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ESG for EMD: Toward Best Practice

Our Emerging Markets Debt team has been analyzing ESG indicators for sovereigns for eight years, and started working with Sustainalytics five years ago to build ESG coverage of its corporates universe. During that time, it has continually enhanced its ESG processes, and over recent months the team has drawn some conclusions about best practice in integrating ESG into emerging markets debt, and particularly corporate bond strategies. In this paper, we explain the importance of integrating sovereign governance indicators into corporate-issuer analysis; selecting ESG indicators for financial materiality; gathering proprietary corporate governance data; and engaging with bond issuers that present particularly high ESG risks.

Executive Summary

- Our Emerging Markets Debt team has been analyzing ESG indicators for sovereigns for eight years, and started working with specialist ESG research providers to build coverage of its corporates universe five years ago.
- As we have enhanced our ESG processes over the years, we have begun to draw some generally applicable conclusions about best practice with respect to integrating ESG into emerging markets debt, and particularly corporate bond strategies.
- In this article we present four of those conclusions as a roadmap to best practice:
  - Sovereign ESG indicators should feed into corporate ESG analysis just as sovereign credit indicators feed into corporate credit analysis.
  - Empirical research is helpful not only to show the materiality of ESG indicators, but also to isolate those indicators that are the most directly relevant and material to companies.
  - Proprietary ESG data may better reflect an investor's views on financial materiality, particularly when it comes to governance indicators; and proprietary scoring will ensure that indicators are weighted to reflect views on materiality across different sectors.
  - Engagement on ESG issues should not be confined to shareholders with voting rights: it is both critical and effective for bondholders, as it improves an investor's ability to identify significant ESG risks and monitor their trends within companies, thereby supporting the right investment decision at the right time.
- Overall, we are increasingly persuaded that a serious approach to ESG in emerging markets is primarily a proprietary approach, achieved by partnering with third-party research providers, not relying on them.

Investors have long been aware of the impact that certain material environmental, social and governance (ESG) indicators can have on asset risk and performance. They increasingly expect to see these risks addressed across their entire portfolios—including in emerging markets sovereign and corporate debt—and they are beginning to differentiate between their external asset managers based on the sophistication and effectiveness of their approach to ESG investing.

We have been integrating ESG indicators into our sovereigns investment process for eight years. We started working with the ESG research and rating agency Sustainalytics five years ago to build coverage of our corporates universe, and have since expanded our partnerships with MSCI and TruCost. Over recent months, as we have taken further steps to enhance our own processes, we have drawn some conclusions about best practice in integrating ESG into emerging markets debt strategies, and particularly corporate bond strategies, based on our experience.

First, because corporate risk is especially sensitive to sovereign risk in emerging markets, relevant sovereign ESG indicators should feed into corporate ESG analysis just as sovereign credit indicators feed into corporate analysis, and that sovereign ESG analysis should be as rigorous and comprehensive as possible.

Second, more rigorous empirical research continues to show that ESG indicators are linked to credit spreads and credit ratings, but it also helps us to isolate those indicators that are directly relevant and material to companies.

Third, investors can get very useful data from ESG research providers, but it is important to rely on proprietary data and analysis whenever possible, particularly on governance indicators, because there is evidently no standardization in what the research providers are measuring and therefore no guarantee that their data is relevant to investors' concerns.

And fourth, in addition to integrating ESG indicators into the investment process, engagement on ESG issues is both critical and effective for bondholders.

We discuss these four conclusions in more detail in this article.

Country Risk Counts

We believe that it is important to integrate sovereign ESG risks into the analysis of corporate ESG risks, but in order for that to be effective it is also important to make sovereign ESG analysis as comprehensive and rigorous as possible.

We empirically observe a relationship between ESG indicators and subsequent changes in the credit spreads of hard currency sovereign bonds, and for eight years ESG scoring has been a part of our country credit model. However, while we have always believed that environmental factors were material to sovereign credit analysis, in the past a shortage of appropriate environmental data has led us to weight our analysis toward social and governance indicators.

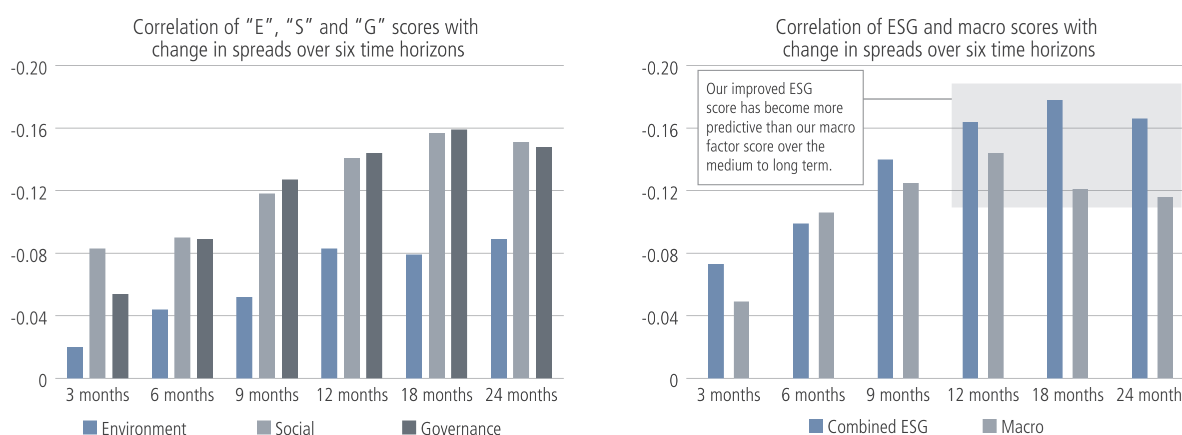
In fact, until recently, our country credit model score gave only a 5% weight to the environmental score, out of its 40% weight to ESG scores overall. Moreover, that 5% came entirely from one indicator: Energy Intensity, as measured by the nominal U.S.-dollar GDP achieved for each kilowatt hour of energy usage. More recently we have seen an improvement in the quality and availability of environmental data, and therefore also in our ability to demonstrate correlation with sovereign financial performance over time.

As Figure 1 shows, our "E" scores for issuers appear to be less clearly correlated with credit spreads than our "S" and "G" scores. Nonetheless, they do have predictive power and we think it is important to recognize that heightened investor scrutiny of environmental issues is likely to increase their impact. For example, institutional investors in France are now required to report the carbon footprints of their portfolios; and in emerging markets debt specifically, the launch of JPMorgan's "JESG" suite of indices in April 2018, which apply an ESG overlay to its hard currency, local currency and corporate bond benchmarks, using Sustainalytics and RepRisk scoring, is likely to channel more investor capital to issuers that perform better on these indicators.

To enrich the environmental sensitivity of our model, we took eight widely recognized environmental indicators—such as CO_2 Emissions per Capita, CO_2 Emissions per GDP, Proportion of Electricity Production from Coal Sources, positioning in the Notre Dame Global Adaptation Index (ND-GAIN), and alignment with the UN Sustainable Development Goals—and looked at their relationships with changes in credit spreads over three, six, nine, 12, 18 and 24 months.

The results led us to increase the weighting of "E" indicators from 5% to 15% by including five additional indicators that our tests showed had a material impact on spreads. The new indicator weights were added at the expense of lower weights for some of the "S" and "G" indicators.

FIGURE 1. PREDICTIVE POWER OF NEUBERGER BERMAN'S ESG SCORES ON HARD CURRENCY SOVEREIGN CREDIT SPREADS, 2000–2018



Source: Neuberger Berman, Bloomberg. A negative lagged correlation (a higher bar) indicates that a lower ESG or macro score has predicted wider credit spreads. Data covers the period Q1 2000 to Q1 2018.

For hard currency sovereigns, as Figure 1 shows, the newly enhanced ESG scores that we apply appear to be just as predictive of future credit spreads as our macro scores, which cover indicators such as GDP growth, inflation, sovereign fiscal data and foreign exchange reserves. In fact, as the time horizon lengthens beyond 18 months, the ESG indicators appear to exhibit even stronger predictive

power—perhaps reflecting that they are more structural than cyclical. We have also looked into the materiality of ESG factors in the more complex dynamics of local currency bonds, and our results indicate that there are similar relationships to those we see in hard currency markets.

In our view, ESG indicators are material to the performance of emerging markets sovereign and local currency bonds, then, and it is important to keep testing one's scoring approach to ensure that it remains sensitive to the full range of material ESG indicators as markets evolve. In addition, it is important to recognize that sovereign ESG-related risks are material to the performance of emerging markets corporate bonds, too.

While our peers in developed corporate bond markets may have started to differentiate between regions and countries when it comes to credit analysis since the financial crisis, they are still likely to apply the same ESG analysis, regardless of country, for each corporate issuer. Similarly, not all third-party ESG research providers embed sovereign risks into their corporate scores, and those that do seem to emphasize them in some sectors over others. That is ill-suited to emerging markets, however, where credit risk in general is much more correlated with sovereign risk, and ESG risks in certain sectors exhibit substantial regional variability. For example, a sovereign widening in AA- rated Qatar or in B+ rated Turkey has tended to be immediately followed by a widening in their corporate bonds' spreads, albeit that corporate bonds in some countries or sectors might widen less or more, depending on macroeconomic, liquidity and other factors.

The depth of our experience with integrating ESG indicators into our country credit model has allowed us to plug them into our scoring for corporates. We have done so by allocating a substantial weight in our corporate governance score to the four sovereign indicators that are most material for the business environment: Rule of Law (based on World Bank indicators); Corruption (based on Transparency International's Corruption Index); Ease of Doing Business (based on World Bank indicators); and Banking Sector Risk (based on Standard & Poor's analysis).

Salient and Material

Alongside our work on the relationship between ESG indicators and sovereign spreads, the research we have been doing since 2014 continues to show that ESG indicators are directly linked to corporate credit spreads and credit ratings. We show evidence of that below.

However, we think an investor's objective should really be to identify the specific ESG indicators that genuinely make a difference to asset prices (a finding that should determine which indicators are selected for issuer analysis); and how those indicators differ across countries and sectors (a finding that should determine the weighting of those indicators when they are integrated into issuers' ESG scores).

When we tested the new environmental indicators in our country credit model for materiality, for example, we found that whereas the country score on Proportion of Electricity Production from Coal Sources showed a significant correlation with future credit spreads, Proportion of Electricity Production from Renewable sources did not. This may reflect the relative importance that investors assign to one indicator over the other, or it may reflect the fact that it is too early for risk premiums to respond to the renewables variable. Whatever the reason, the result points to the importance of empirical testing of these indicators for materiality.

Our indicator-selection process took 75 environmental and social indicators from MSCI and Sustainalytics and regressed them against nine financial metrics, and credit spreads, from the hundreds of emerging markets corporate bond issuers rated by those two research providers. We found 24 indicators to have a material relationship on those metrics and spread (from Water Stress and Carbon Emissions to Human Capital Development and Privacy & Data Security). Our regression results also enabled us to see how different indicators are more or less relevant to different sectors, which informs subsequent weightings when it comes to ESG scoring. For example, we found Biodiversity and Land Use to be material for the Utilities sector, but not for Financials; whereas Privacy and Data Security was material for Financials, but not for Utilities.

Some of these indicators we also regard as "salient"—that is, they had no, or only a weak, relationship with financial metrics or spreads in the regression analysis, but they have a clear and substantial impact on some or all of a company's stakeholders, and could over time become financially material via changing reputational and regulatory expectations. Examples would include whether or not a company has a Community Involvement Program; this can be impactful and reputation-enhancing even if the regression analysis suggests they have not historically significantly affected businesses' cash flows or creditworthiness.

Once we identified the indicators that met our thresholds for materiality and salience on a sector-specific basis, we were able to dismiss the rest—the majority of indicators—from our scoring.

Governance Needs a Spotlight

The investment industry owes a lot to specialist ESG research and rating providers. They developed the early methodologies for analysis of ESG investment risk factors, and their work is a big reason why data disclosure by corporates has improved and broadened so much over the years, helping to change the challenge from data availability to data consistency. Having said that, we understand that they are serving a wide range of clients and that they are trying to provide data that will be of interest to investors as varied as quantitative equity strategists, short-term oriented hedge fund portfolio managers, corporate credit analysts and stand-alone engagement service providers. It is therefore unsurprising that we use only a subset of the environmental and social data that they provide, and it is essential that we are confident that we understand what that data is measuring—in the same way we are confident that we know what Transparency International is measuring with its Corruption Index in the sovereigns space, for example.

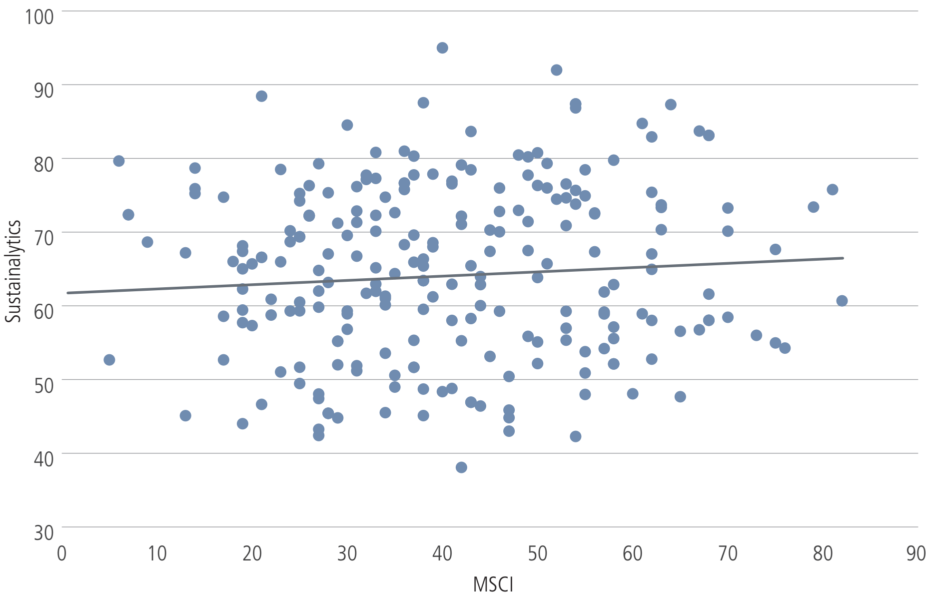
On governance data, we are more purist—here we think a best-practice approach in emerging markets corporate bonds is to use an analysis framework that is as proprietary as possible, for three reasons. Firstly, these indicators are the most directly material to financial risk and, for that very reason, they ought to be covered as part of normal credit analysis; secondly, ESG research providers appear to be measuring very different things to get to their governance scores; and thirdly, we believe the weighting that these research providers allocate to governance indicators in their ESG scores understates its significance in our investment universe.

Many commentators have observed the inconsistent rating methodologies used by the ESG research providers at the overall ESG rating level. It is well understood that the primary reason for this is the heritage, geographic location and initial client set of the various providers. A European-headquartered provider grounded in a stakeholder framework focuses on different social factors than a U.S.-headquartered competitor, for example.

What has not been given sufficient comment is the extent to which these research providers disagree on corporate governance. When we compared the governance scores from MSCI and Sustainalytics on our own universe of emerging markets corporates there appeared to be no relationship between the two sets of data in this sample (see Figure 2). We have also regressed these two data sets against corporate bond spreads in our universe, and again found a correlation close to zero.

FIGURE 2. ON GOVERNANCE, ESG RESEARCH PROVIDERS SEEM TO MEASURE DIFFERENT THINGS

MSCI and Sustainalytics governance scores for 234 issuers in the Neuberger Berman emerging markets debt universe



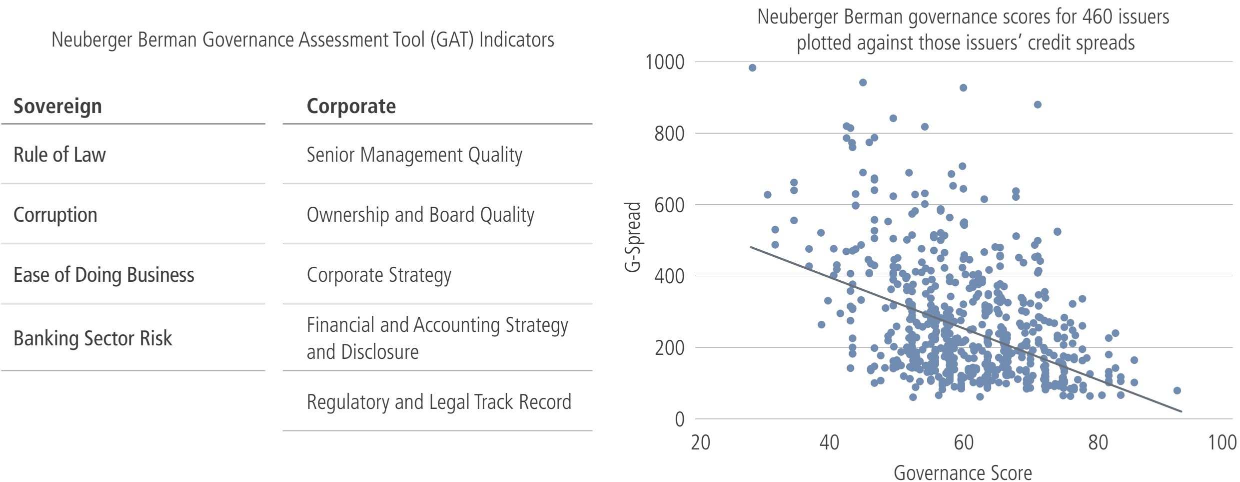
Source: MSCI, Sustainalytics.

Given our concerns about the appropriateness for emerging market corporate debt investors of the governance methodologies used by both Sustainalytics and MSCI, we decided to put the third-party governance data entirely to one side and build our own proprietary governance data set. This decision was further informed by the preponderance of equity-focused indicators in the governance ratings of both providers. By building our own proprietary governance data set, we believed we would be more likely to identify the governance characteristics that are financially material for emerging market corporate credit.

Our fundamental credit research analysts developed five indicators for our proprietary governance score and then assessed issuers one-by-one against these indicators to build out a proprietary governance data set. The five indicators include Senior Management Quality (covering indicators such as experience, reputation, key-person risk, and turnover); Ownership and Board Quality (controlling shareholder quality, board independence, audit effectiveness); Corporate Strategy (anti-competitive behavior, track record); Financial and Accounting Strategy and Disclosure (complexity and aggressiveness of tax and financing structures); and Regulatory and Legal Track Record (class actions, fines, regulatory actions, bribery, corruption, environmental or social claims). We have assessed more than 90% of our universe based on this proprietary data.

Figure 3 shows the correlation of our scores on these five indicators with the credit spreads of the 400-plus issuers that we have covered. The closer the correlation is, the more the points on the scatter plots should cluster along a line from the top left-hand corner to the bottom right-hand corner.

FIGURE 3. IDENTIFY AND THEN FOCUS ONLY ON MATERIAL OR SALIENT "G" INDICATORS


Neuberger Berman Governance Assessment Tool (GAT) Indicators

Sovereign	Corporate
Rule of Law	Senior Management Quality
Corruption	Ownership and Board Quality
Ease of Doing Business	Corporate Strategy
Banking Sector Risk	Financial and Accounting Strategy and Disclosure
	Regulatory and Legal Track Record

Source: Neuberger Berman. Data as of June 27, 2018. Neuberger Berman governance scores are generated by a proprietary Governance Assessment Tool, based on the four sovereign governance indicators and five corporate governance indicators shown.

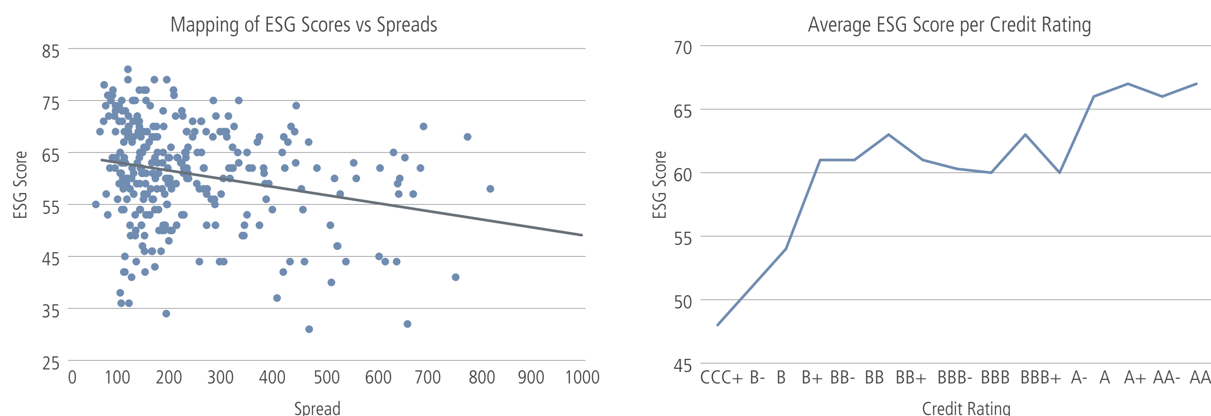
We believe taking a proprietary approach to selecting ESG indicators is best practice, then. But we also believe that a proprietary approach to generating ESG scores from those indicators is best practice. Only a proprietary approach can ensure that "E", "S" and "G" indicators are weighted in such a way as to reflect an investor's own view of their materiality and saliency for different sectors.

Again, we think this is most pertinent to governance indicators. When we analyzed the weights given to "E", "S" and "G" indicators in the scores that third-party providers assigned to our universe of securities, we found that both MSCI and Sustainalytics weight governance at around 30%. That may reflect the materiality of those indicators to equity performance, but we do not believe it reflects their materiality to creditworthiness. At Neuberger Berman, we weight governance approximately 50% higher than that, on average.

We believe the payoff for this proprietary effort is set out in Figure 4, which shows how Neuberger Berman's proprietarily selected and proprietarily weighted ESG scores correlate with credit spreads and third-party credit ratings for our universe.

FIGURE 4. THE MATERIALITY OF PROPRIETARY ESG SCORES AND PROPRIETARY WEIGHTINGS

Neuberger Berman ESG scores for 303 issuers plotted against those issuers' credit spreads and credit ratings



Source: MSCI, Sustainalytics, Neuberger Berman. The first chart shows the proprietary NB ESG scores, and the second chart shows the average proprietary NB ESG score for each credit-rating bucket, for the 313 JPMorgan Corporate Emerging Markets Diversified (CEMBI-D) issuers that provide full ESG data. Data as of October 1, 2018.

Once financially material ESG indicators have been selected and weighted, best practice requires that they be integrated into a scoring system that has a meaningful and sector-specific impact on security selection.

Investors will approach integration in different ways. For our part, we feed ESG scores into our internal credit rating process, and have recently moved toward a sector-specific, standard deviations-based integration approach: we upgrade or downgrade by one notch when an ESG score is more than one standard deviation above the mean score of its sector; and we downgrade by two notches when an ESG score is more than two standard deviations below the sector mean, thereby re-rating asymmetrically.

Under this methodology, ESG indicators affect the internal credit ratings of more than a third of the issuers in our benchmark index. The resulting comprehensive risk rating is a key part of how we calculate the fair value of the bonds in our universe.

Better Engagement and Reporting, Even on Difficult ESG Issues

The final piece in the best-practice jigsaw is company engagement. This should not be confined to shareholders who have voting rights. Our previous article on ESG in emerging markets corporate bonds mentioned the importance of engagement. In some ways it is just a natural extension of the importance we assign to on-the-ground research in emerging markets, which was the topic of another article we published earlier this year. We continually try to enhance our engagement program; we also believe that insights gained from good ESG scoring can inform that program, and vice versa.

Whenever possible, our portfolio managers and economist will discuss with Sovereign Debt Offices, finance ministers and other officials why we demand a certain yield premium to account for ESG risks and concerns. In addition, we engage mandatorily on ESG matters when an issuer is involved in a severe controversy (as categorized by Sustainalytics and/or MSCI), or when an issuer's ESG score is low enough to trigger a downgrade in our proprietary risk rating methodology. We have long believed that it is only through engagement that the underlying dynamics that lead to a low ESG score can be identified, and potential solutions proposed by company management can be properly assessed. Furthermore, the quality of the response we get from an issuer to our engagement program feeds into our ESG scoring system. Analysts have the discretion to suggest an additional one-notch downgrade in the event of a poor response, but a response can also help them to identify, early on, a trend for improvement within a company.

A good engagement program will add another layer of proprietary tailoring to an ESG scoring system, then. But it is also necessary to take ESG analysis beyond the corporate sector that tends to be well-covered by the third-party research agencies, to cover the state-owned enterprises that represent a big share of bond issuance in emerging markets.

Our engagement effort is increasingly getting traction. For example, a year ago we received a full written response from a very large state-owned enterprise to a series of very difficult and potentially uncomfortable ESG-related questions. The company in question had experienced a series of safety incidents, culminating in a serious accident; it operated in a number of countries with histories of human rights abuses; and an ex-member of its senior leadership team is under investigation for corruption that led to a loss of assets.

We wrote to ask how they had adapted their safety, human rights and anti-corruption policies in the light of these facts. The response detailed a safety program that we would credit with having prevented serious accidents at the firm; confirmed the terms of the company's human rights policy; and highlighted its internal anti-corruption regulations and training.

Finally, a best-practice approach to ESG, regardless of the asset class, requires full and transparent reporting of ESG risk exposure to clients. Of course, this will draw on the independent scores provided by third-party ESG research providers, as a benchmark. Firms such as MSCI and Sustainalytics are facilitating this by working to integrate their scores into widely used fixed income portfolio management and reporting tools such as BlackRock Aladdin. We think that reporting should also include full explanations as to why portfolio managers invest with issuers that exhibit poor ESG scores. From our perspective, for example, that may be because we feel the risks are all reflected in market prices, or because we see or expect a substantial improvement in ESG performance, or because we see potential for change through our engagement program.

Toward Best Practice

The commitments we received, in writing, from the management team of the state-owned enterprise we mentioned above show that even the largest emerging markets issuers recognize the importance of ESG issues, and of engaging with their keystone investors on those issues. We believe this is a significant aid to prudent risk management in markets where formal ESG data is frequently inconsistent and third-party ESG data providers find it difficult to achieve comprehensive coverage.

But even where the availability of third-party data is abundant and growing, we believe that any asset manager or investor that wants to move toward best practice for ESG in emerging markets needs to take a proprietary approach to generating ESG scores, a proprietary approach to integrating them into the investment process, and an engaged approach to scrutinizing issuers that present high ESG risks and, where possible, helping them to address their challenges.

In short, a serious approach to ESG in emerging markets is increasingly a proprietary approach, achieved by partnering with third-party research providers, not relying on them.

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