

White Paper

For Professional Investors in Switzerland or Professional Investors as defined by the relevant laws.



Key points

- Expanding the understanding of sovereign ESG beyond "G" and assessing the sustainability of economic growth has become increasingly important for emerging market investors.
- Our proprietary Sovereign ESG model covers over 80 countries from the EM investment universe, across 28 Environmental, Social and Governance indictors.
- We believe traditional ESG approaches unnecessarily penalise poorer countries that may need access to capital the most. By focusing on ESG momentum and wealth-adjustment, we see more opportunity in countries which are taking leaps to improve ESG outcomes.
- ♦ ESG data in the sovereign space tend to be slowmoving and often lag behind events. To mitigate this, we complement signals from our ESG model with sentiment scores to capture faster-moving, material ESG changes.
- Our EM sustainable sovereign debt investment process also includes a phase of investment universe filtering, where we remove issuers involved in controversial activities as well as those in breach of international norms; and it incorporates where possible sustainability-linked bonds.

In this paper, we will take a closer look at why it is important to systematically evaluate material ESG risk factors in fundamental credit research across emerging market sovereigns. We go on to discuss the ESG framework we developed for investing in emerging markets, highlighting how we have tried to mitigate some of the challenges posed by ESG data.

Why consider ESG for emerging market sovereign investing?

Creditworthiness of an emerging market country (i.e. the ability to service and repay debt) is fundamentally dependent on its competitiveness and capacity to sustain economic growth over the long term.

Spotlight: trends in EM sustainability bond investing

The investment universe of EM green, social and sustainable bonds has grown rapidly, and annual issuance has nearly tripled since 2016 (see Chart 1). According to Bloomberg, these bonds currently comprise around a fifth of the total green, social and sustainable bond universe and are largely issued by corporates.

Due to the Covid-19 pandemic, we saw a significant rise in EM social bond issuance and the EM social bond market grew fivefold in 2020. This growth came partly at the expense of EM green and sustainable bond issuance.

All in all, the EM sustainable bond universe remains relatively small. We expect further expansion of this market as sovereign issuance continues to grow in response to social challenges, tightening climate policies and shifting energy investment trends.

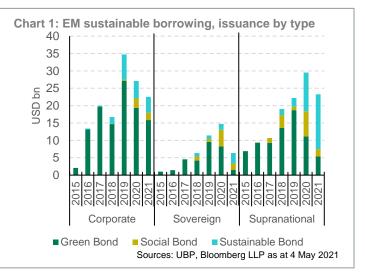
Traditional sovereign credit risk analysis has focused on macroeconomic factors to determine a country's ability to pay. Government finance metrics, such as debt-to-GDP, have been central to this analysis. Investors also place importance on economic structure and strength metrics, such as GDP growth, to capture an economy's resilience to shocks and ability to generate revenue. Last, external payment and debt indicators, such as the current account position, are used to capture a sovereign's external vulnerabilities.

For investors, willingness to pay is of equal importance as ability to pay when assessing creditworthiness. As regards willingness, the focus for investors has been on the strength of institutions, good governance and political stability embodied by a stable and predictable legal and regulatory environment. Metrics related to the rule of law and control of corruption are examples of indicators that feature in the "G" (or "governance") in ESG.

Development economics literature—relevant for ESG analysis and implementation—broadly agrees on the importance of sustainable, long-term growth. As a result, expanding our understanding of sovereign ESG beyond "G" and assessing the sustainability of economic growth has become increasingly important for EM investors.

"At UBP, the Emerging Markets Fixed Income team defines sustainability as an enduring improvement in institutions and policymaking, which leads to good, long-term management of natural resources, improvements in social outcomes for citizens, and sustainable returns for investors."

Indeed, for a long time now UBP's sovereign analysis has taken into consideration governance factors, which constitute a significant component (40%) of UBP's proprietary sovereign credit-scoring model. It has also been our view that the effectiveness of these governance mechanisms is a strong determinant of how countries alleviate some social and environmental risks.

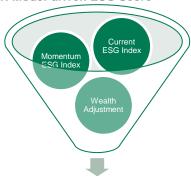


In 2020, we decided to further enhance our approach by creating and rolling out an in-house proprietary framework to systematically evaluate ESG risk factors across sovereigns. This is being used by UBP's portfolio managers to better integrate ESG factors into investment decision-making.

ESG framework for emerging market sovereign bond analysis

Our ESG framework covers over 80 countries from the emerging market sovereign investment universe. We use a model-based ESG score which includes wealth-adjustment and is based on available annual data.

Figure 1: Model-driven ESG Score



Model-driven ESG score

Our final ESG Sovereign Score is a combination of the model-based score and our analyst-driven ESG sentiment score which captures high-frequency ESG risk changes.

Figure 2: Framework for UBP's ESG Sovereign Score



Table 1: Examples of ESG model indicators

ESG Model

UBP's model-driven ESG score is a weighted average of current and momentum indices adjusted for wealth.

The first consideration in building the ESG model was the indicator selection which centred on the following four considerations:

- the strength at which an indicator captures a certain dimension
- the breadth of country coverage and credibility of the source
- how much control the government has over implementing policies that can directly affect the outcome, and
- to a lesser extent, indicators' historical predictive power of financial performance

In total, 28 indicators have been selected from various sources which include 6 environmental factors, 9 social factors and 13 governance factors. Table 1 shows a snapshot of some of the chosen indicators.

Current ESG Index

For each of our sustainability indicators, we take into consideration the relative position of a country compared to its peers, as measured by Z-scores. These Z-scores indicate where each country stands compared to the average of all countries for a sustainability indicator. For each country, all environmental Z-scores are averaged to give the E pillar score. The same process is used to give the S and G pillar scores.

Pillars	Indicators	Sources
Environmental factors capture the extent to which a country can protect, harness, and supplement its natural resources, and manage environmental vulnerabilities and externalities.	- CO ₂ per capita - Biodiversity Loss Index	European CommissionUnited Nations...
	- Environmental Performance Index	- Yale University and Colombia University
Social factors capture the extent to which a country can develop knowledge capital, along with a healthy, productive and stable workforce, and create a supportive economic environment.	- Mean years of schooling - Gini coefficient Internet use per capita	- United Nations- Credit Suisse Global Wealth Report..- World Bank
Governance factors capture a country's institutional capacity to support long-term stability and functioning of its financial, judicial, and political systems, and its capacity to address environmental and social risks.	- Corruption Perception Index - Global Freedom Score State Fragility Index	- Transparency International - Freedom House Fragile States Index

Source: UBP as at 18 May 2021. For illustrative purposes only.

The current ESG index is a weighted average with the environmental and social pillars given a weight of 20% each, and the governance pillar a weight of 60%.

Taking our cue from academic literature¹, we place a large weight on governance factors as we believe they have the greatest potential impact on a country's ability to implement robust environmental policies and achieve favourable social outcomes. We put a relatively lower weight on the social and environmental pillars to reflect the fact that behavioural and institutional attitudes towards the environment and societal changes take a long time to bear fruit.

Momentum ESG Index

These Z-scores are calculated somewhat differently. They indicate where each country stands compared to its own historical average for a sustainability indicator. Using the same method as the current ESG index, the momentum ESG index is a weighted average of the E, S and G pillars.

The resulting current and momentum indexes are then combined with weightings of 80% and 20%, respectively. These model-driven ESG scores are then normalised on a scale of 0–100, with the worst-performing country receiving a score of 0 and the best-performing country scoring 100. As the model is based on annual data, the model is updated biannually.

Table 2: Snapshot of UBP ESG Scores

	Wealth Adjusted and		No Wealth Adjusted and
Africa	Momentum	Momentum	No Momentum
Namibia	50	50	49
Morocco	45	46	47
Ghana	45	45	43
South Africa	44	48	54
Tunisia	39	43	44
Kenya	37	35	31
Senegal	36	39	37
Uganda	29	25	19
lvory Coast	27	23	8
Angola	27	26	19
Zambia	26	25	25
Ethiopia	25	25	15
Egypt	23	28	29
Nigeria	23	23	17
Gabon	21	26	29
Cameroon	16	15	12
Asia			
Singapore	100	100	100
South Korea	92	92	88
Hong Kong	89	90	87
Malaysia	59	62	61
Indonesia	51	54	50
Thailand	46	50	45
China	43	47	39
India	41	42	35
Philippines	40	42	42
Mongolia	40	44	45
Vietnam	39	44	40
Sri Lanka	37	41	41
Pakistan	26	26	20
Papua New Guinea	23	23	23

Source: UBP as at 18 May 2021

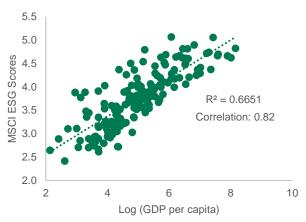
Wealth Adjustment

The UBP Emerging Markets Fixed Income team is most interested in investing in sovereigns making great strides in improving their ESG outcomes. Typically, wealthier EM sovereigns, in their current development phase, have higher ESG scores and poorer countries have lower scores (see Chart 2).

¹ Capelle-Blancard, G., Crifo, P., Diaye, M.-A., Scholtens, B., & Oueghlissi, R. (2016). Environmental, Social and Governance (ESG) Performance and Sovereign Bond Spreads: An Empirical Analysis of OECD Countries.

We believe that traditional approaches unnecessarily penalise those countries that need access to capital most². With this in mind, we include wealth adjustment to try and ensure very poor countries are not so heavily penalised for their early stages of development. Furthermore, by focusing on ESG momentum, we see more opportunity in poorer countries who are actively taking steps to improve environmental standards, social outcomes and institutional strength.

Chart 2: MSCI ESG scores and wealth



Sources: UBP, @2021 MSCI ESG Research, World Bank as at 18 May 2021

Case study: Côte d'Ivoire

With no adjustments for wealth and momentum, Côte d'Ivoire's ESG score is very low. With a score of eight (as shown in Table 2) the country is in the bottom decile. However, as a poor³ country making significant changes, once we adjust for wealth and momentum, Côte d'Ivoire's score jumps up 20 points.

Advances in ESG outcomes reflect reconstruction efforts after the 2010/11 civil war. More recently, amongst other issues, the Ivorians are taking positive steps to curb child labour, all of which is reflected in successive upgrades to our analyst-driven ESG sentiment score.

Côte d'Ivoire benefits from exceptional biodiversity and vast mineral deposits. Successive post-civil war administrations have put environmental health and sound natural resource governance at the heart of their vision for sustainable development and conflict prevention. Nonetheless, Côte d'Ivoire still faces the significant challenge of forest degradation. Indeed, since 1960, over 85% of the country's forest cover has been lost.

The allocation of large parts of the national budget to the critically important sectors of health and education has been supportive of better social outcomes. Reflecting this, there has been a significant rise in life expectancy, though at 57 years, it is still very low by West African standards. This improvement reflects a substantial fall in the infant mortality rate from 112 deaths for every 1,000 births in 1998 to 59 in 2019.

² Gratcheva, E M.; Emery, T; Wang, D. (2020). Demystifying Sovereign ESG. Equitable Growth, Finance and Institutions Insight.

³ We categorise a poor country as one which is eligible for World Bank IDA support, i.e. with a gross national income per capita below USD 1,185.

Forward-looking, analyst-driven ESG Sentiment Scores

At UBP, we believe that the transition to better is important. A key challenge of ESG data in the sovereign space is that data tends to be slow-moving and often lags behind reality. This means that changes in governments, threats to judicial independence or corruption scandals that could influence institutional quality are not picked up in a timely fashion.

A recent example of this would be El Salvador, where the calculated governance scores would not, as at the date of this paper, fully reflect the removal of all Supreme Court judges and the attorney general from their positions and the significant erosion of judicial independence.

Recognising this issue of timeliness, we complement the signals from the indicators in our model with ESG sentiment scores in order to pick up any material ESG changes and incorporate our views on the direction of change.

The sentiment scores are an outcome of weekly regional and national discussions held by our investment team. These regular reviews are an integral part of our investment process, allowing us to reflect on headlines, policy announcements, and ESG risk trends highlighted by external data provider, RepRisk's high-frequency research.

The resulting sentiment scores reflect our views, with countries exhibiting the best ESG trends scoring 10 while those with the worst ESG trends score 1. This score is then rescaled to 100. The final ESG score used by our portfolio managers then reflects the weighted average of the model-driven ESG score (70%) and this analyst-driven ESG sentiment score (30%).

ESG in the EM sovereign debt process

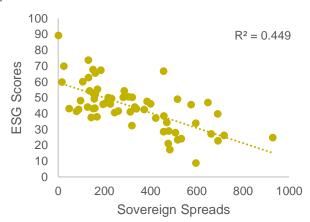
Our updated Emerging Markets Sovereign Risk Framework is shown in Figure 3. It highlights how our portfolio construction process uses ESG scores as a complement to the signals from the macroeconomic factors analysed by UBP's proprietary Sovereign Credit Model.

Our ESG framework is an integral part of the EM sovereign debt investment process as it can help account for differences in sovereign creditworthiness. A material worsening in a country's ESG score can be a catalyst for wider credit spreads on its bonds.

The relationship between ESG factors and credit spreads is visible in the correlation between the two metrics (see Chart 3). We view the relationship between ESG factors and spreads as important, though far from perfect.

Although we place importance on the ESG scores, we still think that macroeconomic factors are of material financial importance. We do see some important informational quality in the deviations of credit spreads from those implied by a simple regression model, and these deviations can be used as one of many indicators of possible richness or cheapness of sovereign credit on an ESG basis.

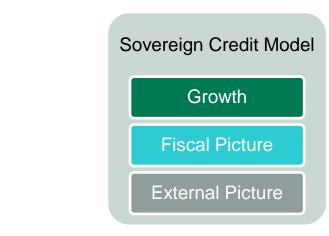
Chart 3: UBP final sovereign ESG scores and sovereign spreads



Sources: UBP, Bloomberg LLP as at 18 May 2021

Past performance is not a guide to current or future results.

Figure 3: Updated emerging markets' Sovereign Risk Framework





UBP's Responsible Investment policy: the importance of human rights and other norms

We are currently working on two sustainable EM sovereign debt strategies, one in hard currency and one in local currency. For both new strategies, the EM Fixed Income team's investment process will include a first phase of investment universe filtering. We will remove from our investment universe sovereigns involved in controversial activities as well as issuers in breach of international norms (norms-based screening).

Human rights are central to our approach. We will codify the importance of human rights and other norms by excluding sovereign issuers from our investment universe if:

- they are identified as oppressive regimes, as recognised by a Global Freedom Score of 7 or below by Freedom House. This currently leads us to exclude investments in Saudi Arabia
- they are included in the EU blacklist of tax havens, or in FATF's High Risk and Other Monitored Jurisdictions. At the time of writing, we exclude Panama and Trinidad & Tobago
- they are on an international sanctions list, such as, but not limited to, those of the EU, UN, and OFAC
- they have an UBP Sovereign ESG score of 20 or below. In this case, the country remains excluded for at least six months. At the time of writing Cameroon, Iraq, Lebanon, Tanzania and Venezuela were on this exclusion list.

We will also significantly reduce weightings of issuers with extensive use of the death penalty as identified by Amnesty International. This led us to significantly reduce our exposure in Chinese assets.

We will also exclude quasi-sovereign or corporate issuers if:

- they are 100% government-owned. These quasisovereign issuers are excluded due to the risk of a lack of independent governance
- their MSCI ESG Rating is B or below
- they bear a Red Controversy Flag by MSCI ESG Research, i.e. they are identified as being in breach of international norms and principles, such as, but not limited to, the UN Global Compact and the ILO.

The only way we would potentially consider investing in countries flagged for exclusion due to their weak ESG credentials would be through sustainability-linked types of bonds. Additionally, for our local currency sustainable debt strategy, we could also invest in bonds denominated in the domestic currency of these countries but issued by Supranationals, as this would give us comfort that the use of proceeds would be closely monitored. This reflects our belief that countries that have problematic ESG scores should not be deprived of capital needed for social and green projects which improve the lives of their citizens.

Egypt is one such example: we find the lack of freedom of speech and political rights concerning, but, due to its good long-term growth prospects, we still wanted to invest in the country. As a result, rather than getting exposure to Egyptian T-bills, we chose to invest in Egyptian pound-denominated bonds issued by the European Investment Bank.

ESG engagement

In comparison to corporates, engagement is less well established on the sovereign side. Corporates tend to be less politically motivated, which is why we have concerns about 100% state-owned quasi-sovereigns, as their motivations and objectives can be blurred by political influences. Furthermore, on the corporate side, there's a greater ability to influence management directly through direct engagement or formal channels such as voting rights. Ultimately, company boards must answer to shareholders and bondholders.

Turning to sovereigns, this accountability as regards ESG matters is somewhat diluted. While it is in the interest of governments to maintain good relations with the market in order to access capital, in the end they are beholden to their citizens, the voters. Although the line of accountability is not as clear, we would argue that voter interests as regards ESG outcomes are closely aligned with those of investors.

While ESG engagement lags behind corporates, there have been improvements on the sovereign side. We have seen nascent growth in investor advocacy groups, such as the EM Investor Alliance of which UBP is a member. As members of the EM Investor Alliance's Labelled Bonds Working Group, UBP has made technical suggestions that are helping to codify the budding Sustainably Linked Bonds market. In turn, this creates a direct financial incentive for issuers to meet specific ESG targets. A forthcoming paper, to which UBP contributed, will go into more depth on this topic and is set to published later this year.

Another means of engaging with issuers is through syndicate desks when sovereigns come to market. UBP actively engages with syndicate desks to share our thoughts on the ESG profile of issuers. For example, we raised the subject of forced labour with an issuer and did not participate in their most recent offerings due to the unsatisfactory response given to us by the government.

Last, the growth in sustainable EM bonds has enhanced transparency. Direct financing of sustainable projects through development finance and green and social bonds entails greater reporting and provides an effective channel through which investors can engage.

Conclusion

With investor interest in the impact of ESG issues in emerging markets continuing to grow, demand for sustainable investment has risen. We have rolled out our inhouse proprietary ESG framework to integrate our ESG research into our portfolios. In doing so, we believe we can complement our existing sovereign research and analysis of traditional macroeconomic variables. As ESG indicators have been shown to be an important aspect of sovereign creditworthiness, we think that this framework can contribute to clearly identifying emerging trends, thus helping investors capture sustainable investment returns and mitigate certain risks in their portfolio.

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