



## SUSTAINABLE FIXED INCOME

NordSIP Handbooks are published by Big Green Tree Media AB Kungsgatan 8 111 47 Stockholm +46 70 9993966

Editor-in-Chief Aline Reichenberg Gustafsson aline@nordsip.com

Director, Strategic Relations Kim Hansson kim@nordsip.com

Economics Editor
Filipe Wallin Albuquerque
filipe@nordsip.com

Senior Research Director Julia Axelsson, CAIA julia@nordsip.com

Design: Gülce Demirer gulce@nordsip.com

For advertising or other sales-related enquiries email: sales@nordsip.com

FOR INVESTMENT PROFESSIONALS ONLY
Please read important Terms & Conditions on the last page of this document

Photographic Credits © Twenty20, Pixabay, Unsplash, NordSIP

Cover image NordSIP ©

© 2021 NordSIP all rights reserved

### TABLE of CONTENTS

		In I	Practice
5	the editor's word Sustainable beyond labels	6	Sustainability In Fixed Income
40	about our partners	12	Aligning Fixed Income Portfolios to Net Zero 3 key steps to avoid a naïve approach
Bon	d Labels	36	Do ESG Information Providers Meet the Needs of Fixed Income Investors?
16	Social Bonds Beyond Labels	Sta	te of Play
20	Sustainability Linked Bonds Looking Behind the Label	10	Themes for 2021 / 2022
23	Securing Quality in A Time of Rapid Market Growth	26	Another Record Year for Sustainable Bonds
34	ATP's Green Bond Push	30	Sustainable Fixed Income the Nordic Perspective

### the editor's word

Sustainable Beyond Labels



We are wrapping up another undeniably successful year for sustainable fixed income. In 2020, we marveled at the record-breaking issuance of labelled sustainable bonds reaching close to US\$550 billion. Yet already by the third quarter of 2021, this amount was exceeded. Green bonds still account for more than half of that issuance, and social bonds are quickly catching up, spurred by the pandemic. Meanwhile, the rookie 'Sustainability-linked bond' label has grown by a whopping 500% in just a year.

Labels, however, are not the whole story, as many of the experts interviewed in this magazine keep reminding us. Naïve assumptions based on the attractive gift-wrapping of a bond simply won't do. Prudent fixed income managers want to look inside the package. They demand evidence of real impact, net-zero alignment, high quality, transparency, and ambitious, science-based targets. Label, or no shiny label.

Talking to the experts, it also seems like fixed income investors are growing more confident of their ability to nudge issuers in the right sustainability direction. Engagement and stewardship are no longer the exclusive domain of equity owners. Bond investors are way past being passive buyers of ready-made packages. They want in on the game, encouraging issuance and origination and helping banks to structure and wrap the debt instruments in a sustainable way.

Dig into the annual issue of our magazine, the fourth edition already, to find out more about the increasingly diverse universe of sustainable fixed income and speculate about the next big trend to pop out of this exciting box.



Aline Reichenberg Gustafsson, CFA Editor-in-Chief NordSIP

NordSIP Insights 4 Sustainable Fixed Income 2021

# Sustainability in Fixed Income

by Pilar Gomez Bravo and Mahesh Jayakumar



**Pilar Gomez-Bravo**Director of Fixed Income - Europe
MFS

to sustainability

Sustainability and environmental, social and governance (ESG) factors are increasingly center stage for fixed income investors. Much is postulated and debated in this arena as investment frameworks can vary significantly due to fast evolving standards, data transparency and regulation. In our view, the art here lies in distinguishing the practice of greenwashing — window dressing — from authentic viable approaches

Below we discuss current developments and key investment considerations when implementing ESG factors in the fixed income research process. The important developments include the explosion of interest in climate change and thematic bonds such as green bonds, as well as a greater focus on regulation, data and investor engagement (see Exhibit 1).

Policymakers continue to be extremely active in developing mandatory ESG, sustainability and climate-related disclosures at both the issuer and investor level. While this has been the case in Europe for some time and Europeans continue to be at the forefront of these discussions, we are increasingly seeing the same policy pressures in Asia and in the United States, particularly with the



Mahesh Jayakumar Fixed Income Research Analyst MFS

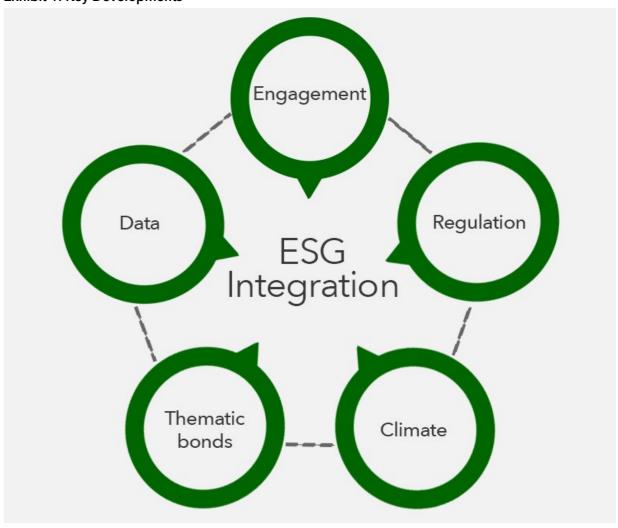
current administration. Investors are entering the fray more readily as the topic gains importance in the investment context from the vantage point of both risks and opportunities.

### **Climate Action**

Climate change is undoubtedly a major challenge for the world. For both companies and countries, there is urgent focus on reducing emissions, while discussions continue apace on carbon pricing, carbon offsets and the timeframe for achieving net-zero targets. Many companies are responding by not only disclosing their emissions but also setting reduction targets. While central banks are discussing climate risks, regulators are requesting more reporting and investors are signaling a greater commitment to climate action.

The landmark 2015 Paris Agreement set the stage for global action to reduce emissions to ensure the temperature rise remains below the two-degree-centigrade threshold. The Paris Agreement constituted a bottom-up approach with countries deciding individually on emission reduction targets and timelines. These were communicated in the form of National Determined Contributions (NDCs). Six years later, the COP26 summit in Glasgow is the most

**Exhibit 1: Key Developments** 



important climate talks since the Paris Agreement. Amid a greater sense of urgency, countries have adopted a ratcheted-up approach, submitting revised and new NDCs to meet carbon reduction targets.

The imperative to address climate change is expected to become increasingly important for investors as the risks of rising temperatures emerge in very tangible forms and the opportunities inherent in the switch to renewables and other forms of carbon reduction comes into sharper focus.

### **Thematic Bonds**

In fixed income, thematic bonds continue to play an important role in the implementation of ESG factors in investment portfolio decisions. Green bond issuance has seen robust growth, with more interest in sustainabilitylinked and social bonds due to the pandemic. In our view, various types of thematic bonds can be considered for inclusion in portfolios provided the fundamental credit characteristics of the issuer and the use of proceeds are well understood (see Exhibit 2).

Last year was already a banner year for the bonds,

with close to US\$550 billion in bond issuance across the four thematic categories. By the third quarter of 2021, this amount was exceeded; issuance now stands at close to US\$850 billion. Green bonds alone account for more than half of the value of bonds issued in 2021 (US\$450 billion) while social bonds account for close to US\$190 billion and sustainability-linked bond issuance accounts for more than US\$70 billion. [Note that Exhibit 2 includes both bond issuance and green loans.]

Sustainability-linked bond issuance has grown 500% in the past year. The typical issuers for these types of instruments are companies in carbon-intensive sectors, such as energy, materials and utilities, that use this funding for decarbonization projects and to incentivize investors by providing a step-up in bond coupons if they fail to meet the environmental KPIs established at the time the bonds are issued.

### Regulation

Regulators invarious regions are developing mandatory ESG and climate-related disclosure requirements, while encouraging the creation of green/sustainable taxonomies. Green and sustainability-linked bond

NordSIP Insights 5 Sustainable Fixed Income 2021

KPI = key performance indicators.

issuance has the support of regulatory authorities and central banks that are also part of the dialogue in a fastevolving environment.

The most significant new regulation is the European Union's SFDR (Sustainable Finance Disclosure Regulation) that calls for classifying funds based on their sustainability criteria. An Article Eight classification is assigned to funds that integrate ESG factors; Article Nine funds are those that target impact. The United Kingdom is examining mandatory reporting based on the Task Force for Climate Disclosures (TCFD) by 2025. In the United States, the Securities and Exchange Commission (SEC) and the Department of Labor are actively pursuing numerous ESG-related initiatives. In Asia, both Singapore and Hong Kong have proposed guidelines on climate and environmental risk management.<sup>2</sup>

#### Data

The proliferation of ESG data and rating providers, coupled with increasing voluntary company disclosure, provides investors with greater visibility into ESG risks and opportunities. This nonfinancial data is an important complement to credit ratings and the financial profile.

More providers of ESG ratings and their accompanying data are available than ever. The large incumbents, index providers and rating agencies continue to acquire smaller players while an increasing number of think tanks, nongovernmental organizations and investor consortiums focus on specialized data disclosure on a particular theme or topic, obtaining the data either directly from the issuer, through questionnaires or through publicly available sources.

ESG data sources vary in terms of coverage and quality. ESG data is more readily available for the corporate bond market than it is for other parts of the asset class. Corporate bond issuers are disclosing more ESG information, and an increasing number of ESG third party vendors are aggregating this data to create summary ESG scores.

Sovereign bond issuers have increased their disclosure related to green and thematic bond frameworks to enable investors to understand how proceeds from this issuance will be used for sustainable development and other projects. ESG sovereign data can also be obtained from other sources, such as think tanks and large multilateral organizations like the IMF, the World Bank and the OECD, but unfortunately disclosure is not as ample in other parts of the fixed income marketplace such as in securitized or municipal bonds.

Bond investors need to take time horizon as well as materiality into account when understanding the risks associated with ESG factors. ESG factors are typically long-term in nature and can have a limited impact on shorter-maturity bond instruments despite

them being material to the sector, industry or issuer.

#### Engagemen

Issuer engagement has taken on more importance because of investors' desire for more dialogue around ESG to better understand the sustainability profiles of issuers. Fixed income creditors are not owners of shares and thus don't have voting rights. However, fixed-income investors can engage in both formal and informal dialogue with issuers on ESG factors despite not being shareholders and have an important role to play in encouraging a sustainable agenda as key providers of financing.

Engagement can be undertaken collectively in addition to on a one-on-one basis. At MFS, we participate in various collective forums, such as the CA-100 Plus. We also engage in one-on-one dialogue with issuers.

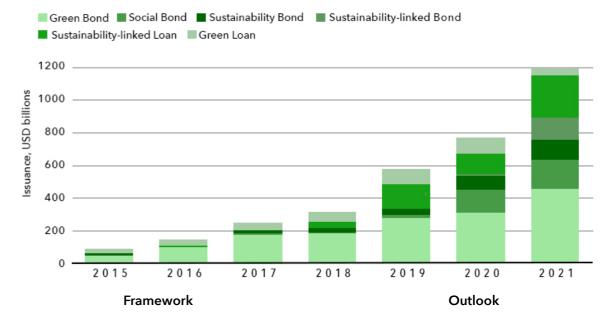
#### **Investment Considerations**

At MFS, sustainability is at the heart of our long-term active investment approach and our purpose of allocating investment capital responsibly. Our robust framework of integrating sustainability into various facets of the investment process encompasses fundamental research and the data required along with prudent risk management and issuer engagement. We have a set of working groups and committees that guide the formulation and implementation of ESG factors across the firm's investment platform. Three key guideposts are considered in this regard: integration, data and risk management.

The most critical element is the integration of sustainability/ESG factors into the bottomsup fundamental analysis that characterizes our investment approach. Research is the engine of portfolio construction; we populate portfolios with the analysts' best ideas. Each analyst, both in fixed income and in equities, is responsible for incorporating the consideration of ESG factors into his or her recommendations, working closely with the portfolio managers and with other dedicated ESG resources that focus on thematic analysis and materiality. At the end of the day, each sector analyst is charged with integrating ESG factors along with all other investment considerations. This is not a responsibility delegated to a separate team. The analyst engages directly with the issuer and those who define the strategic direction of the company to advance important sustainability agendas.

Second, data continues to remain a significant point of discussion. It is important at MFS that all investors have equal access to the relevant ESG data to make informed decisions. This continues to evolve as more disclosures and new standards emerge. While we use third-party ESG ratings in our analysis as we do with credit ratings, we do not rely solely on these to define or constrain our exposures.

### **Exhibit 2: Green and Other Thematic Bonds**



- Three main rules for issues; eligibility of projects; selection process of qualified projects; and ring-fencing of proceeds.
- Second party opinion confirms issuer framework and Green Bond Principles compliance.
- Optional green rating that considers the environmental aspects of the investments
- Post issuance reporting confirms funds were allocated to the appropriate projects
- Disclosure of impacts from ongoing projects.

- Broader focus on sustainability leading to increase in issuance as well as diversification in types of issuers.
- Continued convergence of standard for issuance
- Increasing focus on understanding impact as part of improved reporting
- Evolving regulatory framework and increasing government support for issuance
- Growth in dedicated investor and themed investment products.

Source: Bloomberg and Bank of America, as of 30 September 2021. \*Issuance for 2021 reflects 9 months as of 30 September 2021. Green bonds are specifically earmarked to raise money for climate and environmental projects. Social bonds are dedicated to fund social projects and/or activities that have a positive impact on individuals, communities or society. Sustainability bonds are bonds where the proceeds will be exclusively applied to finance or re-finance a combination of both Green and Social Projects. SDGs refer to the UN Sustainable Development Goals. Please keep in mind that a sustainable investing approach does not guarantee positive results and all investments, including those that integrate ESG considerations into the investment process, carry a certain amount of risk including the possible loss of the principal amount invested.

Finally, risk management and risk analyses are critical. We look at ESG as a risk but also as an opportunity. We analyze ESG risk from the perspective of the overall portfolio and the portfolio construction process, as well as regarding individual securities. This enables us to assess the material risks associated with the portfolio — and make decisions about issuers that may be more at risk.

### Conclusion

Several key developments point to the growing importance of sustainability and ESG for fixed

income investors. We are strong proponents of integrating these considerations into the investment process, a process supported by the relevant data and prudent risk management.

While climate change and ESG more broadly undoubtedly pose risks for many issuers, they also present opportunities as the world shifts to producing and consuming goods and services in a more sustainable way. We believe this theme will be a part of the investment landscape for decades to come.

Source: Bloomberg Index Services Limited. BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg"). Bloomberg or Bloomberg's licensors own all proprietary rights in the Bloomberg Indices. Bloomberg neither approves or endorses this material or guarantees the accuracy or completeness of any information herein, or makes any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, neither shall have any liability or responsibility for injury or damages arising in connection therewith.

The views expressed are those of the author(s), and are subject to change at any time. These views should not be relied upon as investment advice, as securities recommendations, or as an indication of trading intent on behalf of any MFS investment product.

Issued in Europe by MFS Investment Management (Lux) S.à r.l. (MFS Lux) – authorized under Luxembourg law as a management company for Funds domiciled in Luxembourg and which both provide products and investment services to institutional investors and is registered office is at S.a r.l. 4 Rue Albert Borschette, Luxembourg L-1246. Tel: 352 2826 12800.

NordSIP Insights 8 Sustainable Fixed Income 2021

Article 6: Integrates sustainability risks into the investment process. Article 8: Systematically promotes a stated environmental or social characteristic and provides enhanced disclosure accordingly. Article 9: Typically for "impact" funds, which have a dual objective of financial return and specific environmental or social

## Themes for 2021 & 2022

by Ulf Erlandsson, PhD and Nona Alexander, CFA

encompass much more than just the labelled bond market and investments therein. Indeed, many of the most interesting aspects across all of fixed income are developing in the sustainability space right now. Lest one forgets, managing fixed income - once interest rate risk is hedged away - is really about bankruptcy and default risks. And that dark cloud on the horizon called climate change will fundamentally drive the lives and deaths of many companies and capital

The Anthropocene Fixed Income Institute (AFII) seeks to keep abreast of developments on many fronts in this battle between sustainable and unsustainable business and financing models. Here are some of the themes we will be following going into 2022:

### Sustainability Linked Bonds/Loans (SLBs/SLLs)

Building structures where issuers' interest payments depend on reaching certain sustainability targets is quite a sensible approach. However, the approach has come under fire as, in practice, SLBs have tended to have very limited step-ups, often near the end of the life of the bond, not to mention underwhelming targets, and parameters that have been set rather arbitrarily across the market. AFII, for one, is proposing a new binary option pricing model to start quantifying what is really being built into the coupon structure in terms of sustainability ambitions.

As some issuers of bonds have started to pay fairly hefty premiums for being in unsustainable businesses, the incentives for SLB/SLL investors to lower these issuers' cost of capital on the back of credible, ambitious transition plans are mounting. Case in point: thermal coal export terminal Port of Newcastle raised 10v USD money at 6% in November, whereas the fair level for that type of credit quality should be 4%. This gives PON a 2% differential incentive to start pricing into robustly structured SLBs.

### **Capital Structure Trades**

Asset owners regularly hold both debt and equity in the same company. From a valuation perspective, there are interesting contrasts between how climate risks are priced in these markets, especially in

Sustainable fixed income is quickly evolving to companies such as the oil majors. Bonds are often trading at relatively tight spreads / low interest rates compared to the dividend yields offered on the equity side. Rebalancing or using derivatives to take exposure to this gap can give rise to interesting trade profiles, often seen as epitomizing the "deny debt, engage in equities" adage. Through 2021, we saw a few activist equity funds engage, such as Engine No. I lobbying for the Exxon board. It is no daring guess that activist investors will start playing a greater role in sustainability focused fixed income as well.

### Distressed / Debt Exchanges

The embodiment of both sustainability-linked bonds and capital structure trades comes in the distressed debt space, where investors essentially bear equity risk in holding bonds, and sustainability linkages can be applied in restructurings. The Belize Blue Bond restructuring in late 2021 used a debt-for-nature swap format: arguably, the terms of the refinancing were better due to environmental commitments. In our opinion, sustainable fixed income investors should really seize such creative destruction as an opportunity.

### **Convexity and Curves**

The market is also becoming fraught with saddlepoint climate investment cases. By this, we mean situations where bond issuers may have to decide if they wish to see a full transition, or dig their heels in and retain a fully 'fossil-based' business model. Such pivot points in sustainability related situations may lead to tighter spreads (if successful) or much wider spreads (if they fail). For example, late this year, an activist investor suggested a break-up of commodity trader Glencore - an issuer with large coal and methane leakage exposures. If bond holders were to land in the non-coal entity, they would likely enjoy much lower spreads than if their bonds were converted to be securities of the coal entity where many would be compelled to divest. In trading lingo, Glencore and other situations -often driven by activist equity investors - are significantly exposed to convexity. The natural way to play convexity in credit, given the lack of options on single-names, is to use credit curve exposures (in cash or CDS) to go long or short convexity in such situations.

### **Systematic Fixed Income Trading** Opportunities and Leverage

With green and other sustainability instruments migrating beyond the plain vanilla space, the potential to "green up" more traditional trading strategies is improving. This can crystallize in various ways better described in a longer format - but the active sustainability-oriented fixed income investor should cherish the opportunity to trade the Bund-BTPS spread in a green format. Another dimension of this concerns carbon exposures in leveraged fixed income portfolios – long-short implementations in particular - where one can actually argue for carbon-negative portfolio set-ups. This is clearly an area where hedge funds could become more active.

### **Philanthropy**

Switching to what may appear to be exactly the opposite of the leveraged hedge fund domain, something that may be in the fringes of market participants' attention is the philanthropic community. Obscure, perhaps, but it is clear that the broader philanthropic community is paying greater attention to climate risks and fixed income markets. Full disclosure: our own organisation benefits from this. The impact of this is a new breed of activism, where fixed income investors can also be targeted in campaigns that traditionally used to be deployed directly towards companies or equity backers of controversial activities. A strong grassroots campaign in Germany against a domestic bank's role in syndicating a thermal coal mining bond deal? That is not something that has been very common before, but it may well be in the coming years.

### **Legal: Disclosure and ESG Controversies**

One particular area where philanthropies have been successful is in the field of strategic litigation: as oil major Shell experienced in the spring of 2021, litigation driven by non-profit interest can have material effects. In this area, bond disclosures are quite interesting. Equity investors are used to receiving a plethora of information about any issues that could become material to the valuation of the company they are invested in. The tradition, which ought to see such risks formally flagged as "material risk factors" in bond prospectuses, is much weaker in the fixed income space.

In September, AFII filed a complaint with the SEC in respect of a failure on the part of a subsidiary of the Adani Group - the developer of the Carmichael coal mine in Australia - to disclose material ESG risks, and we are starting to see actions in a similar vein from traditional activist groups. With enhanced disclosure, there will also be higher expectations of investors to actually take note of such disclosures.

### The Age Of The Active Counterparty

One of the great events during COP26 happened away from the actual conference. A large custody bank stepped back from providing a substantial loan to the aforementioned coal mine on what appears to have been considerable pressure from custody clients, rather than investors. This flavour of counterparty engagement is a very significant and important change. It is an extension of an approach referred to by traders as "putting a counterparty on ice" when some behavioural alignment is required. In the same way, asset owners and managers can manage their counterparties to align with their sustainability strategy. The step from not buying coffee from companies using child labour in their production for the office coffee machine to (temporarily) refusing to transact with financial service providers failing to adequately act against the climate crisis does not appear large.

#### **Private Versus Public Assets**

A large asset manager clearly outlined during a widely publicised session at COP26 the dichotomy between public and private assets in terms of sustainability, highlighting that valuation discounts on sustainability grounds on the public side would lead to significant arbitrage opportunities on the private side. At the time of writing, it has been announced that said asset manager's private arm just won a long-term lease-sellback of the fossil gas pipeline network of the world's most prominent greenhouse gas emitter to the tune of USD15bn. C'est la vie. We are willing to bet that the public-private debate will still be lively this time next year.

### The Anthropocene Fixed Income Institute

Launched in July, 2020, and seeded by the Growald Climate Fund, AFII is a non-profit think tank/research body to take a markets' based approach to positive climate impact in fixed income markets. GCF, a part of the Rockefeller family, is a venture philanthropic donor focusing on climate change. The AFII logotype picture of the green sprouts growing on the trading terminal encapsulates AFII's basic philosophy: it's through the buy and sell decisions by bond portfolio managers and traders out there that we could change cost-of-capital in favour of a sustainable future. It's grimy, technical and quantitative, it's an everyday struggle for alpha, but fixed income is extremely powerful when you direct it for a sustainable purpose: "I would like to be reborn as the bond market, because you can intimidate anybody" to quote political pundit James Carville. You can freely access AFII's material covering the topics referred to in the article at www.anthropocenefii.org.

10 11 NORDSIP INSIGHTS SUSTAINABLE FIXED INCOME 2021

## Aligning Fixed Income Portfolios to Net Zero

### - 3 key steps to avoid a naïve approach

by Manan Mehta



Manan Mehta Head of Quantitative Fixed Income Research Northern Trust Asset Management

With COP26 having just passed, asset owners are pursuing long-term sustainable investment with more conviction than ever, further exploring how to factor in climate change, a path to net zero and the financial risks of remaining on the sidelines. This is true for fixed income portfolios where climate-related transition and physical risks may impact investment returns. However, a naïve approach to integrating climate change in investment portfolios will bring about unintended consequences.

That said, it is very difficult to model negative credit implications associated with climate risks. As the first "We believe that ESG risks will negatively affect fixed income prices over the long run but uncertainty remains around the timing, nature and magnitude of such risks."

level of defense, investors are integrating climate risk in their fixed income portfolios by looking at three elements: decarbonization, corporate engagement, and tilting portfolios toward climate solutions. At the same time, fixed income investors are incorporating considerations for long-run bond returns, such as duration, yield, sector and country risks. Increasingly, investors are also seeking to capture fundamental credit investment opportunities by systematically targeting compensated risk factors such as value and quality.

### The Two Dimensions Of Financial Risk In Climate Change: Transition and Physical Risks

COP26 increased the global financial community's emphasis on disclosure of the environmental risks discussed earlier by the G20 Financial Stability Board Task Force on Climate-related Financial Disclosures (TCFD). TCFD segments climate-related risks into two categories — transition and physical risks — that can be addressed through our three-pronged approach that we explain below.

Transition risks are generated by policy, technology, market and regulatory changes likely to accompany the transition to a low carbon economy. For example, some assets may become "stranded" when

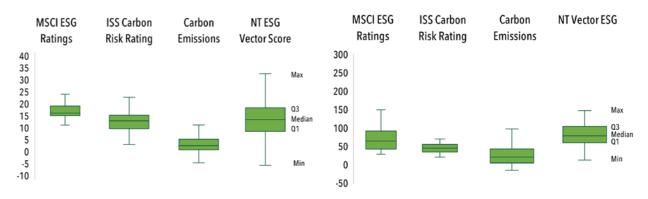
#### **Exhibit 1: Modest Premium For Green Companies**

Greener companies – companies that rate higher on each of four ESG metrics– exhibited narrower option-adjusted spreads than lower-ranked companies after controlling for credit rating, sector membership and credit term structure.

Similar to their investment grade peers, greener global high yield bonds had narrower OAS than lower-ranked companies.

#### GLOBAL INVESTMENT GRADE - ICE BofA Global Corporate Index

#### GLOBAL HIGH YIELD - ICE BofA Global High Yield Index



### Option-Adjusted Spread (OAS) Differentials Low vs. High rated ESG companies

Source: Northern Trust Quantitative research, ICE, Bloomberg, Sustainalytics, MSCI. End date: September 2021. Start Date (MSCI ESG): August 2017. Start Date (ISS Carbon Risk Rating): December 2016. Start Date (Carbon Intensity): December 2012, Start Date (NT Vector ESG): August 2009. IVA Ratings(industry-adjusted) are used for the analysis. Carbon intensity represents the company's most recently reported or estimated Scope 1 + Scope 2 greenhouse gas emissions normalized by sales in USD. Quintile portfolios are formed on each ESG metric by duration band, composite rating, sector, currency cell and the median bond level OAS used to compare the high vs. low ESG metric portfolio The chart displays the five-number summary of a set of the spread differentials for the high and low ESG rated bonds within the ICE BofA Global Corporate Index and the ICE BofA Global High Yield Index. The five-number summary is the minimum, first quartile, median, third quartile, and maximum of monthly spreads over the evaluation time period.

they become less valuable due to their inability to adapt to a low carbon economy. As much as 42% of today's publicly listed utilities' coal capacity is losing money. Further cost pressures could make 72% of the coal power plants' capacity cashflow negative by 2040. Physical risks affecting property, plant and equipment can be event-driven (e.g., hurricanes, wildfires, and floods) or due to chronic longer-term shifts (e.g., sea level rise, heat stress and water stress) in climate patterns. This includes, for example, the 2019 to 2020 Australian wildfires that scorched more than 46 million acres and hurt tourism and farming.

### **Addressing Climate Change Risk In Credit**

We believe that environmental, social, and governance (ESG) risks will negatively affect fixed income prices over the long run but uncertainty remains around the timing, nature and magnitude of such risks. Evidence is somewhat mixed on whether bond markets are pricing in ESG uncertainties in credit spreads for environmentally harmful "brown" companies versus "green" companies after controlling for credit rating, sector membership and credit term structure. There is a modest premium for green

companies, as measured by option-adjusted spreads (OAS) across four metrics'. Higher rated ESG issuers tend to command a spread premium (a tighter spread) than lower rated ESG issuers.

Given these relationships between better ESG ratings and spreads, it isn't recommended to simply invest in top-rated ESG companies or to exclude some industries. As discussed in our "Sustainable Investing in Fixed Income: Avoiding the Pitfalls" article, this naïve approach could bring unintended yield, duration, sector and country risks². Investors should take intentional risks, and ensure they are compensated for those risks, to achieve the outcomes they seek. That's why we believe in taking a three-pronged approach to invest in corporate bonds inclusive of sustainability or climate-related goals.

### Lower The Carbon Footprint In Bond Portfolios Without Increasing Risk

Lowering the carbon footprint of a portfolio will reduce transition risks because lower carbon footprint companies are less exposed to the risks of not achieving the "1.5 degree scenario," which calls for

NordSIP Insights 12 Sustainable Fixed Income 2021

The four measurements are the Northern Trust ESG Vector Score, a measurement that assesses publicly traded companies in the context of financially relevant environmental, social and governance (ESG) related criteria that could impact their operating performance for further reference refer to https://landing.northerntrust.com/esg-vector-score; MSCI ESG Score, a measurement designed to measure a company's resilience to long-term, industry material ESG risks, which uses a rules-based methodology to identify industry leaders and laggards according to their exposure to ESG risks and how well they manage those risks relative to peers; ISS Scope 1 and 2 carbon intensity; and the ISS carbon risk rating score, which assesses the climate-related performance of companies, taking into account not only industry-specific challenges and risk profiles, but also considers companies' positive impact.

<sup>2</sup> Northern Trust Asset Management, Nov 19, 2019, https://pointofview.northerntrust.com/sustainable-investing-in-fixed-income-avoiding-the-pit-falls-a442e8bc80a4

holding the increase in the global average temperature to 1.5 degrees Celsius above pre-industrial levels.

To achieve this, current aggregate world greenhouse gas emissions must be halved, according to the World Bank³, requiring significant policy and regulatory changes. This would likely expose companies with higher carbon emissions to higher transition risks than their competitors with lower carbon emissions. A Harvard Business Review article suggests that "Carbon Might Be Your Company's Biggest Financial Liability⁴." For example, companies with high carbon footprints will suffer financially as more countries assign a price to carbon emissions and as carbon pricing becomes more expensive. This could cut the earnings of companies with high carbon emissions.

Some estimate that most institutional portfolios are currently invested for an implied temperature rise of roughly 4 degrees C<sup>5</sup>. How can institutions lower this significant risk? A balanced approach favoring low carbon leaders within sectors — rather than fully divesting from sectors and companies — can facilitate

meaningful reductions in the carbon footprint while also considering key fixed income risks, such as duration, yield and sectors.

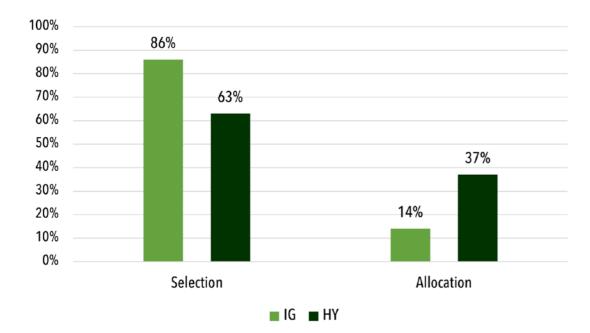
Exhibit 2 shows carbon attribution for portfolios of global investment grade and global high yield bonds, respectively, that target a 50% reduction in carbon intensity. We decompose the carbon intensity of the portfolio with respect to the benchmark into an allocation and selection component. Selecting low carbon leaders can achieve 86% of the desired overall reduction within global investment grade and 63% of the overall carbon reduction in global high yield portfolios, respectively. Because investment grade bonds tend to have less exposure to carbon-intensive sectors, it is not surprising that it is easier to achieve a higher carbon footprint reduction in investment grade bonds from selection rather than allocation.

This exhibit may make it seem as if one can simply choose the lowest-carbon companies for fixed income portfolios, but investors should not overlook other sources of risk. A better approach is a risk-efficient

### Exhibit 2: Security Selection Can Significantly Reduce Transition Risk From Carbon Intensity

Selecting low carbon leaders can achieve 86% of the carbon reduction within global investment grade and 63% of the carbon reduction in global high yield portfolios, respectively.

### **Selection and Allocation Effects On Carbon Intensity**



Source: MSCI, ICE, and Bloomberg. Portfolios optimized within the ICE Global High Yield and ICE Global Investment Grade Benchmarks to improve ESG rating, improve climate transition risk and reduce carbon emissions intensity. The optimization is subject to various diversification controls to reduce tracking difference to the parent index, including duration and option-adjusted spread neutral positioning, while controlling for single security, issuer and sector exposure. The table shows allocation and selection effects to the Scope 1 and 2 carbon intensity, defined as the sum of direct and indirect emissions scaled by sales to ensure comparability. represents the company's most recently reported or estimated. Scope 1 greenhouse gas emissions are those from sources owned or controlled by the company, typically direct combustion of fuel as in a furnace or vehicle; Scope 2 emissions are those caused by the generation of electricity purchased by the company.

portfolio optimization that controls for exposures – such as duration, spread, sectors and issue specific risks — while improving issuer selection through the use of compensated factors, such as value and quality. This risk controlled approach can be paired with the objective of targeting a carbon footprint reduction to produce better overall portfolio outcomes.

### **Engage With Companies On Climate Change Through Stewardship**

Long-term asset owners are engaging with issuers across asset classes and geographies to foster sustainable business practices in their portfolios. Specifically, from a net zero alignment perspective, asset owners are looking to engage with actors including credit rating agencies, auditors, stock exchanges, proxy advisers, investment consultants and data and service providers to accelerate the transition to net zero and reduce emissions in the real economy.

Like equity investors, fixed income investors are examining whether companies have clear net zero carbon targets and strategies, as well as capital expenditure plans to support the transition to net zero. They are engaging with companies as part of coordinated dialogues, including the Climate Action 100+ (CA100+) initiative and using CA100+'s Net Zero Benchmark assessment framework to drive their engagement agenda. More than half (52%) of CA100+ companies have announced their ambition to achieve net zero by 2050.

### **Considering Company Moves Toward Climate Solutions**

Focusing only on the historical carbon intensity of a company doesn't give a complete picture of companies' potential climate risk because it doesn't incorporate what may happen in the future. For example, a company's carbon intensity may increase or decline with future capital expenditures. Accordingly, investors are increasingly focusing on the extent to which a company manages risks with future challenges related to climate change and captures opportunities while transitioning to a low carbon economy.

There is a continuous need for innovation in portfolio management techniques. To that end, we believe that sustainability and climate change initiatives represent an important opportunity. Improvements in ESG and related datasets make the systematic integration of these considerations possible in fixed income portfolios<sup>6</sup>.

In summary, modeling risks and uncertainties associated with future climate change and its impact on asset prices requires a sophisticated approach. Systematic investing approaches that retain flexibility and allow managers to incorporate considerations on sustainability and climate change in their fixed income portfolios can create the potential for better risk-adjusted returns over the long run. These findings are not only intuitively and economically appealing, but they also stand on the shoulders of decades of empirical research. When every basis point of return matters and opportunities to generate income are challenging, we believe investors should strongly consider a systematic approach to fixed income investing.

### IMPORTANT INFORMATION

This material is directed to professional and eligible counterparties only and should not be relied upon by retail investors.

The information is not intended for distribution or use by any person in any jurisdiction where such distribution would be contrary to local law or regulation. Northern Trust and its affiliates may have positions in and may effect transactions in the markets, contracts and related investments different than described in this information. This information is obtained from sources believed to be reliable, and its accuracy and completeness are not guaranteed. Information does not constitute a recommendation of any investment strategy, is not intended as investment advice and does not take into account all the circumstances of each investor. Opinions and forecasts discussed are those of the author, do not necessarily reflect the views of Northern Trust and are subject to change without notice.

This report is provided for informational purposes only and is not intended to be, and should not be construed as, an offer, solicitation or recommendation with respect to any transaction and should not be treated as legal advice, investment advice or tax advice. Recipients should not rely upon this information as a substitute for obtaining specific legal or tax advice from their own professional legal or tax advisors. References to specific securities and their issuers are for illustrative purposes only and are not intended and should not be interpreted as recommendations to purchase or sell such securities. Indices and trademarks are the property of their respective owners. Information is subject to change based on market or other conditions.

Investing involves risk- no investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment.

Simulated and actual past performance is not a reliable indicator of future results and should not be the sole factor of consideration when selecting an investment product or strategy.

Forward-looking statements and assumptions are Northern Trust's current estimates or expectations of future events or future results based upon proprietary research and should not be construed as an estimate or promise of results that a portfolio may achieve. Actual results could differ materially from the results indicated by this information

Northern Trust Asset Management is composed of Northern Trust Investments, Inc. Northern Trust Global Investments Limited, Northern Trust Fund Managers (Ireland) Limited, Northern Trust Global Investments Japan, K.K., NT Global Advisors, Inc., 50 South Capital Advisors, LLC, Belvedere Advisors LLC and investment personnel of The Northern Trust Company of Hong Kong Limited and The Northern Trust Company. © 2021 Northern Trust Corporation. Head Office: 50 South La Salle Street, Chicago, Illinois 60603 U.S.A.

Issued in the United Kingdom by Northern Trust Global Investments Limited. Issued in the EEA by Northern Trust Fund Managers (Ireland) Limited.

NORDSIP INSIGHTS 14 SUSTAINABLE FIXED INCOME 2021

<sup>3</sup> Emissions Gap Report 2021, https://wedocs.unep.org/bitstream/handle/20.500.11822/36999/EGR21\_KMEN.pdf

<sup>4</sup> Robert G. Eccles and John Mulliken, Oct. 7, 2021.

<sup>5</sup> UNPRI, Net Zero Investment Consultants Initiative (NZICI): Guidance and Q&A, https://www.unpri.org/download?ac=14611

https://www.unpri.org/credit-risk-and-ratings/do-esg-information-providers-meet-the-needs-of-fixed-income-investors/8067.article



Sustainable fixed income investors have to thread a complicated line between being at the forefront of impact while overcoming fears that their investments are conducted at the detriment of financial returns. However, no such trade-off is necessary according to Simon Bond, Executive Director in charge of the Responsible Investment Portfolio Management at Columbia Threadneedle Investments.

With over 35 years in the field and responsible for developing and managing Columbia Threadneedle's suite of UK, European and Global social bond funds, the manager is confident in the ability of fixed income markets to support global social charge. Whether as an investor or as a member of the community pushing for better and clearer standards, through labelled or general-purpose fixed income securities, the role of fixed income investors is crucial in pushing society towards a fairer future.

### **Pioneering Social Bonds**

According to Bond, Columbia Threadneedle's original social fund was set up in response to a unique request. "The Big Issue, a street newspaper, approached us nearly 10 years ago to set up what came to be the Threadneedle UK social bond fund. They wanted a product that shared their values of advancing social good by getting people to work rather than through charity."



Simon Bond
Executive Director
Columbia Threadneedle Investments

1.Primary Needs	<ul> <li>Affordable Housing</li> <li>Social housing</li> <li>Key worker housing</li> <li>Independent living housing</li> <li>Care homes</li> </ul>	11 SUSTAINABLE CITIES AND COMMUNICIES
2.Basic Needs	Health & Welfare     Physical health     Mental health     Healthy living     Rehabilitation & support	2 ZENG MINISTR  3 GOOD HEALTH AND WELL-SEING
3.Social Enabling	<ul> <li>Education &amp; Training</li> <li>Primary &amp; Secondary</li> <li>Voccational training &amp; apprenticeships</li> <li>Further &amp; Adult education</li> </ul>	1 POVERTY 5 GENDER TOURLITY 4 COUNTRY は COUN
4.Social Empowerment	<ul><li>Employment</li><li>Creation of jobs in deprived areas; and</li><li>Good employment standards</li></ul>	8 BECEN WORK AND COMMAND TO SEQUELITIES SEQUELITIES
5.Social Enhancement	<ul> <li>Community</li> <li>Local amenities, services&amp; environment</li> <li>Care services</li> <li>Personal (e.g. elderly)</li> <li>Other community services</li> </ul>	11 AND COMMANDES  6 CLEAN MATER  15 UPF ON LAND  AND STRIPTING INSTITUTIONS  TO THE COMMANDES  16 AND STRIPTING INSTITUTIONS
6.Social Facilitation	<ul> <li>Access to Services</li> <li>Affordable financial products</li> <li>First-time mortgages</li> <li>Professional services</li> <li>Communication &amp; broadcast services</li> </ul>	10 NERVED NECOMITES 8 DECENT WORK AND ECOMONIC CHOWNTH STATE OF THE PROJECTION OF TH
7.Social Development	Regeneration & Development  Sustainable development  Public & community transport  Urban & community regeneration  Infrastructure & utility development	9 NORTH INCOMENT  2 STRO SHORE TO CLARA DESIGN  13 CIMANT  CLARA DESIGN  CLA

"We worked together to define seven types of social needs and associated desirable social outcomes, an approach founded on Maslow's hierarchy of needs<sup>1</sup> that remains a foundation of our investment process. Our second task was understanding how those social outcomes could be delivered through fixed income investments. Their request reminded me immediately of the Peabody Trust Housing Association, which was set up to provide housing for the London poor, as part of the legacy of George Peabody, a American Victorian philanthropist. I had come across their work 20 years prior to the Big Issue's query and it was my first encounter with the idea that it is possible do good while earning a financial return," Bond says. Inspired by the example of the Peabody Trust Housing Association, the Columbia Threadneedle social bond strategy focused on housing associations, universities, the Wellcome Trust, and such organisations.

Environment & agriculture

The resulting Threadneedle UK Social Bond fund was the first of the franchise and preceded the International Capital Markets Association's Green and social Bond Principles. According to Bond, the fund received seed investments in December 2013,

before the remaining investors joined in January 2014. "When we were talking about how we develop the social bonds within ICMA in 2016, I was the only manager on the committee that actually had a social bond fund set up and buying bonds. This was one year before we issued the guidelines ahead of the actual publication of ICMA's social bond principles in 2017," Bond explains. The fund Theadneedle (Lux) European Social Bond was launched in 2017, followed by the Global Social Bond mandate in 2018.

### What is a Social Bond?

According to the portfolio manager, a social bond is a bond that delivers for society, in addition to generating a financial return. "The fund rejects preconceptions that doing good requires foregoing financial returns. We think it is possible to do both. We think that if you take the corporate bond risk, you should get a corporate bond return. No sacrifices are required. But on top of the financial return, a typical social bond also delivers for society in at least one of the target areas defined by our social partner," Bond explains.

NordSIP Insights 16 Sustainable Fixed Income 2021

Maslow, A.H. (1943). "A theory of human motivation". Psychological Review. 50 (4): 370-396. CiteSeerX 10.1.1.334.7586.

## "Green bonds allow us to buy government bonds because we know where the money is going to be spent."

Columbia Threadneedle's social bond funds follow their own pioneering path. "We don't just exclude sectors and issuers. Having started before ICMA came up with its principles, we've always invested beyond ICMA-branded social bonds, including standard, general-purpose bonds. We buy any bond whose funds we can follow through the use of proceeds and identify through evidence that they generate a net good to society. We're looking to optimise what we call social alpha - the good that we do for society," Bond explains.

### **Championing Social Investments**

The fund Threadneedle (Lux) European Social Bond's investment process is illustrative of the approach taken by Columbia Threadneedle's suite of social bond funds. As a first step, the fund applies a series of minimum standards to ensure the bonds selected are fit for purpose, including exclusion for companies in violation of international conventions, polluting or socially detrimental industries, and controversial entities.

The goal of the fund is to support projects that help people overcome hurdles along Maslow's hierarchy of needs. "One of the key elements in the filters applied by the fund is the Social Needs Category, which flows from a social hierarchy-of-needs approach, whereby more primary and basic needs (e.g.: affordable housing, healthcare) are prioritised over more general need investments such as infrastructure projects," Bond adds.

According to the fund manager, investments are also mapped onto to the UN Sustainable Development Goals (SDGs). Although the fund targets all SDGs, it has mainly impacted SDG 11 ("Sustainable Cities and Communities"), SDG 9 ("Industry, innovation and Infrastructure"), SDG 8 ("Decent Work and Economic Growth") and SDG 7 ("Affordable and Clean Energy"), according to Bond.

### **Constructing the Social Bond Portfolio**

Columbia Threadneedle sought to do three things in portfolio construction for this fund. "First, we want to optimise social benefits for society. We also want to deliver the financial return that matches the risk investors are taking. Lastly, this is a daily priced fund, so we need to ensure liquidity," Bond says. These objectives have an important effect on some of the fund's investment preferences.

2 Bank Nederlandse Gemeenten

"When the fund was launched, our thought was that a social bond was just a corporate bond with two additional covenants. The use of proceeds covenant ensures that the money goes only to predefined projects, while the information covenant ensures annual reporting on the impact of the money spent. Given this perspective, social housing bonds are a natural target of the fund. The very first social bond after the publication of ICMA's social bond principles was issued by BNG² for social housing in the Netherlands. Given my early experience, the first entity I considered was the Peabody Trust Housing Association, whose bonds we still hold in our portfolio. Housing is a primary need at the top of Maslow's hierarchy of needs," Bond continues

Originally, the social bond fund did not invest in government bonds. "We didn't know where the money was going. Actually, we knew that some of that money was going to areas we didn't want it to go to like conventional and nuclear weapons. But when, Poland, France, Spain, the UK, and other countries started issuing green bonds, this opened the door to us using government, agencies and supranational bonds that deliver for society for liquidity purposes," Bond adds.

"Green bonds allow us to buy government bonds because we know where the money is going to be spent. Earmarked government bonds are very useful to ensure the liquidity of the fund. They are net positive for society and they are very easily traded," Bond continues.

According to the fund manager, the introduction of green and social government bonds also creates broader opportunities than those available in equity markets. "The opportunity set is much, much wider in the bond market than what would be available in the equity market. Entities issuing bonds, such as charities, local authorities, agencies, supranationals, governments, allow investors to gain exposure to projects that are unreachable through common equity," he argues.

#### **Monitoring Intentionality and Social Quality**

The fund manager is keen to emphasis the importance of independent oversight. To this end, an independent Social Advisory Panel oversees the funds' investments and ensures that management is consistent with the funds' social purpose. "We

### "The bond market allows investors to focus on outcomes and impact in very specific ways. Equity investors generally operate in the secondary market."

report to the Social Advisory Panel every quarter on our exposure to each particular area of social outcome through our inhouse social categorisation of intentionality and intensity scores."

According to Bond, the fund performs its own scoring of each investment opportunity, evaluating the social characteristics and expected impact of each bond in two parts. Bonds receive a letter grade assessing the intentionality of the bond. The letter grade assessment defines Impact Categories ranging from A to C.

"Category A bonds are said to have a 'social impact' and the funding is designed specifically to generate positive social impact, development or change. Category B bonds are said to be 'investments with impact' and fund projects likely to generate expected and identifiable social impact for individuals, either indirectly or without specifically disclosed intentionality. Category C bonds are said to be 'development finance & global impact Investments' and that support capacity, infrastructure and other sources of positive social externalities. The structure of the scores echoes our preferred hierarchy of needs so that investments in social housing get slightly higher scores than those in health or education, which themselves score higher score than infrastructure," Bond explains.

"Lastly, fixed income securities also receive a numbered grade assessing their quality and depth. The numbered grade generates an Intensity score, from 0 to 31, which translates into an Intensity rating ranging from 1 to 4, 1 being Strong and 4 being Minor," Bond continues.

### **Deprivation, Deeper Impact and Engagement**

According to Bond, the funds' seven social targets are driven by a preoccupation with the mitigation of deprivation and the promotion of impact. "Given the geographical dispersion of our investments, we had to take an approach that provided a meaningful understanding of deprivation, deprived constituents of society and deprived communities. Our approach echoes the research of Wilkinson and Pickett<sup>3</sup>, which considers that deprivation, as a concept, is best understood as a relative within-country effect. People don't feel deprived relative to somebody on the other side of the continent. They feel deprived relative to their neighbors," the fund manager says.

"The bond market allows investors to focus on outcomes and impact in very specific ways. Equity investors generally operate in the secondary market. Their investments can help with price discovery and signal the quality of the investment, but they don't actually achieve the impact that buying a bond when it is launched does. Primary bond market investors are able to leverage the funding needs of issuers during auctions and syndications, a time when borrowers are likely to be most responsive and receptive to the demands that social bond investors looking to make an impact," Bond argues.

According to Bond, investors in sustainable fixed income securities also need to dig into the details, engage with the use of proceeds and with the issuing entities. "The motto of the property market is 'location, location, location'. The focus on this particular side of the market needs to be 'engagement, engagement engagement," he adds.

"Our opportunity to engage with companies tends to be strongest when issuers want something. In this sense, engagement opportunities coincide with impact opportunities. Sustainable fixed income investors focus on new issues because that's when we can be more impactful. This is when investors have to roll up their sleeves, ask difficult questions and engage with borrowers," he continues.

Investors such as Bond can also contribute by participating in a number of advisory bodies looking to set new guidelines and principles. Bond, for example, sits on the Advisory Council for the impact investing Institute, which was set up by a UK government task force in 2018. He's also on the Social Bond Principles Committee of the ICMA and was an enthusiastic campaigner for the development of the UK sustainable government bond market, including the green gilt a campaign for which he launched in May 2019.

"There's quite a lot that goes on under the radar. It is not just about running a fund. We are not simply buying bonds. We are trying to change the market and encourage issuance and origination, helping banks structure bonds in a way that makes them fit for the purpose of targeting social good," Bond concludes.

NordSIP Insights 18 Sustainable Fixed Income 2021

<sup>3</sup> The Spirit Level: Why More Equal Societies Almost Always Do Better. London, Allen Lane, 5 March 2009. ISBN 978-1-84614-039-6



Looking Behind the Label

by Julia Axelsson, CAIA

"We quite like the fact that SLBs push for specific change on a company level and can therefore have an impact in the real world."



Annemieke Coldeweijer Co-Lead PM, Euro Credit Sustainable Strategies NN Investment Partners

Just a few years ago, the sustainable fixed income market was limited to the issuance of green bonds. Since then, however, it has developed to include an array of debt instruments. The family has expanded to social and sustainability bonds and branched out into a variety of more specific alternatives, like pandemic bonds.

Prominent among those innovative fixed income instruments are sustainability-linked bonds (SLBs). Due to their more flexible structure, SLBs provide an alternative solution to transitioning companies, which are unable to issue project-related green bonds. However, that same flexibility means that they need to be handled with extra care.

Annemieke Coldeweijer, Co-Lead PM of the successful Euro Credit Sustainable strategies at NN Investment Partners (NNIP), guides us through some of the pros and cons of these innovative fixed income instruments. To start with, she admits she finds it challenging to strike the right balance between being supportive and critical of SLBs. "There is definitely plenty of room for improvement when it comes to SLBs," she says. "Yet we try to keep an open mind and apply a constructive approach to these newcomers," she adds.

### **Driving Transition**

So, what are SLBs and what makes this particular type of bond special? According to the International Capital Market Association (ICMA), an SLB is a bond with financial or structural characteristics that vary, depending on whether the issuer achieves some predefined sustainability objectives. It is a forward-looking, performance-based instrument with a flexible structure. SLB issuers define some key performance indicators (KPIs) aligned with their sustainability strategies. This allows the issuers to set more general, overarching sustainability goals rather than being tied to financing specific projects like solar power plants or green buildings.

"We quite like the fact that SLBs push for specific change on a company level and can therefore have an impact in the real world, which is exactly what we are looking for with investments in our sustainable credit strategy" says Coldeweijer. "There is certainly a role for SLBs to play as a complementary financing tool for those companies that are unable to find enough possibilities to issue bonds that require dedicated projects to be financed," she adds.

NordSIP Insights 20 Sustainable Fixed Income 2021

"In the end, SLB is just a label, and labels do not release you from doing your own analysis as an investor and being critical of the company you invest in, labelled or not. It is what is behind the label that really matters."

### **Plenty of Pitfalls**

Yet, the very same flexible structure of the SLBs gives rise to some doubts as well. Moving away from the established use-of-proceeds structure means that investors have less transparency about how the issuer of the bond will use their money and how much impact it could generate. "With no clear framework, it is still very much a matter of trial and error," comments Coldeweijer.

Another pitfall that investors should watch out for, according to Coldeweijer, is the customised KPIs that SLBs' issuers choose. "Unfortunately, these are not always ambitious enough, she says. "We would like to see issuers choosing bold targets, preferably verified by an external party, such as the Science Based Target Initiative. Also, they should realise that a Scope 2 emissions-related target is not enough and take that extra step to set Scope 3 emissions goals. In the selection process for our sustainable credit strategy, trying to align with the below 1,5-degree Celsius scenario is very important and that includes Scope 3 emissions," she adds.

In addition, there are concerns that customised KPIs could make it easier for issuers to indulge in "sustainability washing" by moving the goalposts and tweaking the objectives to suit their needs. "All in all, from the investor's perspective, it is important to be critical and to evaluate whether the KPIs of an SLB are robust and that all the checks and balances are in place to ensure this is the case," advises Coldeweijer. "But there is also a need for more transparency. Investors should have more information on what the company's position is vs the targets set and what concrete actions are taken. Not only at issuance or maturity of the bond, but also during the lifetime," she says.

There is also a potential moral hazard for investors in SLBs. A standard structure for these instruments includes a coupon step-up feature. It means that an increase in interest rate payments is triggered when an issuer doesn't meet the predefined sustainability objectives. The investor will, thus, benefit from a company's failure to deliver on its sustainability ambitions and goals.

### **Just Like Any Other Bond**

"The truth is, not many of the SLBs issued so far meet our sustainability standards," says Coldeweijer. "We don't treat them differently from any other bonds, really. We apply the same careful analysis, focusing on the issuing company's sustainability profile," she explains.

Coldeweijer guides us through the key features that she and her colleagues are looking for when analysing an SLB. "As always, it is important that the issuer is committed to a more sustainable future and its SLB framework and sustainability strategy are well aligned. Transparency and corporate disclosure are key when it comes to assessing the impact of an SLB and a company's ESG targets and achievements," she explains.

Data and reporting on sustainability are still a challenge for both companies and investors, and although increasing regulatory requirements are improving standards, there is a long way to go. "This is why in our bond selection process, we do not rely solely on data from the companies themselves or on third-party ESG data sources alone," says Coldeweijer. "We carry out our own thorough ESG analysis of the issuer, both qualitatively and quantitatively. This ensures we develop a proprietary view on the sustainability performance before investing in any issuer and in any bond," she adds.

Coldeweijer's balanced scepticism toward SLBs is manifested in NNIP's Sustainable Credit portfolio, managed by her. Currently, there is only one SLB in the portfolio. According to her, she pays more attention on whether companies have ambitious sustainable targets and are Paris-aligned, rather than on their ability to issue labelled bonds.

"In the end, SLB is just a label, and labels do not release you from doing your own analysis as an investor and being critical of the company you invest in, labelled or not. It is what is behind the label that really matters," concludes Coldeweijer.



NordSIP Insights 22 Sustainable Fixed Income 2021

"In the end, SLB is just a label, and labels do not release you from doing your own analysis as an investor and being critical of the company you invest in, labelled or not. It is what is behind the label that really matters."

The market for sustainable finance is growing at a fast pace. As the quantity build-up progresses, not least within fixed income, quality is increasingly becoming a concern for investors and issuers. There is a lot of talk about "green washing" and now also about "social washing". On the regulatory side, partly as a response to such washing tendencies, the green taxonomy is already a reality. According to Christian Ragnartz, Head of Debt Management at Kommuninvest, getting quality right is a crucial factor in making sustainable finance work in the long run.

### **Quality Minddness On The Rise**

Over a period of little more than five years, the sustainability segment of the fixed income market has transformed from marginal to big business. Fixed income might still be lagging behind equities in sustainability integration. But probably not for much longer. The dynamics around sustainable bonds is getting stronger by the day. In a recent report on green bonds, SEB, the Swedish bank, predicts that the sustainable debt market, of sustainability-themed bonds and loans, will reach a total volume of USD 1.5 trillion by the end of 2021 and could expand to more than USD 2.0 trillion in 2022.

"Having started off more or less from zero, the growth of sustainable fixed income has been staggering. And there is every reason to believe that growth will be strong in the coming years as well. One of the core takeaways from COP26, which everyone seems to agree on, is that investments in the green transition will have to be quite heavily front-loaded – more than previously imagined – to deliver on the commitments of the Paris Agreement. For that to happen, bold and extensive green financing is essential", Ragnartz

In any fast-growing market or market segment, however, it is not uncommon to see that quality struggles to keep up with quantity.

"In the early years of large-scale sustainable fixed income, the quality mindedness of investors and issuers has varied a lot. There have been some excellent-quality products. But there have also been products that could not live up to the sustainability stamps put on them. "Green washing" is an issue

and "social washing" is becoming one. That said, I believe that this pattern is now starting to change. Lately, a significant number of investors have taken substantial steps forward in demanding top quality products. Quality mindedness is quickly on the rise. "Washing" tendencies are actively targeted. This is a trend that will probably have important implications in the market", he says.

#### **Stricter Frameworks**

The logical response from issuers to a tougher line from investors would be to sharpen up their bond frameworks.

"As an issuer with sustainability-labelled products, a crucial part of your job is to continuously provide investors with a clear picture of the impacts generated by the investments. You need to be fully transparent. And in the long run, the investment projects in your portfolio will, at least for the major part, have to demonstrate contribution. Issuers that have so far failed to meet such standards, and are unwilling to change, will have to be prepared for a difficult time with stricter investors", he says.

"At Kommuninvest, when establishing our Green Bonds Framework, we decided to go for a strict set-up right from the beginning. Every investment project has to be approved by an expert committee based on specific requirements. Every Green Bond is issued against a portfolio of existing investment projects. Detailed impact reporting is carried out on a regular basis. Within a business model of only lending to the municipal sector in Sweden, this programme has become successful. On the Green Loans side, we now have more than 500 approved investment projects, reflecting loan commitments of more than SEK 80 billion, in our portfolio. On the Green Bonds side, we have a total volume of approximately SEK 57 billion in outstanding bonds", he says.

Launching in the spring of 2021, Kommuninvest recently strengthened its sustainability offering by adding a social perspective. Municipalities and regions, and their companies, can now fund appropriate investment projects via Social Sustainability Loans. So far, seven loans of this type, adding up to SEK 614 million, have been approved. A lot of thought

"In the end, SLB is just a label, and labels do not release you from doing your own analysis as an investor and being critical of the company you invest in, labelled or not. It is what is behind the label that really matters."

was, over two years of preparations preceding the introduction, put into considering which strategic line to take.

"Because our lending is restricted to the municipal sector, which produces the major part of social welfare in Sweden, we could hypothetically have opted for an approach of giving a large part of our regular loans portfolio a "social stamp". But we realized that this would not have been the right path to take. In order to make a real difference for social sustainability, and to create a high-quality product that would meet investor demands also in the long run, we chose a strict set-up for our Social Bonds Framework, building on the core pillars of our Green Bonds Framework. This means that every loan has to be approved by an expert committee, that we will be building up a substantial loans portfolio before issuing our first Social Bond and that we will do proper impact reporting as the programme gets going", he says.

"When talking to colleagues within the financial sector, there seems to be broad agreement that social financing is more difficult than green financing. Assessing outcomes and impacts linked to social investments is inherently more complicated compared with green investments. We are still at an early stage and there is, for investors and issuers alike, a lot to learn. Also for the ultimate borrowers, the municipalities and regions in our case. It is clear from our initial work that the use of impact assessment needs to be both broadened in use and improved in quality", he says.

### Taking The Taxonomy On Board

An important item on the agenda of many actors in sustainable fixed income is how to take the EU's green taxonomy, and an upcoming European Green Bond Standard, onboard in the development of bond frameworks. Kommuninvest is no exception.

"The establishment of the green taxonomy is generally a good thing. To have a standardized "language" for how to communicate about green investments will in many ways be useful. At the same time, there is a risk that the detailed rules of the taxonomy will become too bureaucratic and inflexible to be easily

transformed into practical use. Regarding the social taxonomy, we are for the time being in a wait-and-see mode. We still do not know what might come out of the political process", he says.

"We are in dialogue with investors, banks and relevant actors within/linked to the municipal sector in order to develop a carefully crafted approach for introducing the taxonomy into our green financing programme. We are particularly attentive to what consequences our choice of approach would have on developments on the ground. The overarching priority will always be to speed up, not to slow down, the green transition of the municipal sector. As in everything else that we do, good quality must be secured", Ragnartz concludes.



David Ljung Chief Communications Officer Kommuninvest

NORDSIP INSIGHTS 24 SUSTAINABLE FIXED INCOME 2021

### Another record year for

## Sustainable Bonds

by Filipe Albuquerque

As expected, 2021 saw global sustainable fixed income markets reach and exceed the US\$1 trillion mark in issuance. The new record was driven by an explosion in the issuance of sustainable debt by public sector entities and by corporates, particularly real estate companies. Green bonds issuance almost doubled while the issuance of sustainability-linked bonds (SLBs) grew to almost ten times its level last year. Going forward, the market consensus seems to be for another buoyant year in sustainable fixed income markets in 2022.

### Green Bonds Dominate but SLB Growth Explodes

In 2021, green bonds remained the dominant focus of the market, representing over 55% of all sustainable bonds issued according to data from Danske Bank and Bloomberg. However, the popularity of SLBs continued to grow during 2021, with SLB issuance expanding from US\$10.5 billion in 2020 to US\$100.1 billion so far this year. H&M set the trend for the year in February, with the issuance of a €500 million SLB tied to the increase in the share of the usage of recycled materials and the reduction of CO2 emissions.

"The introduction of Sustainability-Linked Bonds has opened up the sustainable bond market to issuers who didn't necessarily find a place in the green bond market. This can be companies with limited capex investments, and where the use-of-proceeds setup simply doesn't work, or it can be companies that are not yet green enough but who have set ambitious targets to get there. Again, it is about transparency as well as accountability and where SLB creates a link between the issuers sustainability performance and cost of capital," says Nina Ahlstrand, Head of Sustainable Finance at Norwegian bank DNB. "As of Q3, 15% of bond volumes issued in the Nordic region had a sustainable label (including green, social, sustainability and SLB), up from 8% in 2020. Globally the number was 5%, up from about 2% in 2020," Ahlstrand adds.

Swedish steel company SSAB issued its inaugural SLB, worth SEK2 billion in floating rate notes on June

9th. "The transaction attracted very high investor interest. The credit itself was a strong factor in this, but the sustainability structure also offered ambitious and material impact – something that investors appreciate," Anna Reuterskiöld, Investment Banking Associate, Sustainable Finance, at DNB Markets notes.

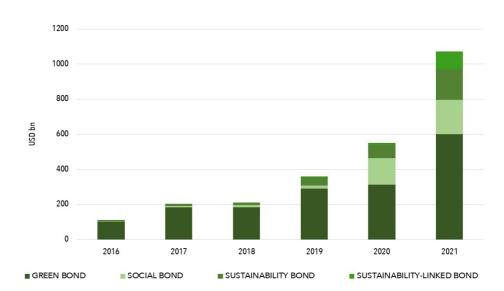
Moreover, on the first day of September, European Energy issued a new €300 million green senior corporate bond. At the time of issuance, the security was expected to be the largest green bond of a corporate issuer to be listed on Nasdaq Copenhagen to date. Reuterskiöld describes the transactions as "a very well-received return to the market".

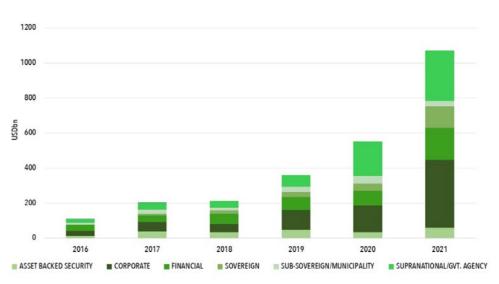
In October, Swedish aluminium company Gränges issued a five-year SEK600 million sustainability-linked bond tied to a reduction in Scope 1 and 2 CO2 emissions, a reduction in CO2 emissions intensity (Scope 3) and an increase in the share of recycled aluminium. "The bond was very well received by the investor community, allowing the issuer to price at a very attractive level," says Lars Mac Key, Head of DCM Sustainable Bonds at Danske Bank. The bond was also the first SLB to list on the Nasdaq sustainable Bond list.

Kährs, an innovative manufacturer and distributor of flooring, issued an inaugural SEK1.45 billion SLB at the end of November. The bond is linked to the achievement of three defined sustainability goals that are aligned with the group's sustainability strategy, focusing on emissions reductions, the definition of science-based CO2 emission reduction and an increase in the share of sustainably sourced wood. "This is a prime example of a company reaching towards ambitious goals and inviting investors along for their sustainability journey," Reuterskiöld says.

In December, Elekta entered the SLB market with the first social target in the SEK market. "Elekta's SEK1.5 billion inaugural SLB drew a lot of attention despite the time of the year when markets are usually closing down. Elekta's SLB focuses on increasing the global access to cancer care in underserved markets. If Elekta reache it's ambitious target, it will mean additional

### Sustainable Bonds Issuances





Sources: Bloomberg, Danske Bank

annual cancer treatment of 400,000 patients in the areas where it's most needed, contributing to close the gap behind SDG 3.4 for non-communicable diseases," Mac Key argues.

### SSAs and Real Estate Lead the Way

Sectorally, supranationals, sovereigns and agencies (SSAs), and corporates led the way, representing approximately 40% and 36% of the market, respectively. Within SSAs, two transactions in particular stand out.

In the middle of April, German development bank KfW issued the largest non-sovereign green bond to date, worth €4 billion. The security pays a zero-coupon and was priced through KfW's conventional bond curve. Six months later, the European Commission broke KfW's record when it issued its inaugural green in the middle of October and. Following its takeover of the social bonds market in the autumn of 2020, this first NextGenerationEU

green bond was the largest green bond issuance anywhere ever. The 2037 green bond is worth €12 billion in funds to be used exclusively for green and sustainable investments across the EU.

The Nordic market was particularly important for corporates, with issuance in Swedish Krona representing 43% of this sub-segment. Among corporates, real estate was dominant in the Nordics, where it represented over 65% of the private sector market according to data from Danske Bank and Bloomberg. The real estate sector is a crucial part of tackling climate change. According to the UN Environment Programme Finance Initiative (UN EPFI), "the buildings sector" contributes to 30% of the annual global greenhouse gas (GHG) emissions and consumes around 40% of the world's energy. Thus, the issuance of sustainable bonds, particularly of the green variety is crucial for the fulfilment of the Paris Agreement's commitments.

NORDSIP INSIGHTS 26 SUSTAINABLE FIXED INCOME 2021



Katya Nolvall Head of Sustainable Capital Markets Swedbank

In May, Kojamo Plc, the largest private residential real estate company in Finland, issued its €350 million 8-year inaugural green bond to finance or refinance investments that promote energy efficiency of buildings. Two weeks later, Citycon launched a €350 million green hybrid bond, without maturity and coupon that will be regularly reset. In August, Sweden's Genova announced it had tapped a senior unsecured covered green bonds. The company is a modern real estate company that owns, manages and develops properties with a focus on Greater Stockholm and Uppsala.

Most recently, Swedish real estate company Diös Fastigheter issued what appeared to be the first (preliminary) green bond specifically hoping to comply with the upcoming European Green Bond Standard. "While the use of the European Green Bond Standard and EU Taxonomy is voluntary for thematic bond issuance, taxonomy related disclosures for investors, financial institutions and large companies is not. Given that Taxonomy-alignment is a critical and work-intensive part of issuing a European Green Bond, there will be a strong momentum building up in favour of European Green Bond structures in the next 18 months as entity-level taxonomy disclosures ramp up," said Tobias Lindbergh, Head of Sustainable Finance at Handelsbanken Debt Capital Markets on this occasion. Handelsbanken acted as Green Structuring Advisor to Diös' green financing framework and as a dealer on this transaction.

"The market has experienced stellar year-on-year growth for many years now, and what with this year's global issuance volume of sustainable bonds already surpassing last year's total volume a good while back, this year looks no different," Reuterskiöld, notes. "I find it encouraging how many new issuers have entered and are looking to enter the market. We need every company to do what they can, so new issuance from entities that have never before issued sustainable debt is always encouraging – together with habitual issuers of course who give the market their stamp of approval by returning," Reuterskiöld adds.

### A Buoyant 2022 Ahead

Going forward, the market expects sustainable fixed income markets to continue to grow, with everyone expecting SLBs to continue to drive growth. "We predict continuous growth in 2022, with potential to reach US\$1.5 trillion in issuance. Euro-denominated issuance will continue as the main driver, with the EU, corporate issuers and the SLB format as the main drivers of added issuance," says Mac Key.

At Swedbank, Katya Nolvall, Head of Sustainable Capital Markets, sees three trends continuing into 2022. "First, we expect issuers to continue fine-tuning the SLB set up through combining green and sustainability-linked elements. For example, we have seen Bank of China introducing sustainability-linked loans as a green eligible asset-category, the renewables company Verbund has issued a bond complying with both green and sustainability-linked criteria and Grängers has written a combined green and sustainability-linked bond framework enabling the issuance of either green of sustainability-linked bonds. Second, we expect the International Capital Market Association (ICMA) to give more guidance for best practice on communication of ESG strategy



Lars Mac Key Head of DCM Sustainable Bonds Danske Bank

and targets in part one, "about the company", in ESG related frameworks. Finally, following the ratification of the Sustainable Finance Disclosures Regulation (SFDR) in March 20210, investors are increasingly looking for information on their investments' EU Taxonomy alignment, both on company and bond level,

Although DNB also expects SLBs to continue to grow in 2022 it is keeping an eye on EU regulations. "With the proposed introduction of an EU Green Bond Standard, we expect to see issuers with large enough investments in EU Taxonomy-aligned activities to start issuing EU Green Bonds. This may become a gold standard in the European market, but in the short to medium term we do not expect it to crowd out green bonds following other standards. The Taxonomy-aligned share of the market can be expected to so far be very low, and it doesn't yet cover all sectors. Standards can be expected to rise naturally over time, and to reach the Paris Agreement we need to see all sectors contributing. Green bonds, irrespective of standard, should still provide investors with additional transparency, making it easier for them to identify sustainable investments," Ahlstrand adds.

"As corporates set Science Based Targets at a rapid pace - aligned with the Paris Agreement and suitable for Sustainability-Linked financing - we see a great potential for growth in SLBs, already a dominant product in the loan market. We predict a potential 2022 slowdown in Social Bond issuance if the pandemic alleviation need decreases, e.g. the EU shifted into Green Bonds in 2021 – post-pandemic rebuild of the economy will partly be green," Mac Key argues.



Anna Reuterskiöld Investment Banking Associate Sustainable Finance DNB Markets



Nina Ahlstrand Head of Sustainable Finance DNB Markets

DNB is more sanguine about social bonds. "Ever since the start of the pandemic, we have seen a stronger focus on social factors (and higher issuance volumes of Social Bonds). That focus is likely to withstand the test of time, but also (as issuers and investors become more used to seeing well-rounded and multi-facetted sustainability structures that capture the most material aspects for the issuer in question) we are likely to see even more structures featuring both social and environmental aspects — as well as one of the two only in the cases where that is more relevant," Reuterskiöld says.

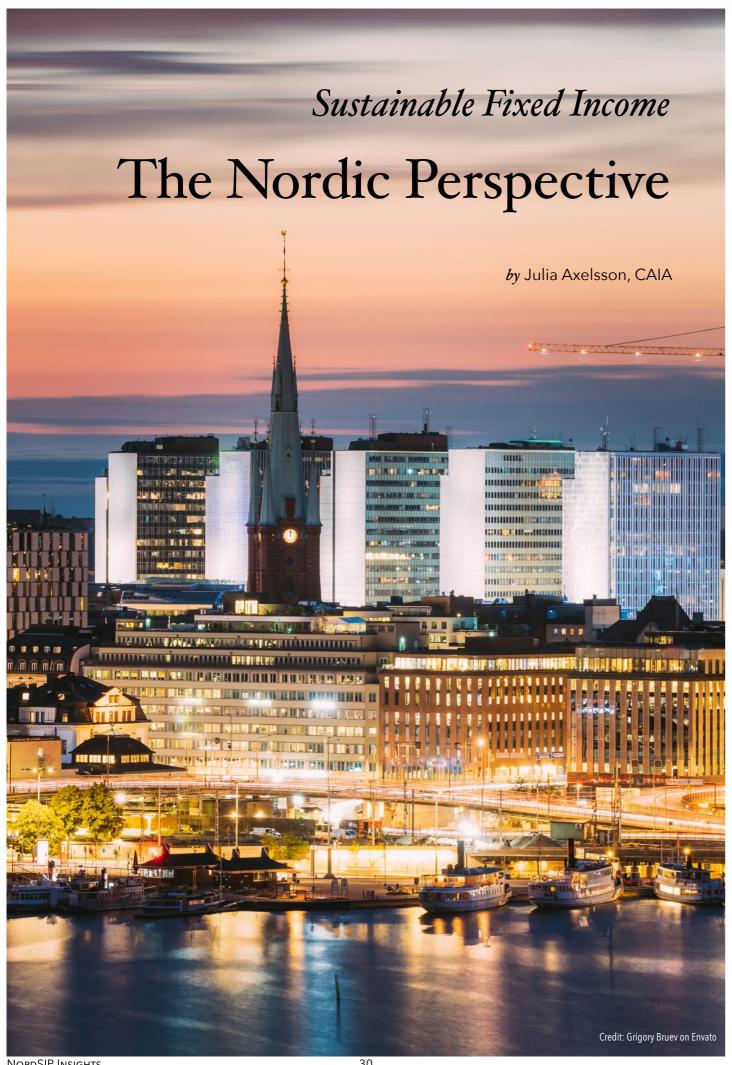
### **Growth Welcomed**

The increase in issuance will certainly be welcomed by investors who are starting to see premia on green and other sustainable bonds rise potentially beyond their comfort.

In the beginning of April, at Phenix Capital's online Impact Summit, Peter Lööw, Head of Responsible Investment at Alecta, warned against demand driving this greenium too far up. "The problem is that we are seeing very significant demand for green bonds in the Nordics, which pushes the limit on the pricing of those bonds. This is causing us to opt-out of some opportunities these days because they are just too expensive," Lööw said on that occasion.

"The problem is how much you should pay for that. It's acceptable to pay perhaps one or two basis points (bps), but we have seen instances of 10bps and 20bps. That's a little bit too much for us. I'm hoping it's an issue that supply can fix," he said noting that the present level of demand is likely to make the issuance of green bonds a standardised and more approachable funding channel for an increasing number of borrowers," Lööw added.

NordSIP Insights 28 Sustainable Fixed Income 2021





Karin Göransson Senior Portfolio Manager Handelsbanken Asset Management

"We strongly encourage all the companies we invest in to set up interim targets, in addition to their long-term ones. Partly because it makes a follow-up of the progress, and our impact, easier. But, also, because we can't keep postponing the solutions further into the future, we need to act now."

Equity markets have historically taken the lead when it comes to sustainable investing. In comparison, debt investors have been somewhat slower on the uptake. According to Morningstar, fixed income strategies still account for less than one-fifth of sustainable assets under management. A bit disappointing, given that the global bond market is twice the size of the equity market. Could it be that the tide is turning, though? To find out more about what is happening in this space, NordSIP interviewed three fixed income managers based in Sweden, all passionate about investing sustainably: Mattias Ekström, portfolio manager at SEB Asset Management; Karin Göransson, senior portfolio manager at Handelsbanken Asset Management and Stefan Ericson, Partner at Pareto Asset Management AS.

### **Gaining Sustainability Momentum**

Göransson starts by questioning the perceived status of fixed income as a sustainability laggard and calling it a misconception. "I wouldn't say that equity investors were so far ahead," she argues. "Fixed income managers have always been considering sustainability risks. And of course, dedicated sustainable debt has been growing rapidly ever since the launch of the green bonds market in 2007 and intensifying in the past few years."

It is true that many prudent fixed income investors have long been excluding unethical companies and sectors entrenched in fossil fuels as risk mitigation, agrees Ericson. Yet, he is also aware of the accelerating sustainability trend recently. Just a couple of years ago, in 2018, when Pareto was starting to discuss an Ecolabel certification, things looked different. "Neither the consultants at Nordic Swan nor we had any script to follow," he recalls. "There were simply no other certified fixed income funds at that point. Things have definitely picked up since, and we are lucky to have been part of this journey," he adds.

Just like Göransson, Ekström too emphasises the role that green bonds have played in the development. "We would argue that the concept of green bonds was the starting point for connecting fixed income investments with sustainability," he says. "Through project financing, it became possible to demonstrate the environmental impact from fixed income. This, in turn, has made discussions about sustainability and investing more prevalent in client dialogue and continues to increase to this day," Ekström adds.

### A Palette Of Opportunities

Given the variety of options sustainably minded Nordic fixed income investors have at their disposal - they can choose between debt issued by sovereigns or corporates, climb along the credit quality ladder from high yield to investment grade, opt for public or private debt, or go straight into impact alternatives like green, social, or sustainable bonds and loans - it is interesting to hear which ones they find the most attractive currently.

"The largest interest has been in the corporate space, both investment grade and high yield," says Ekström. "Companies are preparing for reporting in connection to the EU Taxonomy, which has meant that they are highlighting the environmental work they do. This has resulted in many companies coming to the market with labelled bonds, which makes it easier for investors to know what they are buying and the impact they get," he adds.

Global corporate credit is also Ericson's focus at Pareto. "Investing in green, social and sustainable bonds is just one way to play sustainability, however," he says. "We find many companies, especially in the high yield space, that say less than they actually do. Very often, they would issue unlabelled bonds that contribute significantly to sustainable economic growth," explains Ericson.

NordSIP Insights 30 Sustainable Fixed Income 2021

"The large interest in SLBs is just one example where Nordic investors have been quick to embrace a new way of making impact investments."



Mattias Ekström Portfolio Manager SEB Investment Management

Göransson, who can invest in bonds issued by sovereigns, municipalities, and corporates globally, tends to use the whole range. "Different clients want different things," she says. "Dedicated sustainable funds, like the one I am managing, classified as Article 9 and Swan Eco-labelled, are a good fit for those more interested in the impact they can achieve," she adds.

#### **Beyond Labels**

Asset managers may also opt to subscribe to different approaches when integrating sustainability into their fixed income strategies. Some find dedicated or thematic impact investing through labelled sustainable bonds and loans more attractive. Others claim that a broader fixed income portfolio, where ESG is integrated into the investment decisions, could achieve more.

"For us, these two approaches are not mutually exclusive," says Ekström. "Our fundamental ESG research forms the basis for our company sustainability ranking. Labelled financing in specific projects can have a larger positive impact than its parent company. To us, labelled investing has the added benefit of adhering to defined standards, which make them clearer to assess and follow up."

Göransson is essentially in agreement with him. At Handelsbanken AM, all fixed income investments are subjected to the same exclusion criteria, and a rigorous ESG analysis is part of the investment process. "The dedicated sustainability products, however, go a step further. To be included in a fund like this, a bond needs to have a clear purpose and measurable impact on a continuous basis," she says.

According to Ericson, active dialogue with the issuing companies is at the heart of Pareto's investment

approach. It is in discussion with the management that you can ask the important questions and indeed peek behind the labels. How does a green bond issuer treat social issues? Do the sustainability ambitions in the corporate strategy amount to more than beautiful words? "Covid 19 has actually been helpful when it comes to getting access to bond issuers all over the world," he comments. "And the dialogue is mutually beneficial. Especially some of the smaller companies appreciate our sustainability questions and suggestions," he adds.

### The Data Challenge

Turning to the specific challenges that sustainable fixed income investors face today, it is hardly surprising that all the managers interviewed mention data quality issues. "There is a lack of standardisation when it comes to sustainability reporting, which makes it difficult to compare similar investments in a like-for-like manner," points out Ekström. "To tackle this, we break down the company data and compare relevant parts to assess sustainability quality of investments. The absence of Scope 3 emission data can make certain sectors look better than what they are, as Scope 3 is typically the largest contributor to emissions. We are talking to data providers about improving the reporting universe."

Data and reporting are also a big challenge for Göransson and her colleagues. She is optimistic about the evolving regulatory framework, especially in Europe, and welcomes the various initiatives from other parts of the world as well. "It makes life easier for us, even if it doesn't mean we can skip our own thorough analysis," she says. "Measuring the impact, in particular, is a demanding endeavour. Hopefully, with standards developing and data providers shaping



up, it will be easier to gather and aggregate the impact data going further."

"Data providers try hard, but they are not quite there yet," agrees Ericson. "One thing we notice is the weak link between the ESG analysis of equities and bonds, issued by the same company," he says. A while ago, Pareto initiated a pilot project with S&P Global Trucost, launching what Ericson calls "a genuine attempt to estimate our portfolio's carbon footprint from a bottom-up perspective". "Having concrete data like this is incredibly valuable as a starting point for a discussion on environmental issues both with the companies we invest in and with our clients," he explains.

Another challenge, according to Göransson, is the tendency for companies to focus on long-term goals while sometimes neglecting concrete action now. "We strongly encourage all the companies we invest in to set up interim targets, in addition to their long-term ones. Partly because it makes it easier to follow the progress and our impact. But, also, because we can't keep postponing the solutions further into the future." Ericson expresses a similar sentiment. "We need to find solutions here and now, not in 2050," he says.

### A Brave New Fixed Income World

According to the managers, the sustainable fixed income space offers plenty of exciting new opportunities. They all mention the emergence of innovative fixed income products, like Sustainability Linked Bonds (SLBs), as a positive development. "Hopefully, we will see new sectors and new actors entering a market that currently tends to be crowded by real estate companies and projects," says Göransson. She is referring to SLBs more flexible

"Covid 19 has actually been helpful when it comes to getting access to bond issuers all over the world."

**Stefan Ericson** Partner Pareto Asset Management AS

structure that allows transitioning companies, including those on the high-yield credit spectrum, to tap into the capital of impact investors.

These new instruments can be, however, extra challenging to assess. "The various KPIs that the issuers choose to set for themselves might be relatively easy to follow up, but they are difficult to compare and aggregate. Also, we want to see truly ambitious targets, not just business as usual," warns Göransson. Ericson, too, is a bit sceptical of the popular new instruments. "SLBs are still at the stage where proof of concept is needed," he says. "I'd like to see them adopt proper and ambitious science-based targets," he adds.

"Nordic investors tend to be early adopters of new sustainability products," comments Ekström. "The curiosity from investors for smart new ways to help solve the climate crisis means that they are familiar with new regulation and impact. The large interest in SLBs is just one example where Nordic investors have been quick to embrace a new way of making impact investments," he adds.

Apart from innovative instruments, the future of sustainable fixed income is bound to pay attention to new issues, such as biodiversity, according to Göransson. She points out initiatives like TSFD branching out into TNFD as well as the development of the science-based targets for nature as examples. With new themes and instruments gaining traction and more financial actors getting onboard the sustainability transformation, the managers seem confident that the future of sustainable fixed income is bright. "There is no doubt that we are witnessing a pivotal moment in capital allocation," concludes Ericson.

NordSIP Insights 32 Sustainable Fixed Income 2021

### ATP's Green Bond Push

by Eugeniu Guzun

Danish pension provider ATP, Europe's fourth-largest pension fund, has announced plans to sharpen its climate ambitions to contribute to the global green transition. "We simply cannot afford not to," said ATP's CEO, Bo Foged, in October. As part of its longer-term objective of having DKK 200 billion in green investments by 2030 and half that by 2025, ATP has embarked on a process of shifting its U.S. high-yield credit bond exposure to investments in European green corporate bonds.

ATP runs a hedging portfolio and an investment portfolio, "with the hedging portfolio taking care of the guarantees that we have and the investment portfolio generating returns on top of the guaranties," explains Christian Kjær (pictured), Head of Liquid Markets at ATP. ATP has long been housing green bonds within its hedging portfolio, which oversees DKK 753 billion in assest under management as of the end of June.

"When we started looking at green bonds for the first time, we focused on our hedging portfolio," says Kjær. "The hedging portfolio is huge and we have a lot of capital there to hedge our guarantees, a big part of which is invested in bonds," continues ATP's Head of Liquid Markets. "We have long been working on getting green exposure into the hedging portfolio." At the midpoint of the year, ATP's holdings of green bonds amounted to DKK 36 billion. "The hedging portfolio needs very strong credits, therefore, the green bond exposure within this portfolio is limited to the sovereign and quasi-sovereign green bonds," explains Kjær.

This year, however, the Danish pension fund added green corporate bonds for the first time in its investment portfolio worth DKK 423 billion, which reflects leverage from borrowing from the hedging portfolio. "We are in the process of replacing our U.S. high-yield credit bond exposure with investments in European green corporate bonds," Kjær tells HedgeNordic. "That is one of the transitions within our portfolio. We are building up, quite slowly actually, our green corporate bond portfolio."

### **Green Bond Exposure in Investment Portfolio**

ATP's investment portfolio predominantly builds its credit exposure using credit default swaps (CDSs), which give credit exposure to multiple entities at once without holding the underlying bonds. "We have some credit bonds within the portfolio, but we actually prefer the CDS indices in order to preserve capital and get liquidity," says Christian Kjær. "We are not able to get a specific green exposure with the CDS indices, because they are simply indices." In its efforts to contribute to the global green transition, the team led by Kjær decided to replace its traditional corporate bonds with green corporate bonds.

"We decided to take the bonds within our investment portfolio and do whatever we can in terms of the green agenda and get exposure to the green transition," explains Kjær. "We shift as much cash as possible from the credit side within the investment portfolio to the green transition. That is why we started looking at green corporate bonds this year."

### **Green Washing**

As not all bonds called green are actually green, the ATP team has opted for a slow, measured and careful approach in transitioning a portion of its corporate bond portfolio to green bonds. "There are not that many issuers to analyze on the sovereign and quasi-sovereign side, which makes it much easier to make sure that there is no greenwashing," argues Kjær. The corporate bond market, on the other hand, is more difficult to navigate for a green bond investor. "There are a lot of issuers on the corporate side, so it is a little bit more difficult to make sure there is no greenwashing."

"ATP has been among the first investors in the world to start demanding closer communication with green bond issuers to ensure the greatest possible transparency about the projects they would be used for," says Kjær. "We have been a very active investor in green bonds, being in ongoing discussions with the issuers, which was new to us and to some extent new in the financial market in that the buy-side actually approached the issuers trying to improve



the framework, trying to mitigate greenwashing by expressing what our needs would be." ATP has maintained good cooperation with issuers such as the European Investment Bank (EIB), whose Head of Sustainability Funding, Aldo M. Romani, said earlier this year that "ATP has become a strategic business partner in the development of best practice when it comes to how to handle green investments."

"We are very aware of the dangers of greenwashing. We have a large team that helps us in the efforts to detect greenwashing. Every single bond is screened in order to minimize the risk of greenwashing."

"We are very aware of the dangers of greenwashing," points out Kjær. "We have a large team that helps us in the efforts to detect greenwashing. Every single bond is screened in order to minimize the risk of greenwashing," he continues. "We have put together a set of screening criteria, which allow us to assess the quality of the issuance and ensure transparency. We need to feel confident that the bonds that we think are green are actually green." Therefore, ATP continues to be in close dialogue with the issuers of green bonds to ensure that the pension fund is investing sustainably.

The green bond market has been growing significantly in the past few years, reaching a new global supply record in 2020. The global green bond issuance for 2021 is expected to exceed the previous year's level. "The market is growing exponentially in size, but it is also maturing in terms of what is green and what is

not green, and all these things around it," says Kjær.

### Two Sides of a Coin

Green bonds tend to offer investors slightly lower yields compared to conventional non-green bonds, with this yield difference known as the green bond premium or greenium. Christian Kjær and his team have also analyzed the green bond premium in the market, with the analyzis showing that "green bonds are priced very similarly to traditional bonds," according to Kjær. "You are more or less paying the same on average compared to other bonds."

Green bonds, however, may also exhibit slightly lower risks compared to their non-green counterparts. "As risk-focused investors, we have seen in our analysis that green bonds actually performed better on the risk side," points out Kjær. "It seems they have a bit more patient investors who do not want to sell that much," he continues. "There are two sides of the coin. The return side seems to be very similar. The other side of the coin is that they seem to be less risky than traditional corporate bonds. Risk mitigation is really important to us. Green bonds with lower risk than other bonds have tangible value to us."

This article features in HedgeNordic's 2021 "Alternative Fixed Income" publication.

NordSIP Insights 34 Sustainable Fixed Income 2021



## Do ESG Information Providers Meet the Needs of Fixed Income Investors?

by Filipe Albuquerque

To promote the transparent and systematic incorporation of ESG factors in credit risk analysis, the UN-supported Principles for Responsible Investment (PRI) launched the ESG in Credit Risk and Ratings Initiative in 2016. As of today, the initiative is supported by 28 credit rating agencies (CRAs) and 174 institutional investors managing US\$40 trillion in assets.

While the first phase of the initiative focussed on creating a dialogue between investors and CRAs to challenge and deconstruct misconceptions about ESG factors and credit risk, last year the PRI decided to reach out to broaden the outreach to other stakeholders, including ESG information providers who play an important role in supporting asset managers' ESG assessments. Following a survey to gauge the extent to which the data and services provided were useful to fixed income investors, the PRI engaged with 20 providers of different specialism and scope, focussing on the following areas: fixed income coverage, data quality, methodological transparency and product offering. The key issues discussed were summarised in an article. The PRI subsequently held a webinar on this topic on 5 October 2021, with credit analysts and various ESG information providers.

The event was introduced by Sixtine Dubost, Investment Practices Analyst at the PRI, and moderated by Alessia Falsarone, Managing Director and Head of Sustainable Investing at PineBridge Investments.

The discussants included Aaron Yoon, Assistant Professor at Northwestern University's Kellogg School of Management, Rahul Ghosh, Managing Director for ESG Outreach & Research at Moody's ESG Solutions, Annie Joyce, former Vice President for ESG Client Coverage at MSCI (as of 6 December 2021) and Constantine Pretenteris, Advisory Lead at Urgentem. The discussion focussed on how useful ESG information providers' data and services are for fixed income investors, how the current products are evolving and where gaps remain.

### **ESG** - From Equities to Fixed Income

Mentioning his equity background, Yoon hopes to see a similar progress and maturing in the sustainable fixed income market. Although ESG data has become much more granular for fixed income assets in the last few years, the journey continues.

"Most of the ESG data has been focussed on the equity market. A lot of the equity investors have been using it to build long-short portfolios or risk-related decisions. Sustainable fixed income is very exciting

at the moment because it is at a very nascent stage," Yoon notes, comparing it to the more advanced disclosures in equity markets.

According to Joyce, early ESG ratings and information providers played an important role in where the ESG market is today. Taking the example of RiskMetrics and GMI Ratings¹ in pioneering ESG for investors, she highlights that without their, and other early innovators, original efforts, the market would not be where it is today. Joyce points to MSCI's 2019 acquisition of CarbonDelta as an example of the data provider continuing the work of these early pioneers by integrating science-based targets into its climate-related insights.

She notes that although ESG integration may have started in equities, integrating ESG factors in fixed income continues to build strong momentum. As an asset class, fixed income is a more complex market with many sub-asset classes and instruments, including corporate borrowers with varying credit quality, sovereigns, municipal bonds and securitised products, which may require a different approach. "There needs to be a more nuanced approach because fixed income is more complex," Joyce states.

Discussing data sources, Joyce is keen to emphasise the need to collect information from a broad spectrum of sources to build a holistic assessment of companies' ESG profile. For example, beyond public disclosure documents, 45% of MSCI's rating is based on alternative sources, be it from Non-Governmental Organisations (NGOs) or third-party data providers. She also highlights the relevance of considering corporate entity structures to have a better and more granular view of corporations.

### **A Complex Market**

Ghosh shares this view of the fixed income market as requiring a more nuanced approach than equities. "The sustainable debt investor is not homogenous. There is a broad range of different types of investment approaches and needs. There are investors that are looking to integrate ESG into portfolio risk management and research, and that is where they need credit materiality mapping, inputs for their models. (...) But there are also investors in the fixed income space that are focussed on understanding negative or positive externalities to minimise exposure."

"We are also seeing an increase in bondholder engagement. There has also been a rise in labelled debt and impact measurement. For instance, we are looking at instrument-level alignment with best practices, impact assessment of projects and the coherence of a green bond to an issuer's sustainability

NordSIP Insights 36 Sustainable Fixed Income 2021

<sup>1</sup> MSCI acquired RiskMetrics in 2010 and GMI Ratings in 2014. With the acquisition of RiskMetrics, MSCI came to own ESG pioneers such as KLD, Innovest and IRRC.

"On the CRA side, we published research that showed that ESG was material for 85% of private sector credit rating actions last year, largely driven by COVID-19."

credentials," he continues, commenting that not every investor needs to be exposed to all these perspectives. "Ultimately investors must decide on the products that best suits their investment philosophy and needs," Ghosh says.

### Transparency, External Reviewers and Second Party Opinion

Ghosh also raised the issue of transparency. "It is important to be transparent regarding the methodologies and criteria in all of the different products." According to Ghosh, Moody's is addressing this issue by publishing methodologies, webinars, one-to-one meetings with investors and research. "On the CRA side, we published research that showed that ESG was material for 85% of private sector credit rating actions last year, largely driven by COVID-19."

"As the sustainable bond market has developed, there is also a need for investors to understand how a particular instrument and the projects that it is financing are linked to the overarching objectives and sustainability pathway of the issuer," Ghosh says.

According to Ghosh, external reviewers and second party opinion providers are there to support the story connecting a project financed by a green bond and how that fits into the issuer's net-zero CO2 emissions pathway. "There are different ways to demonstrate green credentials and get an independent review. Second party opinions tend to be the most popular in the market – accounting for approximately 70% to 80% of the independent reviews," Ghosh adds.

However, the Climate Bond Initiative (CBI)'s climate bond certification, and the coming EU Green Bond Standards, provide alternative ways for an issuer to reinforce their credentials to investors, according to Ghosh. "I would expect to see multiple uses of different types of certification and reviews in the market going forward," he continues.

### FinTech Contributions to Sustainable Fixed Income Investors

While Ghosh and Joyce illustrate the experience of large established ESG data and service providers, the experiences of innovative fintech companies is also insightful. Urgentem is a climate fintech, specialising in climate risk. It provides ESG data but does not produce ratings.

"We use quantitative and bottom up information to construct various forms of analytics on climate risk at the company, sector and portfolio level," Pretenteris says." Our platform distinguishes between fixed income and other asset classes. We can provide some insights into the current carbon exposure or a more forward looking metric, such as understanding how different decarbonisation pathways relate to different [bond] maturities," he adds.

Urgentem takes a collaborative approach, according to Pretenteris. "We work mainly on a bespoke basis with clients, whether they are large organisations like the European Central Bank (ECB) or the International Monetary Fund (IMF) or a small family office. Iterative collaboration is key because climate science is always evolving. We need the input of climate scientists, practitioners, NGOs and other specialists to understand whether the issues we are addressing and the solutions we are providing are meaningful," he explains.

### The Role of Regulation

Some of the webinar participants appeared more cautious than others regarding the role of regulation for ESG information providers. Pretenteris seemed to believe that the current trend towards regulatory standardisation is beneficial. "There is an issue with methodologies not being comparable, be that regarding alignment, footprinting or temperature scores. We need consistency in the market. Offerings need to coincide a bit so investors can have similar types of information to make insightful decisions," Pretenteris argues.

"My cautionary note is that regulation can help enhance transparency and integration, but we don't want to fix today a way to do things that may not be what we need five years down the line."

Pretenteris is especially hopeful about the potential positive effects of upcoming climate change regulation and its ability to bring data to the market. "This can lead to better decisions in terms of assessing risks going forward, including understanding how CapEx or revenue are linked to certain activities," he says.

Ghosh was less sanguine. "There are many ways to provide climate change assessments," Ghosh argues. "You can take a macro view and use the NGFS² and central bank scenarios and take a top down approach. You can take a bottom-up approach which includes looking entity by entity. You can look at IPCC scenarios. The beauty of it all is that there is no one-size fits all solution," he adds.

In this context, Ghosh notes that supervisory frameworks can play an important supportive role for market development when properly calibrated. "My cautionary note is that regulation can help enhance transparency and integration, but we don't want to fix today a way to do things that may not be what we need five years down the line. A regulatory environment that is encouraging a principles-based approach to transparency on methodology and on data but still allows for flexibility and innovation is absolutely critical," Ghosh says. Joyce agrees. She notes that regulation can focus on the guiding principles, while allowing enough flexibility for managers to find the approach that better satisfies client needs.

Ultimately, the heterogeneity of preferences and goals is also what explains the lack of consistency across ESG ratings, or scores, as opposed to credit ratings. "Credit rating agencies are trying to answer the question of how likely a company is to default. However, with ESG assessments the question is different," Ghosh explains, noting that some data providers focus only on the financial materiality of ESG factors while others also focus on the impact of the company on its environment and the society it operates in.

### Greenwashing and the Secret Sauce

Given the complexity of the market and the plethora of needs from the investor side, the panel was keen to hear from Yoon as to whether academia could offer a guide to what investors should be looking for. "I do not have a concrete answer, but I think investors need to make up their mind," Yoon says.

"It seems like people are still unsure whether they are an information provider, a rater or an investor. Raters or information providers like MSCI and Moody's claim a dual role. They not only provide information but also serve as a rater," he notes.

"It is important to think about what outcomes people have in mind. From my conversation with information providers, they push out data, but they do not consider the type of ESG outcome that it should lead to. I think this is a big issue that is very closely tied to greenwashing," Yoon continues.

"Everyone is waving their hands and using some type or variation of public disclosures, from NGOs for example, as Annie says, which are effectively based on public disclosure with some discretion. I also agree with Rahul that transparency is important, but you cannot give out the recipe to your secret sauce," Yoon argues.

According to Yoon, regardless of whether they focus on fixed income or equities, investors need to ask themselves what ESG means to them, think about investment horizons and why ESG matters from a fiduciary duty perspective.

"To Aaron's point, as an investor, you have to be very clear about what the data you are pulling in is telling you," Ghosh agrees noting that investors can select from a wide range of products to find what better suits their needs. "That is why I do not think we are going to see a standardisation of methodologies, nor should we. There is a space for eclectic views, but it is important to understand what you are buying and how you are using it," Ghosh says.

NordSIP Insights 38 Sustainable Fixed Income 2021

The Network of Central Banks and Supervisors for Greening the Financial System

## about our partners



Your success. Our priority.

At Columbia Threadneedle, we are intentionally built to help you succeed. We equip our investment professionals with the resources, tools and insights they need to achieve or surpass – the outcomes our clients expect. Our commitment to consistent client success is underpinned by our distinctly different investment approach, which comprises four pillars: global perspectives, research intensity, responsible investment and continuous improvement with our '5P' approach. Responsible investment (RI) has long been integral to our investment research and decisions and our approach to business more broadly.

The rationale for responsible investment is clear: companies with sustainable business models that look to the future have more potential to deliver value to all stakeholders, including shareholders. As a founding signatory of the United Nations' Principles for Responsible Investment (PRI), responsible investment has been an established pillar of our business for well over a decade.



In 1924, MFS launched the first US open-end mutual fund, opening the door to the markets for millions of everyday investors. Today, as a full-service global investment manager serving financial advisors, intermediaries and institutional clients, MFS still serves a single purpose: to create long-term value for clients by allocating capital responsibly.

We believe that purpose is synonymous with sustainable investing, which we approach by integrating ESG factors into our research, security selection and overall investment process. Our powerful investment approach combines collective expertise, thoughtful risk management and long-term discipline. Supported by our culture of shared values and collaboration, our teams of diverse thinkers actively debate ideas and assess material risks to uncover what we believe are the best investment opportunities in the market. To learn more visit mfs.com



NN Investment Partners (NN IP) is a Dutch asset manager active in 37 nations and manages €300 bln AuM. As a responsible investor, NN IP aims to improve clients' returns by looking beyond financial performance. Responsible investing and putting capital to work is integral to NN IP's investment strategies and approach. NN IP allocates all of its investments in a responsible manner, contributing to a more sustainable world. ESG criteria are integrated in 74% of NN IP's AuM, the goal is to increase this to 80% by 2023. In 2020, the UN PRI awarded the NN IP a rating of A+ for its responsible investing and ESG integration approach.

At NN IP over 40 different nationalities make up the workforce, underlining the belief cognitive diversity leads to smarter teams and better decision-making. NN IP cares about what matters most to stakeholders. Putting resources to use for the wellbeing of customers, the advancement of communities, the preservation of the planet, and for a stable, inclusive, and sustainable economy is of utmost importance.



integrity, respect, and transparency.

Northern Trust Asset Management is a global investment manager that helps investors navigate changing market environments, so they can confidently realize their long-term objectives. Entrusted with US\$1.2 trillion of investor assets as of September 30, 2021, we understand that investing ultimately serves a greater purpose and believe investors should be compensated for the risks they take – in all market environments and any investment strategy. That's why we combine robust capital markets research, expert portfolio construction and comprehensive risk management to craft innovative and efficient solutions that deliver targeted investment outcomes. As engaged contributors to our communities, we consider it a great privilege to serve our investors and our communities with

Northern Trust Asset Management is composed of Northern Trust Investments, Inc., Northern Trust Global Investments Limited, Northern Trust Fund Managers (Ireland) Limited, Northern Trust Global Investments Japan, K.K., NT Global Advisors, Inc., 50 South Capital Advisors, LLC, Belvedere Advisors LLC and investment personnel of The Northern Trust Company of Hong Kong Limited and The Northern Trust Company.

NordSIP Insights 40 Sustainable Fixed Income 2021





### SUSTAINABLE FIXED INCOME DECEMBER 2021

#### GENERAL TERMS AND CONDITIONS

These are the terms and conditions which govern the use of NordSIP Insights, an online magazine edited and distributed electronically and owned, operated and provided by Big Green Tree Media AB (the "Editor"), Corporate Number: 559163-7011, Kungsgatan 8, 111 43 Stockholm, Sweden.

### DISCLAIMERS AND LIMITATIONS OF LIABILITY

- 1. The Content may include inaccuracies or typographical errors. Despite taking care with regard to procurement and provision, the Editor shall not accept any liability for the correctness, completeness, or accuracy of the fund-related and economic information, share prices, indices, prices, messages, general market data, and other content of NordSIP Insights ("Content"). The Content is provided "as is" and the Editor does not accept any warranty for the Content.
- 2. The Content provided in NordSIP Insights may in some cases contain elements of advertising. The editor may have received some compensation for the articles. The Editor is not in any way liable for any inaccuracies or errors. The Content can in no way be seen as any investment advice or any other kind of recommendation
- 3. Any and all information provided in NordSIP Insights is aimed for professional, sophisticated industry participants only and does not represent advice on investment or any other form of recommendation.
- 4. The Content that is provided and displayed is intended exclusively to inform any reader and does not represent advice on investment or any other form of recommendation.

- 5. The Editor is not liable for any damage, losses, or consequential damage that may arise from the use of the Content. This includes any loss in earnings (regardless of whether direct or indirect), reductions in goodwill or damage to corporate.
- 6. Whenever this Content contains advertisements including trademarks and logos, solely the mandator of such advertisements and not the Editor will be liable for this advertisements. The Editor refuses any kind of legal responsibility for such kind of Content.

### YOUR USE OF CONTENT AND TRADE MARKS

- 1. All rights in and to the Content belong to the Editor and are protected by copyright, trademarks, and/ or other intellectual property rights. The Editor may license third parties to use the Content at our sole discretion
- 2. The eader may use the Content solely for his own personal use and benefit and not for resale or other transfer or disposition to any other person or entity. Any sale of Contents is expressly forbidden, unless with the prior, explicit consent of the Editor in writing.
- 3. Any duplication, transmission, distribution, data transfer, reproduction and publication is only permitted by
- i. expressly mentioning Nordic Business Media AB as the sole copyright-holder of the Content and by
- ii. referring to the Website www.nordsip.com as the source of the information provided that such duplication, transmission, distribution, data transfer, reproduction or publication does not modify or alter the relevant Content.
- 4. Subject to the limitations in Clause 2 and 3 above, the reader may retrieve and display Content on a

computer screen, print individual pages on paper and store such pages in electronic form on disc.

5. If it is brought to the Editor's attention that the reader has sold, published, distributed, re-transmitted or otherwise provided access to Content to anyone against this general terms and conditions without the Editor's express prior written permission, the Editor will invoice the reader for copyright abuse damages per article/data unless the reader can show that he has not infringed any copyright, which will be payable immediately on receipt of the invoice. Such payment shall be without prejudice to any other rights and remedies which the Editor may have under these Terms or applicable laws.

### MISCELLANEOUS

- 1. These conditions do not impair the statutory rights granted to the readers of the Content at all times as a consumer in the respective country of the reader and that cannot be altered or modified on a contractual basis.
- 2. All legal relations of the parties shall be subject to Swedish law, under the exclusion of the UN Convention of Contracts for the international sale of goods and the rules of conflicts of laws of international private law. Stockholm is hereby agreed as the place of performance and the exclusive court of jurisdiction, insofar as there is no compulsory court of jurisdiction.
- 3. Insofar as any individual provisions of these General Terms and Conditions contradict mandatory, statutory regulations or are invalid, the remaining provisions shall remain valid. Such provisions shall be replaced by valid and enforceable provisions that achieve the intended purpose as closely as possible. This shall also apply in the event of any loopholes.