

Credit Where Credit is Due: ESG in Fixed Income

We believe environmental, social and governance (ESG) analysis is an important investment discipline with the potential to generate differentiated insights that can lead to investment outperformance. In this publication we outline key elements that inform our approach to ESG investing across fixed income markets.

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Key Takeaways

The Three E's of ESG investing at GSAM Fixed Income: Enriched, Evolution and Entrenched.

Our fixed income investment process is **enriched** by ESG analysis which can identify factors that may create material financial risks. Robust ESG integration is an **evolution** and we continually seek to advance our application to fixed income markets and specific investment objectives. ESG investing is firmly **entrenched** within GSAM; it is the responsibility of fixed income investment professionals, not just those with ESG in their title.

ESG as a Core Investment Competency.

This past year we have deepened our ESG toolkit by assigning **proprietary ESG ratings**¹ to more than 90% of the corporate and sovereign bond issuers under our research coverage. These ratings are derived through **fundamental research** carried out by our corporate sector analysts and sovereign economists, in partnership with ESG investment professionals. Our ratings include **a forward-looking momentum** element through which we assess if ESG performance of a bond issuer is deteriorating, stable or improving.

Materiality Matters.

Our ESG investment research framework is built around the concept of **materiality** – the view that ESG factors can affect investment value differently depending on the sector and asset class. **Active management** is critical given ESG materiality is **sector-specific** and can include a **time horizon element**. Key events can also create inflection points. For example, the 2020 US election outcome presents new implications for sectors exposed to the energy transition.

Bondholders Have an Important Voice in ESG Engagement.

Engagement with corporate management is an important input into our credit research process and can guide our investment views. Dialogue with company management teams also provides us with an opportunity to encourage issuers to strengthen their **ESG performance** on factors that may present credit risk. Additionally, we can engage with issuers to drive **positive outcomes**. For example, GSAM recently launched an initiative through which we intend to engage with over 340 companies to promote greater climate data disclosure.

A Digitized Sustainable Investment World.

We believe **technology** can provide a **dynamic investment edge** with potential to enhance all aspects of our investment process, including ESG analysis. Our Fixed Income team benefits from a close partnership with GSAM engineers who are responsible for building and deploying innovative technical and quantitative solutions for our clients and our firm. Their expertise enables us to leverage ESG data, investment insights and knowledge-sharing across our **digitized platform**, from credit analysis to portfolio construction and client reporting to investment solutions. We also collaborate with the Fundamental Equity and Quantitative Investment Strategies teams to share ESG views and investment process approaches across GSAM. The outcome of this is what we view as the litmus test for successful ESG integration: **sustainable investment solutions for our clients**.

¹ GSAM may invest in an asset prior to completion of the proprietary ESG rating. Instances in which proprietary ESG ratings may not be completed for a specific asset prior to investment include but are not limited to new issuance, in-kind transfers, corporate actions, and/or certain short-term holdings.

What Does ESG Mean to GSAM Fixed Income?

An ESG lens enables us to paint a more complete picture of investment risks and opportunities. This is why we believe analysis of ESG factors is additive to our investment process and an important input into our investment decision-making.

Three elements inform our approach to ESG investing across fixed income markets:

1. Enriched

Our assessment of credit risk is consistent with—and enriched by—the analysis of ESG factors that can evolve into credit risks. This ranges from climate transition policy driving the requirement for real estate companies to improve the energy intensity of their property portfolios (green buildings) to data protection breaches among telecommunications firms that could generate significant regulatory repercussions. Consideration of these risks is critical for fixed income investing due to the asymmetric return profile of bonds; upside potential is well-defined as timely coupon payments and a principal payment on maturity, while the downside can be considerable should an issuer default, with limited or no recovery value. In other words, "avoiding the losers is more important than picking the winners."

2. Evolving

When evaluating creditworthiness, our investment professionals have long assessed risks labeled today as ESG, particularly those related to weak corporate governance structures. We seek to continually advance our ESG capabilities and this past year we have strengthened our ESG integration efforts by assigning proprietary GSAM Fixed Income ESG ratings to more than 90% of the corporate and sovereign bond issuers under our research coverage¹. These ratings are captured on our digitized investment platform, Fluent, alongside fundamental investment research analysis, integrating ESG as a component of our research process.

3. Entrenched

We believe ESG is the responsibility of GSAM Fixed Income investment professionals, not just those with ESG in their title. Our sector research analysts and sovereign economists are paramount to ESG integration as they can apply their fundamental research expertise to focus on which ESG issues can impact creditworthiness and to what extent. They also regularly engage with company management teams and policymakers on factors that can influence our credit assessment, including ESG issues. Specialist ESG professionals partner with our investment teams to provide guidance on industry-specific issues, drive dialogue around ESG themes and to advise whether companies set targets that are suitably ambitious to achieve ESG-related outcomes. The identification of ESG data and performance metrics also forms part of an ongoing collaboration between ESG professionals, sector research analysts and economists, and engineers.

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ESG as a Core Investment Competency

ESG factors can move the dial when it comes to financial performance. For example, the climate transition is a key investment driver for Automakers, while social factors can drive credit risk in the pharmaceutical industry.

GSAM Fixed Income ESG Ratings

Overview

Our proprietary ESG ratings¹ reflect our investment team's view. They are underpinned by in-depth research analysis that seeks to understand the nuances and complexities of ESG performance and how it translates to credit risk. Exhibit 1 outlines how we derive our ratings based on three areas of focus: materiality, momentum and engagement.

How our ESG ratings enhance our investment analysis

- Reflect ESG factors that are material for bond investors.
 We consider ESG issues from a bondholder—rather than an equity investor—perspective. For example, governance factors such as executive pay are considered material for shareholder value, but may not be sufficiently relevant to a company's creditworthiness.
- Include a forward-looking momentum element. Momentum
 assessments provide additional insights that static ESG
 metrics fail to capture. This can create an investment edge
 given an improving ESG laggard can offer a different
 investment signal to a deteriorating ESG leader.
- May uncover market inefficiencies. As a global fixed income manager, we invest in all corners of the world, including high yield and emerging market (EM) companies for which exposure to ESG risk may be greater but visibility can be lower. We believe the fundamental research that underpins our ESG ratings can help uncover market inefficiencies, particularly in high yield and EM markets.



Source: GSAM. For illustrative purposes only. ¹ GSAM may invest in an asset prior to completion of the proprietary ESG rating. Instances in which proprietary ESG ratings may not be completed for a specific asset prior to investment include but are not limited to new issuance, in-kind transfers, corporate actions, and/or certain short-term holdings.



ESG as a Core Investment Competency

ESG views form part of our assessment of a bond's risk-adjusted return potential. Put another way, we evaluate whether a bond's yield or spread provides adequate compensation for potential downside risks, including ESG issues.

Bondholders have a growing and important voice in company engagement. We view engagement as an important aspect of active management that we believe can unveil differentiated and forward-looking investment insights.

Portfolio Perspectives

Our ESG Ratings1:

- Inform Portfolio Construction. We aggregate ESG ratings at a portfolio and benchmark level. This enables us to assess the overall balance of ESG risks. Combined with portfolio construction tools, these ratings enable us to optimize or minimize a portfolio's target exposure to certain ESG factors.
- Enhance our ability to deliver customized ESG-solutions.
 We can systematically eliminate bonds from issuers that we expect to be ESG laggards on our ESG rating scale, while adding overweight exposure to issuers we anticipate to be ESG leaders
- Have potential to drive investment performance. We believe an issuer's improving momentum on ESG factors has the potential to drive investment performance. Allocating capital to corporate bond issuers that are both willing and able to improve ESG practices may also generate a positive impact.

Bondholder Engagement

- Fixed income investors do not have access to shareholder communication channels such as proxy-voting but as capital providers to global corporations, we communicate regularly with management teams.
- In addition, given issuers access bond markets repeatedly, we are able to develop an ongoing, productive dialogue that centers on gaining insights into a company's operational performance and mitigation of risks. As such, our engagements also serve as an opening for us to encourage issuers to strengthen their ESG disclosure and performance on factors that may present credit risks.
- Importantly, regular and open communication informs our ESG 'momentum assessment,' providing a level of granularity that can strengthen or diminish our ESG and investment views.
- Our engagements are tracked on our digitized research platform, Fluent. From 2021, our credit analysts will seek to deepen and expand their ESG dialogue with companies, while also advancing their reporting of engagements in Fluent, outlining specific E-, S- or G- themes and issues discussed.

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Our investment team looks to understand the nuances and complexities of ESG factors and their relationship with credit risk; focusing on what we believe matters most for each sector—a concept known as materiality—is key to achieving this.

Through the these case studies we illustrate the application of GSAM Fixed Income ESG ratings and how our areas of focus—materiality, momentum and engagement—inform our investment views.

Case Study: European Real Estate Investment Trust (REIT) – Taking Green Initiative Fluent. **F** ESG Engagements Fixed Income – Investment Grade **ESG Theme:** Environmental – Climate Change: Credit Business Model and Innovation (Green Buildings) **GSAM RATING (CREDIT) 4.1**/5 Environmental: Regulatory trends and consumer Industry Leader preferences are mounting pressure on the Real Estate sector to hasten its pace on energy efficiency Weaker In Line Better Leader improvements. efficiency upgrades. There is a growing body of research that indicates properties with greater energy efficiency provide a 'green premium' for real estate companies through higher GSAM SCORE WEIGH1 MOMENTUM occupancy, sales and rental rates. A European REIT 3.5 **✓ Environment** 30% Stable in our investment universe is well positioned for Better than Peers these trends, with an acquisition focus on smaller Business Model & Innovation Better 30% residential buildings with significant potential for Green Product / Business Opportunities energy ore than 50% of its properties have been modernized and it has established an environmental GSAM SCORE WEIGHT MOMENTUM performance target to reduce the carbon intensity of 4.0 its property portfolio by 50% by 2025, thereby ╩ Social Improving 4 Better than Peers placing it on an 'improving' ESG momentum path. Product Safety & Quality, Wellness & Impact Better 20% Product Quality & Safety Governance: As bondholders, we hold a positive GSAM SCORE WEIGH1 MOMENTUM view of this company's management team's decision to reinvest profits in its business, rather than taking 4.5 Industry Leade unnecessary risks to boost shareholder returns. Corporate Governance Leading 50% Board and Management Quality

Source: GSAM. For illustrative purposes only. GSAM in its sole discretion and without notice may periodically update or change the process for conducting its ESG assessments and implementing ESG views in portfolios, including the format and content of such analysis and the tools and/or data used to perform such analysis. Accordingly, the type of assessment depicted here may not be performed for every portfolio holding. No one factor or consideration is determinative in the fundamental research and asset selection process.



Case Study: Engagement with a US Pharmaceutical Distributor



ESG Theme: Social - Product Quality & Safety

Background: Opioid litigation is a material issue for the US Pharmaceutical sector due to an epidemic caused by prescription misuse and addiction. A distributor of pharmaceuticals in our investment universe is also exposed to litigation risk as it has a legal obligation to report suspicious orders (characterized by unusual quantities and frequencies) and to maintain an effective distribution process that prevents the diversion of controlled substances. A proposed fine included in a legal settlement is lower than what was initially tabled, however, there is still considerable uncertainty around the final resolution, with various state, local government and municipal plaintiff parties yet to approve this.

Engagement: From a fundamental standpoint, our engagement focus is to understand whether this company's free cash flow position can absorb the proposed settlement without a material degradation of its credit profile. In terms of 'lessons learned' in the management of this product risk, our takeaway is that the company has taken remedial actions. This includes reinforcement of programs to detect and prevent opioid diversion, with measures such as the use of algorithms in its supply chain to identify suspicious orders and block shipment.

Outcome: Litigation risk continues to weigh on our ESG rating for this company, with its performance deemed to be 'weaker than peers.' However, we think actions taken to improve 'product quality and safety' place its momentum assessment on an 'improving' path.

Source: GSAM. For illustrative purposes only. GSAM in its sole discretion and without notice may periodically update or change the process for conducting its ESG assessments and implementing ESG views in portfolios, including the format and content of such analysis and the tools and/or data used to perform such analysis. Accordingly, the type of assessment depicted here may not be performed for every portfolio holding. No one factor or consideration is determinative in the fundamental research and asset selection process. GSAM may invest in an asset prior to completion of the proprietary ESG rating. Instances in which proprietary ESG ratings may not be completed for a specific asset prior to investment include but are not limited to new issuance, in-kind transfers, corporate actions, and/or certain short-term holdings.



A Digitized Sustainable Investment World

Technology

As <u>discussed</u> previously, we believe technology can provide a dynamic edge with potential to enhance all aspects of our investment process, including ESG analysis. Our Fixed Income team benefits from a close partnership with GSAM engineers whose technical and quantitative expertise provide us with tools that enrich our ESG research and portfolio management capabilities. These teams are also adept at understanding the nuances of ESG data and the unique challenge of mapping this to fixed income securities.

Research

GSAM Fixed Income ESG ratings are captured on our centralized, digitized research platform, Fluent. This platform allows transparency of investment views across GSAM investment teams. Analytical tools within Fluent enable research analysts to add granularity to their analysis. For example, we can select a relevant ESG theme and readily review and assign performance rankings across a peer group. The volume, quality and comparability of ESG data is rapidly evolving, and technology is critical to analyze and synthesize this data to better facilitate our investment decisions.

Portfolio Management

Our portfolio management platform, Concert, unites GSAM Fixed Income ESG ratings with third-party metrics such as carbon intensity on an ESG Portfolio Management Dashboard. This allows portfolio managers to track and monitor ESG risks alongside other fundamental metrics. Concert also enables portfolio managers to swiftly assess the impact of employing specific ESG objectives in a portfolio and benchmark. In our view, it is a powerful tool for implementing ESG-oriented investment guidelines.

Strengthening Our ESG Competency

Integration

We have set a high bar for our investment teams to achieve ESG integration, and we continually seek to enrich our ESG competencies across all segments of the bond market. The richness of our ESG analysis is already proving insightful, prompting discussions and greater engagement between teams and with our clients.

Portfolio Construction and Bondholder Engagement

We believe the way in which our ESG ratings inform investment decisions and portfolio construction is an evolving process. Looking ahead, we plan to track outcomes associated with our bondholder engagements. Ultimately, we see the litmus test for robust ESG integration as simple: sustainable investment solutions for our clients.



FSG Entrenchment

Our Fixed Income team benefits from the expertise of dedicated ESG professionals who partner with $316\ \text{GSAM}$ Fixed Income investment professionals¹.

ESG Assets Under Management

We manage over **\$60 billion** in fixed income assets with specific ESG requirements².

Positive Impact Engagement...

Through the GSAM Collaborative Climate Engagement Framework we intend to engage

with over **340** companies³...

Fixed Income ESG Ratings

We have assigned proprietary GSAM Fixed Income ESG ratings to more than 90% of the corporate and sovereign bond issuers under our research coverage².

Materiality Matters

Our 'Materiality Matrix' maps ESG themes and issues across more than 70 industries and sub-industries, focusing on what we believe matters most for financial outcomes².

...on Climate Data Disclosure

...to promote greater climate data disclosure.

These companies account for **70%** of carbon emissions in our investment universe³.

Source: GSAM. ¹ As of Q3 2020. ² As of November 2020. GSAM may invest in an asset prior to completion of the proprietary ESG rating. Instances in which proprietary ESG ratings may not be completed for a specific asset prior to investment include but are not limited to new issuance, in-kind transfers, corporate actions, and/or certain short-term holdings. ³ This investment universe was derived as follows: 1) We identified companies in the MSCI ACWI index that do not report at least one type of carbon emissions metric that the Sustainability Accounting Standards Board (SASB) deems material for their business; 2) We narrowed this universe to determine companies that are large contributors to carbon emissions, leveraging data from third party vendors.

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