹, "Our job of preserving price stability must include further work on better understanding how climate change affects our role. We must incorporate climate change into everything we do: our models, data, projections and analyses."

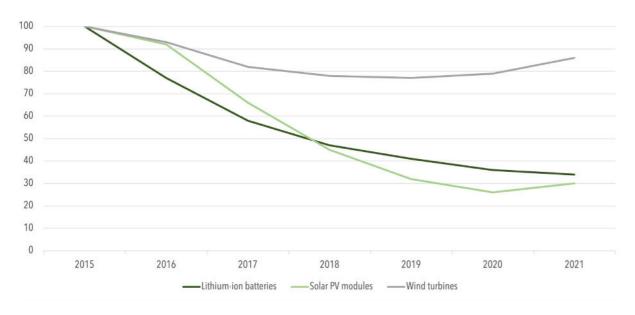
Many of the most relevant ESG topics in macroeconomic analysis are not new areas of study for fixed income investors. However, the same tools provided by an ESG framework for credit analysis can also be applied to the analysis of price levels and monetary policy.

Looking ahead through a ESG lens can yield insights into the potentially stabilising effects of the energy transition on inflation, the potentially inflationary effects of enhanced social considerations and the relevance of monetary policymakers' sustainability mandates, among other lessons.

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 $^{^1\,\}underline{https://www.ecb.europa.eu/press/blog/date/2022/html/ecb.blog221107 \sim 1dd017c80d.en.html/press/blog/date/2022/html/ecb.blog221107 \sim 1dd017c80d.en.html/press/blog/date/2022/html/ecb.blog/date/2022/$

Figure I: Cost trajectory of selected clean energy technologies (rebased to 100 in 2015; 2021 figures are estimates)



Source: IEA, PRI.

Commodity Prices and Climate Risks

Energy and food – traditionally volatile components of inflation, and also two of the items behind much of the recent increase in prices – are intimately linked to climate change considerations.

Extreme weather presents a physical risk to food markets because of the way in which it disrupts harvests. Research² by Gert Peersman, Professor at Ghent University in Belgium³, estimates that exogenous swings in international food prices resulting from harvest shocks account for 25%-30% of volatility in the ECB's harmonised index of consumer prices.

The Bank of England⁴ also argues that the upfront capital expenditure to finance the investments necessary to facilitate the climate transition will, all else equal, lead to a higher long-run equilibrium interest rate.

traditionally been falling according to the IEA, prices of some technologies such as solar photovoltaic modules and wind turbines have recently been trending upwards.

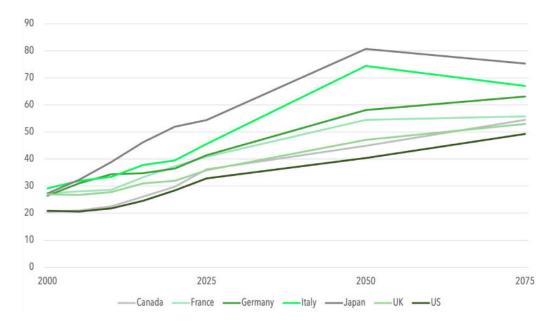
Yet given that many renewable energy technologies have very low and stable marginal costs, theoretically, in the long-run, the energy transition could be disinflationary at first and then make inflation more

Inflationary Effects of ESG Factors in the Labour Market

Companies are considering their environmental and social footprints and exposure - partly in response to investors adopting stricter ESG criteria and regulators introducing new sustainability rules. Firms are working to make their supply chains, recruitment processes and compensation practices - among other operations - more ethical and sustainable.

The costs of the materials needed to electrify the As the bar is raised, some investors reckon companies world's power will also gain increasing importance. are likely to have to spend more to meet expectations. While the price of much clean energy technology has On the social front, depending on the sector, this

Figure II: Dependency ratio for G7 countries



Source: OECD, PRI.

could involve deploying cash on recruitment drives to reach potential employees from disadvantaged groups, raising wages, or ramping up monitoring and reporting related to modern slavery.

The fact that companies reviewed by PwC and Strategy⁷ in a 2022 study reported appointing more Chief Sustainability Officers in 2021 than in the whole period 2016-2020 is one example of this trend in action.

Companies improving their sustainability performance help the planet and society. These actions may also improve individual firms' prospects, reducing the risk of fines, tapping into demand from ethical consumers or improving desirability to employees. But, in the short-term, as expenditure picks up, costs may be passed onto consumers, in turn raising inflation.

Wages may be pushed higher by another social factor: demographics. The proportion of the population that is working age is set to decline in many countries over the coming years. Figure 2 shows how inversely, the dependency ratio (the ratio of the number of people over 65 to the number aged 25-60) has been increasing and will continue to do so in G7 countries.

The Impact of Central Bank Mandates⁸

Determining whether the overall effect of ESG trends will be inflationary or disinflationary is not trivial. The impact will also vary from country to country, depending on the energy mix or demographics, among other considerations. But incorporating ESG analysis into their work will help investors examine how rate setters will react.

Investors will also have to pay close attention to central banks' approach to sustainability – particularly climate change - in other decisions, including asset purchase programmes. One study by Simon Dikau and Ulrich Volz of the London School of Economics (LSE) and the School of Oriental and African Studies (SOAS) respectively found that of 135 central banks, 70 have a mandate directly or indirectly (through an objective to support government policy) to enhance sustainability of economic growth or sustainability in general. As 2022 draws to a close, a holistic approach to ESG analysis in fixed income is more important than ever.

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 $^{^2\ \}underline{\text{https://www.nbb.be/de/artikel/international-food-commodity-prices-and-missing-disinflation-euro-area}$

³ Gert Peersman, 2018. "International Food Commodity Prices and Missing (Dis)Inflation in the Euro Area," Working Paper Research.

⁴⁻https://www.bankofengland.co.uk/quarterly-bulletin/2022/2022-q4/climate-change-possible-macroeconomic-implications

⁵ https://www.twentyfouram.com/node/4059

⁶ https://www.alliancebernstein.com/americas/en/institutions/solutions/insights-and-solutions/the-intimate-linkage-of-esg-and-inflation-esg-and-the-hegelian-dialectic.html

https://www.pwc.co.uk/press-room/press-releases/uk-firms-turning-to-chief-sustainability-officers-as-board-level.html

⁸ https://doi.org/10.1016/j.ecolecon.2021.107022

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