ESG in LGIM's Active EMD investment process



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Sanchay is Portfolio Manager in the Global Emerging Markets Debt team and is responsible for managing corporate risk in our active EM portfolios. In addition to portfolio management, Sanchay's responsibilities include analysing corporate debt and developing quantitative analysis tools.

As fixed income professionals, one question we find ourselves increasingly answering is:

How do you make the connection between environmental, social and governance (ESG) considerations and credit?

For most people, there is an intuitive connection to be made when it comes to ESG and the equity markets, yet when it comes to credit this connection can be harder to grasp.

If we go back to the basic principles of bond investment, as investors we are looking to reduce the uncertainty around the range of possible outcomes and be comfortable holding a bond through to maturity. As a credit investor, investment horizons are inherently long term; this implies that the identification of downside risks should be front and centre in any robust fixed income investment strategy. Therefore, assessing return and risk only over the short term can fail to highlight factors which erode capital over the long term; it is the "fat tail risks" which require a different lens of credit assessment, and this is where ESG plays a vital role.

As bondholders, ESG is not a new tool for assessment, but the improved quantity and quality of data available has opened up greater levels of issuer transparency. In practice, the data alone may not tell the full story, which is why we believe that



incorporating a qualitative element is essential in order to fully capture the ESG risks embedded within each issuer.

ESG has long been part of LGIM's active emerging-market debt (EMD) investment process. That incorporation is driven by our view that generating alpha is not just a function of traditional credit analysis but a consequence of a broader and deeperrooted investment framework with multiple elements. ESG's inclusion also reflects what we think drives variance in the market pricing of similarly rated credits, and how countries respond to shocks and market conditions differently. In our view, both the pricing differential and implied risk are not just a reflection of macroeconomic conditions and market technicals, but also ESG.

So how has ESG been formally included in our investment process? We will address first our process for sovereign issuers, and then for corporate credit.



Sovereign EMD investment process

Our sovereign investment process marries a top-down and bottom-up approach. In the former category, monthly interaction with LGIM's research, strategy and portfolio management staff, including dedicated EM economists, allows the EMD team to update views on global macro conditions, key currencies, benchmark rates and yields, commodities, geopolitics, and overall risk appetite for the coming one-tothree months. This anchors our bottom-up sovereign credit analysis, which factors in ESG considerations, ensuring a holistic approach to ascertaining sovereign creditworthiness. This bottom-up analysis has two elements:

Macroeconomic indicators: Our country databases, with annual and high-frequency indicators, monitor an economy's macroeconomic trajectory. The former allows us to form a medium-term view (two years); the latter is an assessment of current economic trends and progress towards forecasts.

Quantitative ESG factors: While we recognise that many ESG factors can stay static over relatively long periods of time, there are a number of examples where deterioration in ESG factors can alter credit quality and/or willingness to repay, thus leading to adverse bond performance. Recent examples are the 2011 Arab Spring (unemployment/inequality), the 2015 Ukraine default (geopolitics), the 2017 Mozambique default (governance), and recent protests in Venezuela, Ecuador and Lebanon. Thus, an evaluation of ESG factors supplements the investment process, deepening our understanding of the challenges and opportunities facing each sovereign. By enabling enhanced risk management, ESG analysis allows for better standalone credit selection and relative value analysis.

What ESG data do we integrate?

We source and select EM ESG factors through a robust and considered approach, assessing the credentials and quality of the data using the following criteria:

- a. data that is available, with history, from credible and accessible reputable providers for our investment universe, which is important for ensuring transparency, consistency and measuring evolution; and
- b. we select factors that impact not just a country's economic and social trajectory, but also a sovereign's ability and willingness to pay. The latter is central to our remit of preserving client capital and delivering consistently superior returns.

Below are some of the ESG factors we have isolated and the data source we use to support our quantitative assessment:

• Institutional capacity and governance: We use Transparency International's Corruption Perceptions Index to capture how effective a government is in implementing its stated policy agenda. A country that ranks poorly implies both policy formulation and implementation will be weak, with consequences for macroeconomic stability and the longer-term trajectory. Following concerted efforts to reduce corruption after the election of a new president in 2017, for example, we have been constructive on the Angolan sovereign which has seen its rank on this measure improve by 17 places between 2015 and 2019.

- Competitiveness: We use the IFC/World Bank's Ease of Doing Business rankings as a measure of how conducive government policies are and public infrastructure is in aiding the delivery of superior economic performance. Indeed, our consistent overweight in India is driven by the strong reform effort being undertaken by the incumbent government, with the results evident in its Doing Business rank rising from 142nd out of 189 countries in 2015 to 63rd out of 190 in 2019.
- Human development: We use the United Nations Development Programme's Human Development Index to evaluate the social context within which government policies and institutions operate. Poor human development points to high poverty and/or inequality, which implies smaller "social buffers" to absorb expected/ unexpected or exogenous/endogenous shocks. If human development is weak, such shocks have the potential to increase political instability. For example, despite the peaceful elections in 2018 and subsequent IMF engagement, we have not increased our Pakistan exposure meaningfully given deterioration in the country's human development rank to 152nd out of 189 countries from 147th out of 188 over the past few years, reflecting higher inflation and weaker growth driving higher unemployment and poverty.
- Environmental considerations: In recognition of geographical differences, development strategies and development states, we develop a composite measure of each country's susceptibility based on five equally weighted metrics: climate change, air quality, water stress, vulnerability to natural hazards, and food security. We believe these five factors have the most immediate and direct impact on a sovereign's ability/willingness to pay.
 For example, the consistent deterioration in Papua New Guinea's scores on food security and high vulnerability to climate change led us to reduce our position despite the bond's scarcity and attractive relative value. Without addressing these factors, we suspect macroeconomic volatility will remain high for such a small and narrowly based economy.

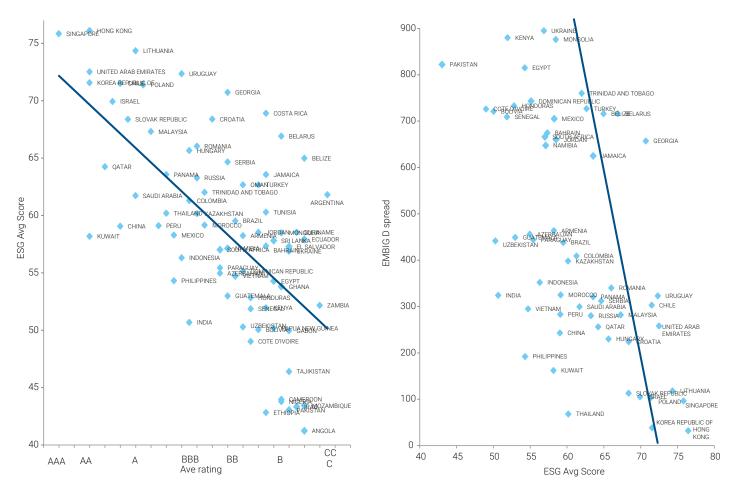
How do we integrate the ESG factors?

Using the ESG factors in isolation can provide valuable insight; however, we go one step further by plotting these scores versus current spreads and ratings. This allows us to highlight whether a country is rich or cheap on valuations, if current ratings over- or understate a sovereign's strength, and how countries compare versus one another. But there are anomalies which highlight the importance of our analysts' judgement. For example, in the case of India, given our analysts' view that the reform and green-economy push of the current government will eventually lead to higher ESG scores, we have remained overweight.

Chart 1:

LGIM's ESG country scores versus country average rating

Chart 2: LGIM's ESG country scores versus current country spread



Sources: LGIM, World Bank, World Economic Forum, Maplecroft, Transparency International, S&P, Moody's, JP Morgan

This highlights why the data alone may not tell the full story, which is why we believe that incorporating a qualitative element is essential; we must treat the raw ESG data with caution and complement it with the expertise of our EM analysts.

It is also evident in looking at returns. On a year-to-date, three-year and five-year basis [source: JP Morgan, February 2020], total USD returns in the ESG layered GBI-EM have underperformed the non-ESG index by 150bps, 90bps and 80bps (as seen overleaf). The opposite holds true in sovereign hard currency – on a year-to-date, three-year and five-year basis, total returns on the EMBI GD have underperformed the ESG layered index by 80bps, 82bps and 100bps, respectively. That, though, is driven by index construction: the ESG index excludes several "weak" countries and quasi-sovereigns, making it longer duration and more geared towards IG names.

| Table 1: Total Returns (%) ESG vs. Non-ESG benchmark indices | | | | | | |
|--|------|-------|------|------|------|------|
| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| EMBIG Div | 7.4 | 1.2 | 10.2 | 10.3 | -4.3 | 15.0 |
| JESG EMBI | 8.8 | 1.1 | 8.8 | 10.7 | -3.8 | 15.9 |
| Relative performance (bps) | 140 | -10 | -140 | 40 | 50 | 90 |
| | | | | | | |
| CEMBI BD | 5.0 | 1.3 | 9.7 | 8.0 | -1.6 | 13.1 |
| JESG CEMBI | 4.1 | 1.5 | 8.8 | 7.7 | -1.4 | 12.8 |
| Relative performance (bps) | -90 | 20 | -90 | -30 | 20 | -30 |
| | | | | | | |
| GBI-EM GD | -5.7 | -14.9 | 9.9 | 15.2 | -6.2 | 13.5 |
| JESG GBI-EM | -6.1 | -15.4 | 9.6 | 15.6 | -5.9 | 11.9 |
| Relative performance (bps) | -40 | -50 | -30 | 40 | 30 | -160 |

Sources: LGIM, JP Morgan

What sets LGIM's EMD process apart is how we complement our active management expertise with ESG considerations. Their inclusion strengthens our investment process and risk management by adding an additional lens with which to evaluate investments and relative value.

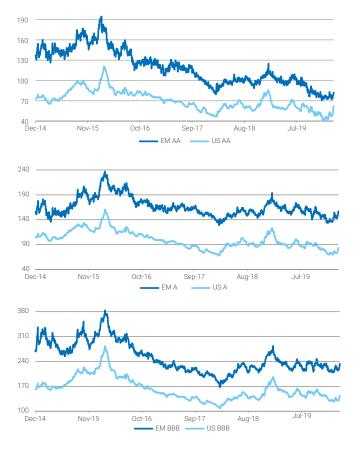
EM corporate credit investment process

Much like our assessment of sovereign quality, ESG has always been at the heart of robust EM corporate investing. EM corporates operate in relatively weaker regulatory environments compared with their counterparts in developed markets. This typically translates into weaker standing on ESG factors.

Epitomising this, lax environmental laws and challenges in implementing them have resulted in higher pollution levels across many EM cities and regions. Similarly, on the social front, many ESG exclusion lists and data providers highlight the prevalence of child labour, lower worker safety standards and human rights issues in sectors across many EM economies. Finally, on governance, with lower public listing norms in EM exchanges, corporates face a lower hurdle of regulatory scrutiny – leading to regulators routinely accepting lower numbers of independent board directors, lower reporting standards and less transparency in inter-company dealings.

Driven partially by these factors, EM corporates trade at a premium to their DM peers even in the same rating bucket, at a time when rating agencies are becoming more sensitive to ESG factors. For example, last year, despite a strong balance sheet and operational efficiencies, Moody's downgraded Vale (a Brazilian iron-ore miner) to high yield after one of its tailings dams in Brazil collapsed. The decision pointed specifically to higher environmental risks and associated social costs. In its aftermath, LGIM analysts engaged with Vale and the management of other Brazilian iron-ore miners (CSN, for example) to better understand the tailings process and business impact of implementing enhanced safety procedures. Facing these challenges, active EM managers have long relied more on their analysis and judgement around these factors rather than being able to benefit from collaborative engagement with local regulators and public institutions.

The EM discount: EM corporate bonds have consistently traded with a spread premium relative to similarly rated US credits



Sources: Bloomberg, JP Morgan, February 2020

The challenge in incorporating ESG considerations

Analysing ESG factors within the EM corporate space is complex due to several factors. For one thing, close to 20% of the EMBI Global Diversified Index is made up of quasisovereigns which are unlisted and 100% government owned. That's in addition to corporates which are partially stateowned and can similarly lack transparency. In many cases, both form key parts of an EM sovereign's economic policy design and implementation tools.

However, the challenge is differentiating between the ESG factors that affect the state versus those that impact the state-owned entity. Even if environmental factors can be gauged via third-party providers, analysing social and governance considerations is more difficult given a lack of public knowledge and disclosure.

Understanding those linkages is important in determining whether a state-owned entity should be evaluated against its own ESG metrics, those applicable to the state or some combination of the two. State level assessment may be more appropriate in the case of fully state-owned companies which are simply an extension of the sovereign's policyimplementation toolkit.

Beyond state-owned entities, many EM corporates follow different reporting standards than their DM peers due to regulatory weaknesses. Thus, data integrity, reliability and standardisation become significant challenges in the EM corporate space. That then plays a constraining role in creating effective, blanket ESG screens or exclusion lists.

This points to the core challenge when evaluating corporate ESG risk – different businesses and sectors face different ESG challenges and opportunities. Hence, evaluating all companies using one simplistic, universal standard will create a misleading picture of their standing. This is perhaps one reason why corporate ESG indices with blanket screens or exclusion lists underperform non-ESG indices, as illustrated in Table 1. That favours an investment process that is able to combine qualitative judgement and quantitative metrics.

How LGIM does it

Given the above, LGIM's corporate credit ESG analysis is driven by each analyst's view on the significance of each factor. We start with third-party data from multiple different vendors. Our corporate governance and credit analyst teams normalise this data for each sector by taking idiosyncrasies into account. That is used to increase or decrease weightings for each environmental, social and/or governance factor to come up with an overall assessment. This is illustrated below with an example comparing the Oil & Gas sector to Healthcare. As is clear, there is a greater emphasis upon E risks (shaded in green) within Oil & Gas as compared to Healthcare, which has higher S risks (shaded in blue). Importantly, analysts also incorporate their own assessment on the future trajectory of management, policies and business models to formulate the overall ESG view for each company.

Chart 7: Active view weights for Healthcare

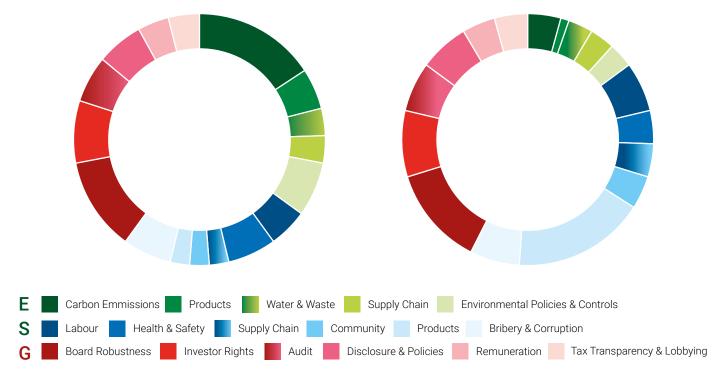


Chart 6: Active view weights for Oil & Gas

Source: LGIM, February 2020

Given that much of the ESG data provided by third party vendors is backward looking, it falls short of capturing management and strategic changes, and may not capture the indirect impact of business activity. This means that the analyst assessment, utilising bottom-up fundamental research and corporate engagement to supplement quantitative information, is critical from an investment perspective. It is the key differentiating factor between the EM corporate credit investment process at LGIM and its peers.

The analysis of ESG factors has to be active and dynamic given limitations in existing data and the diversity in the EM corporate universe. For example, it is often difficult to differentiate financial institutions based on their environmental scores as variance and levels are fairly low. However, what is meaningful is their indirect environmental impact, something which can only be gauged via analysis of their loan exposure to different industries and an evaluation of their lending strategy. Taking the Credit Bank of Moscow* as a case in point, we were concerned about the bank's concentrated exposure to a single entity in the Russian oil and gas sector and hence have chosen to avoid investing in it for the time being. Another example is Petrobras*. The Brazilian company has weak ESG metrics due to the nature of its business and past corruption scandals. However, there has been a management change after which corporate governance has improved markedly. Given that backward-looking data would not have been able to capture this, our analysts' positive view of these changes and the potential for an improved trajectory has helped generate positive alpha. This level of company engagement provides us with a solid platform from which to develop and implement high-conviction views.

Conclusion

We have seen that taking ESG considerations into account can result in improved financial performance, but at LGIM we recognise that a one-size-fits-all approach to ESG analysis may not have the desired impact. We thus take great pride in our investment process which takes a complementary approach to ESG integration, blending quantitative ESG factors with active engagement and our knowledge and expertise in active EMD.

*For illustrative purposes only. Reference to a particular security is on a historic basis and does not mean that the security is currently held or will be held within an LGIM portfolio. The above information does not constitute a recommendation to buy or sell any security.

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