



▶ GREENING OUR APPROACH TO CREDIT ANALYSIS

Incorporating ESG considerations into credit analysis is a natural extension of our current framework. Our structured approach to ESG analysis seeks to provide a comprehensive view of industry specific ESG risks and how prepared an issuer is to address these issues. Understanding these dynamics and how they evolve, helps us separate the leaders from the laggards and deliver sustainable returns to investors over the long term.

Responsible investment aims to incorporate environmental, social and governance (ESG) factors into investment decisions, to better manage risk and generate sustainable, long term returns¹. Studies show that entities (including companies and sovereigns) that act responsibly towards the environment, society and stakeholders, and that incorporate ESG considerations into their policies and operations enjoy more sustainable growth, better profitability as well as lower risks of bankruptcy.

We believe that entities can perform well on a sustainable basis by having good ESG practices. Likewise, investors can generate sustainable long term returns by adopting responsible investing practices that incorporate ESG factors in their fundamental analysis. These practices would apply



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to all asset classes including fixed income.

Responsible investment is more than just about ruling out investment in a sector or company on ethical grounds. It involves analysing the key ESG risks or opportunities that are relevant to the issuers and their potential impact. (See Fig 1.) We seek to understand the mitigating factors as well as

Fig. 1. Key ESG considerations²

Environmental	Social	Governance
<ul style="list-style-type: none"> - Greenhouse gas and other air emissions - Water stress and pollution - Waste management - Biodiversity and ecosystem - Energy use and management - Climate change vulnerability - Product carbon footprint 	<ul style="list-style-type: none"> - Labor and human capital management - Community and stakeholder relations - Workplace health & safety - Product responsibility and customer service - Privacy and data security - Health and demographic risk 	<ul style="list-style-type: none"> - Board composition & independence - Anti-bribery & corruption - Executive & employee remuneration - Shareholder and creditor rights - Related party transactions - Transparency, reporting & accountability

the issuers' preparedness in dealing with different ESG issues. We aim to identify issuers that perform better from an ESG perspective while demanding higher risk premiums on bonds from issuers that fare poorly or avoid the latter completely.

Traditional fixed income credit analysis already incorporates some form of ESG consideration. In Asia for example, the market puts great emphasis on corporate governance standards. An issuer with poor corporate governance practices and track record, which can include material related party transactions, frequent changes in management/auditors, previous involvement in fraudulent activities or litigation cases, complex organisational structure or accounting irregularities, will have to pay higher risk premiums on the bonds it issues or may not even be able to issue bonds. Social and environmental considerations also come into play as poor practices often have negative consequences. Fines/penalties and reputational damage arising from violating environmental regulations, labor/consumer related laws or from litigation cases can ultimately affect an issuer's sales, profitability and cash flow.

A STRUCTURED APPROACH TO ESG EVALUATION

Our structured approach to incorporating ESG considerations into our credit analysis seeks to provide a comprehensive view of the unique risks faced by each issuer and the mitigating factors. The following components are key:

- Focusing on sector specific ESG risks
- Understanding materiality of the risks
- Evaluating how prepared the issuer is in dealing with ESG issues
- Assessing the issuer's ESG practices relative to peers
- Engaging with issuers regularly on key ESG issues

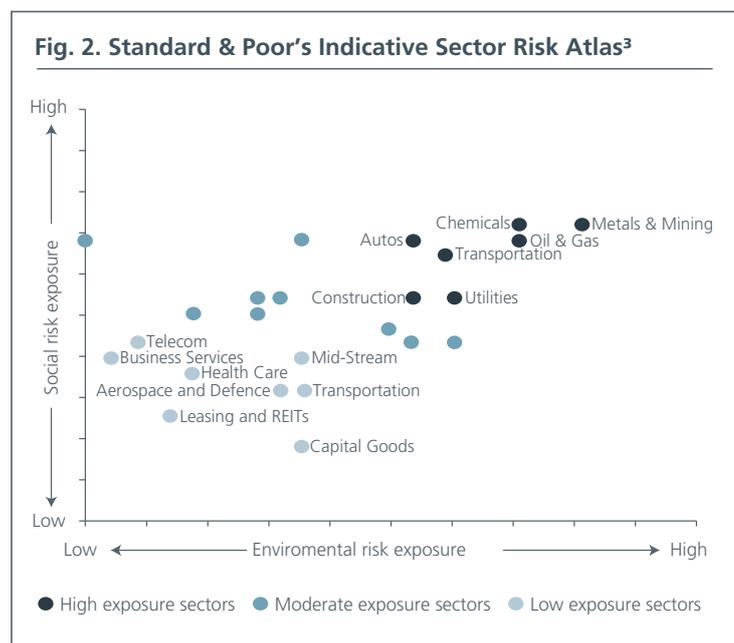
It is important to identify the ESG risks that are specific to each sector as the risks (and their materiality) are unique for different sectors. Examples of sectors that face higher environmental

related risks include steel and cement production (high carbon emissions), oil/gas exploration and production and ore mining (damage to ecosystem), as well as lead smelting and chemical production (toxic waste).

On the other hand, social risks rank higher for labour intensive manufacturing (workforce health and safety), data intensive technology and network (privacy/ data security), consumer products (product safety), and industrial estate development (community displacement).

Meanwhile, governance risks would be more relevant for the financial services sector and for countries where corporate/financial regulations, listing/reporting requirements, investor protection, bankruptcy laws and accounting standards are still developing or where the compliance and enforcement of such standards are weak.

Some sectors can have high exposures to more than one category of ESG risks. Standard & Poor's Indicative Sector Risk Atlas (See Fig. 2.) shows that the metals & mining, chemicals as well as the oil & gas sectors experience high social and environmental risks.



► *Understanding materiality*

An issuer can face a variety of ESG issues in its course of operations, but we focus on those that will have a material impact on its credit fundamentals - current or potential future impact on its operating or financial performance and hence its default potential.

At the same time, we are cognisant that the materiality of sector specific risks may change over time as regulations shift and operating models evolve. More stringent emission standards or heavier penalties for violations can increase compliance costs. Enhanced automation can reduce labour related risks although digitisation will increase data security risks. Changes in government policies such as a stricter oversight of the financial sector for example will lift governance risks.

To illustrate, assume a company has set up a chemical plant in a developing country where there are limited laws to regulate water pollution. As such, the risk of penalties or litigations for dumping chemical by-products into the river is minimal. The materiality of this risk rises as the government starts to put in place policies to improve environmental protection. If the company had acted responsibly at the onset by recycling its by-products and adopting proper waste disposal procedures, it will be less vulnerable to changes in regulations.

► *Evaluating preparedness*

We evaluate how prepared an issuer is to deal with ESG risks by having a holistic picture of its policies and actions on the environmental, social and governance fronts, and how they evolve. With regard to the environmental risks, this can involve assessing whether the issuer has installed emission reduction or waste recycling equipment or makes use of energy/resource efficient technology. Employee training programs, on the other hand, together with diversity policies and active customer engagement can help to address social risks. Meanwhile, independent board representation, fair compensation policies, and greater information

transparency will help reduce governance risks.

For example, let us assume that two coal mining companies face similar environmental and social risks. Only one has put in place a comprehensive plan around the decommissioning of the mine to ensure that the mining site is in a physically and chemically stable state post closure. This company will be in a better position to mitigate the potential ESG risks and their impact. Likewise, a company that sells a carbon intensive product but is successful in diversifying into lower carbon or green businesses will enjoy a more sustainable growth path.

► *Engagement*

While bondholders are not able to vote on key company matters, it is still possible to influence an issuer's ESG practices by highlighting key ESG issues to management and encouraging a more proactive approach to addressing the issues. Requests for better information disclosures can also be made through regular engagements with management.

► *Other considerations*

Our comprehensive ESG evaluation framework also helps us identify opportunities and benefits arising from positive ESG practices. A manufacturing company, for example, that demonstrates commitment and effectiveness towards ensuring a healthy and safe workplace for its employees would, besides minimising accidents and medical related costs, also benefit from increased loyalty and productivity. In another example, a company that has invested in low emission machinery and as a result produces a level of carbon emission that is below the regulated level can sell the difference in the form of carbon credits⁴ to help subsidize the cost of the new machinery. That said, our ESG analysis tends to be skewed towards risk factors which are likely to have a more immediate and material impact on credit fundamentals.

IMPLEMENTATION CHALLENGES

While ESG considerations are becoming more relevant to investors and companies, there are a number of implementation challenges that will only be resolved over time. For one, there isn't a standardised methodology to quantify ESG risks and measure their impact. This is especially so for social and governance risks which involve a wider variety of factors that are not just dynamic in nature but may also be defined differently across countries and regions. For example, the perception towards data privacy (social risks) may evolve while countries may have different guidelines on independent board representation (governance risks). Measurements for environmental risks are not standardised either. For instance, the value of carbon intensity, which is measured in terms of tons of CO₂ per million dollars in revenue and is a more relevant factor for fixed income portfolios, may vary depending on methodologies, timeframes and sectors.

At the same time, each issuer in the same industry may have its own disclosure standards which makes comparison difficult. For example, some companies may report direct carbon emissions from their own operations while others include emissions from consumption of electricity or other sources of energy as well as emissions along their supply chain. There are also instances of incomplete or inaccurate information, as well as varying estimates from third party data providers.

Another challenge is that some ESG impact, particularly those related to climate change or health risks related to new consumer products (e.g. smartphones) may emerge only after several years, even decades. In such cases, it may not be feasible to quantify the impact on credit metrics with meaningful accuracy. Furthermore, companies may take mitigating actions by adopting new technologies or adjusting their business mix over time.

A NATURAL EXTENSION

Incorporating ESG considerations is a natural extension of our credit analysis framework, which assesses key factors that impact an issuer's business and financial performance, and hence its default probability. Our structured approach to ESG analysis seeks to provide a comprehensive view of the industry specific ESG risks, how prepared an issuer is to address these issues and how these dynamics evolve over time. While implementation challenges exist, efforts by regulators such as the Financial Stability Board's Task Force on Climate related Financial Disclosures as well as the Sustainability Accounting Standards Board on standardised definitions and reporting, will lend momentum to the ESG focus. Understanding the impact of ESG risks on issuers helps us separate the leaders from the laggards and deliver sustainable returns to investors over the long term.

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