BARINGS



FIXED INCOME

ESG: Managing Climate Risk in EM Corporate Debt Portfolios

BARINGS INSIGHTS



Omotunde Lawal, CFAHead of Emerging Markets
Corporate Debt

EM companies are making strides when it comes to capturing and disclosing climate risks, but there is work still to be done. Encouragingly, investors and managers are often able to go a few steps further to fill the gaps.





Call to Action

As average temperatures rise around the world, climate science finds that acute hazards such as heat waves and floods are growing in frequency and severity, and chronic hazards such as drought and rising sea levels are intensifying. Emerging market (EM) countries, in particular, tend to be more exposed to climate change risks relative to developed markets, largely due to geography, higher carbon intensity (given the exposure to commodities), and their more limited ability to deal with shocks. In fact, almost all EM countries are likely to be negatively affected by at least one of the two major economic impacts from climate change: the direct impact from higher temperatures on the economy and the need to reduce carbon intensity—and many countries by both. For instance, China, India, Indonesia, South Africa and Turkey, all of which have above-average carbon intensity levels, are expected to see a negative impact from climate change on GDP.¹

It may come as no surprise, then, that many EM countries have responded to this issue by launching and implementing sustainable finance policies and frameworks. Several countries have also strengthened their commitments to achieve net-zero emissions by 2050, or in the case of China, 2060, with the rollout of a multitude of regulations—from the Paris climate accord to the EU Green Deal to proposals for carbon taxes on goods—aimed at mitigating or reducing climate risk.

For EM corporates, mitigating climate risk begins with identifying and quantifying greenhouse gas emissions (GHG) and carbon intensity. Understanding the forward-looking risks that climate change could bring to a particular sector or business model is also paramount. For example, oil & gas exporters in Africa and the Middle East are likely to be impacted by the economic costs of higher temperatures as well as lower carbon export revenues. In the steel industry, another sector in the spotlight, investment in decarbonization technology and upgrades will likely raise production costs, and could weigh on margins as steel makers spend more on carbon-reduction investments and research and development (R&D).

Overall, EM corporate issuers have taken encouraging steps to increase their awareness of the climate risks facing their business models and sectors—and for many, the next phase is the call to action, or putting in place policies and plans to accurately capture carbon data and mitigate the associated risks. To be sure, much of this process is and will be focused on satisfying the requirements of ESG ratings providers. However, it is beneficial to investors and managers as well, in that the steps these companies are taking will likely assist in optimizing measured ESG performance while also driving positive ESG outcomes for the long term.

INCENTIVES & REGULATION DRIVING CHANGE

While there has been a proliferation of ESG data in recent years—including carbon data from third-party vendors like MSCI, Sustainalytics and Moody's—the quality of company disclosures still varies widely across the EM corporate universe, and there are often inconsistencies, particularly when it comes to implementing policies for climate-related risks. In our own coverage universe, for instance, more companies are producing annual environmental impact reports—but because disclosure is voluntary, there is significant dispersion in how they present the information, what they benchmark and how they calculate certain metrics.

1. Sources: Bank of America, Burke Hsiang Miquel (2015), Global Carbon Atlas, IMF. As of April 2021.



50 30% 25% 40 20% 16.9% JSD\$ Billior 10% 7.2% 6.3% 4.7% 10 5% 0% 2018 2019 2020 2021 Green Sustainable Social - % of Total Issuance (RHS)

FIGURE 1: EM Corporate ESG Bond Issuance is Rising

SOURCE: J.P. Morgan, Bond Radar. As of June 14, 2021.

However, just as the awareness of climate risks has grown, climate-related data and disclosures are improving as welland there are reasons to believe the positive momentum will continue going forward. On the one hand, many EM corporates recognize that insufficient disclosure can lead to negative ESG ratings, financing hurdles and lower valuations. As a result, some companies are now providing more comprehensive carbon emissions reporting. National Oil Companies (NOCs), in particular, have taken steps to increase natural gas, reduce carbon emissions, invest in clean or renewable energy and explore carbon capture technology key steps in achieving peak carbon and net-zero targets. Brazil's Petrobras, for example, has adopted 10 sustainability targets to minimize its GHG emissions and increase its carbon capture, targeting a 25% reduction by 2030 relative to its 2015 base level.² To help achieve or reinforce these formal targets, the company has introduced compensation incentives.

Regulation will continue to play a role as well. In addition to the aforementioned global regulations, more targeted climate-specific initiatives—such as the Financial Stability Board's Task Force on Climate-related Financial Disclosures, the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, and the Carbon Disclosure Project Reporting Guidelines—will also drive better practices. Compounding these efforts, EM financial sector regulators have also recognized the critical importance of addressing climate risks, specifically within the context of financial stability. For instance, proposals have

been introduced that would integrate climate risks into capital requirements, requiring higher risk-weighted assets for carbon intensive exposure and lower risk-weighted assets for "green assets" or pillar 2 capital requirements. There are also a range of efforts being undertaken from country to country, although the level of engagement and implementation varies. In China, for example, the PBoC is aligning its financial oversight to the country's key climate targets, i.e. reducing emissions intensity, peaking emissions and working towards carbon neutrality. Besides the effort to mobilize green investments, the bank is also evaluating the potential impacts of climate change on financial stability and monetary policy.

RISE OF SUSTAINABILITY-LINKED BONDS

The capturing and disclosure of carbon emissions data by EM issuers is also being propelled by the growing popularity of sustainability-linked bonds and the associated cost savings—the green premium or "greenium"—from issuing such bonds.⁴ These bonds typically set specific GHG targets and call for punitive repercussions if the targets are not met. While less prominent in the market than green bonds, sustainability-linked bonds have seen growing demand in recent years. In fact, ESG-related EM corporate bond issuance has reached \$44 billion year-to-date, accounting for 17% of total issuance across the market.⁵ Asia remains the largest contributor to green bond issuance, led by China and Korea. However, other regions are quickly catching up, most notably Latin America due to the increased issuance by Brazilian corporates.

^{2.} Source: Petrobras. As of February 25, 2021.

^{3.} According to the European Central Bank, the Pillar 2 Requirement (P2R) is a bank-specific capital requirement that applies in addition to the minimum capital requirement (Pillar 1) and, additionally, covers risks that are underestimated or not covered by Pillar 1.

^{4.} Recent J.P. Morgan research estimates the ESG-driven spread differential to be roughly 26 bps. As of March 15, 2021.

^{5.} Source: J.P Morgan, BondRadar. As of June 14, 2021.

"EM corporate issuers have taken encouraging steps to increase their awareness of the climate risks facing their business models and sectors—and for many, the next phase is the call to action, or putting in place policies and plans to accurately capture carbon data and mitigate the associated risks"

Filling in the Gaps: Barings' Approach

While emerging markets are making headway when it comes to climate-related issues, there is clearly still progress to be made. Encouragingly, investors and managers are now able to go a few steps further to fill the gaps.

INTEGRATING CLIMATE RISKS

At Barings, our EM corporate debt team is structured by sector of expertise, meaning climate risk analysis is led by our credit sector specialists as part of their rigorous fundamental, bottom-up analysis. The analysts evaluate and score corporate issuers according to our proprietary ESG framework, which screens issuers on environmental factors like GHG emissions, carbon intensity, history of environmental fines/sanctions, and reduction programs in place for water/waste/resource intensity. The factors are rated on a scale of 1–5, with a higher number assigned to companies with weaker ESG profiles. We also take into account an issuer's ESG outlook, which provides a way for us to gauge whether a company's profile is improving, stable or deteriorating. Ultimately, a company's ESG profile—the combination of its current state and outlook—can affect its overall credit grade, both positively and negatively. That said, our ESG scores are not an end goal for our team. Rather, they are viewed as a starting point for further research and analysis and to direct areas for engagement with issuers.

At a sector level, we also seek to identify applicable "physical" and "transition" risks related to climate, such as business disruption, stranded assets and productivity loss. This includes carbon taxes that could impact EM companies, such as the cross-border carbon tax that's being discussed in the EU. It also includes energy-related technological advancements, such as solar or wind technologies, and the associated costs for companies transitioning to or adopting these technologies. As part of our analysis, we also consider the potential future liabilities that could come from litigation against corporate issuers that are not taking sufficient action to tackle climate risk.

Ultimately, through this analysis, we aim to identify which issuers could be perceived as "best in class" in their respective sectors, the extent to which they are mitigating or managing climate risk, and the contributory effect this has at the overall portfolio level.

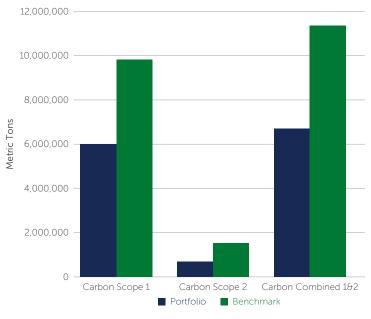


CARBON FOOTPRINT ANALYSIS

To better manage and minimize the carbon impact—and by extension the overall climate risk—in our portfolios, we have developed a proprietary carbon footprint model. The process begins with our research and analytics team, which produces portfolio-level reports to identify the largest carbon contributors in each portfolio. As part of this process, we use carbon data where it exists, and if it doesn't, we estimate the total carbon emissions that a company generates based on a set of peer companies.

Once the largest carbon contributors in a portfolio are identified, we are able to discern not only where our engagement efforts with companies may be most impactful, but also whether there are any substitute issuers or instruments that could help improve the portfolio's climate risk exposure. It also allows us to compare carbon emissions with future expected returns, helping us to gauge relative value and whether investors are being compensated in return for higher levels of emissions.

FIGURE 2: Sample Output From Barings' Proprietary Carbon Footprint Model (Total Weighted Average Carbon Emissions)



SOURCE: Barings. As of May 31, 2021.

ENGAGING WITH ISSUERS

More broadly, we believe engagement is an effective means of identifying improving credit stories, uncovering relative value and mitigating risks. We also engage with companies to more thoroughly understand their approach and thinking around ESG and, where possible, reward responsibility and progress.

Engagement also presents a significant opportunity for value creation. As active managers engage with companies to gain a better understanding of ESG concerns, as well as any steps being taken to address them, there is often an opportunity to effect positive change, and potentially help pave the way for stronger performance over time. As part of our engagement efforts, we use a proprietary engagement tool to actively monitor and encourage issuers' disclosures and strategies on ESG factors, including climate change. With regard to climate risks specifically, our team engages with issuers on a range of topics—from their alignment with the Paris Agreement, to their management of underlying credit risks, to their progress in transitioning from climate awareness to readiness to commitment.

The Takeaway

EM corporates are advancing when it comes to ESG-related issues, specifically climate risk, and we expect this positive momentum to continue going forward—especially as ESG becomes increasingly ingrained in the way the investment industry analyzes and selects investments.

At Barings, we are a signatory to the UN Principles for Responsible Investing, rated A+ at a firm level, as well as part of the Climate Action 100+, an investor-led climate engagement coalition that works with selected issuers among the largest carbon emitters in a broad range of sectors. As we strive to be responsible corporate citizens, we strongly believe that integrating climate risks into our fundamental, bottom-up investment process and engaging directly with companies to improve their ESG stance are crucial to delivering value to our investors.

Barings is a \$326+ billion* global investment manager sourcing differentiated opportunities and building long-term portfolios across public and private fixed income, real estate and specialist equity markets. With investment professionals based in North America, Europe and Asia Pacific, the firm, a subsidiary of MassMutual, aims to serve its clients, communities and employees, and is committed to sustainable practices and responsible investment.

IMPORTANT INFORMATION

Any forecasts in this document are based upon Barings opinion of the market at the date of preparation and are subject to change without notice, dependent upon many factors. Any prediction, projection or forecast is not necessarily indicative of the future or likely performance. Investment involves risk. The value of any investments and any income generated may go down as well as up and is not guaranteed by Barings or any other person.

PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. Any investment results, portfolio compositions and or examples set forth in this document are provided for illustrative purposes only and are not indicative of any future investment results, future portfolio composition or investments. The composition, size of, and risks associated with an investment may differ substantially from any examples set forth in this document. No representation is made that an investment will be profitable or will not incur losses. Where appropriate, changes in the currency exchange rates may affect the value of investments. Prospective investors should read the offering documents, if applicable, for the details and specific risk factors of any Fund/Strategy discussed in this document.

Barings is the brand name for the worldwide asset management and associated businesses of Barings LLC and its global affiliates. Barings Securities LLC, Barings (U.K.) Limited, Barings Global Advisers Limited, Barings Australia Pty Ltd, Barings Japan Limited, Baring Asset Management Limited, Baring International Investment Limited, Baring Fund Managers Limited, Baring International Fund Managers (Ireland) Limited, Baring Asset Management (Asia) Limited, Baring SICE (Taiwan) Limited, Baring Asset Management Switzerland Sarl, and Baring Asset Management Korea Limited each are affiliated financial service companies owned by Barings LLC (each, individually, an "Affiliate").

NO OFFER: The document is for informational purposes only and is not an offer or solicitation for the purchase or sale of any financial instrument or service in any jurisdiction. The material herein was prepared without any consideration of the investment objectives, financial situation or particular needs of anyone who may receive it. This document is not, and must not be treated as, investment advice, an investment recommendation, investment research, or a recommendation about the suitability or appropriateness of any security, commodity, investment, or particular investment strategy, and must not be construed as a projection or prediction.

Unless otherwise mentioned, the views contained in this document are those of Barings. These views are made in good faith in relation to the facts known at the time of preparation and are subject to change without notice. Individual portfolio management teams may hold different views than the views expressed herein and may make different investment decisions for different clients. Parts of this document may be based on information received from sources we believe to be reliable. Although every effort is taken to ensure that the information contained in this document is accurate, Barings makes no representation or warranty, express or implied, regarding the accuracy, completeness or adequacy of the information.

Any service, security, investment or product outlined in this document may not be suitable for a prospective investor or available in their jurisdiction.

Copyright and Trademark

Copyright © 2021 Barings. Information in this document may be used for your own personal use, but may not be altered, reproduced or distributed without Barings' consent.

The BARINGS name and logo design are trademarks of Barings and are registered in U.S. Patent and Trademark Office and in other countries around the world. All rights are reserved.

LEARN MORE AT BARINGS.COM