

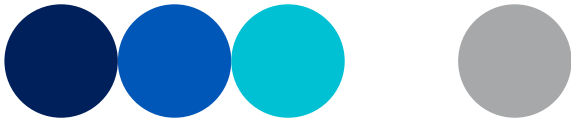
ESGP framework

Emerging Markets Debt – Sovereigns

December 2021

abrndn.com

ESGP framework – EMD



We are committed to the integration of environmental, social and governance (ESG) factors into our investment process. Through a proprietary ESG model developed within the Emerging Markets Debt (EMD) team, we assess material sustainability risks and opportunities of all of our investments, which may include among others: environmental risks, social inequalities, political risks and institutional quality and efficiency. Meanwhile, for specialised investment products, we apply ESG screening of both sovereign and corporate issuers.

Our proprietary sovereign ESG framework assesses the ESG performance of over 80 emerging market issuers across a number of factors which fall within one of four pillars – environment, social, governance and political. This resulted in naming the framework ESGP, where 'P' stands for politics, in order to highlight the importance of the political environment in sovereign ESG analysis. Through this framework, ESG is fully embedded into the investment process and every country analyst is responsible for conducting ESG analysis on their coverage.

The following sections describe our ESG research and analysis in more detail, from the sources we use, to the exclusion framework designed for a range of our funds with sustainability at the heart of the investment process. We believe this framework to be suitable for other investment strategies that wish to take into account ESG risks for sovereigns and state-owned enterprises (SOEs), filtered through the expertise of abrdn's EMD team.

1. ESG data and sources

We use a range of data sources, mostly publicly available, which meet the following criteria:

- Indicators able to quantify ESG factors necessary for sustainable economic development
- Timely and consistent data updates
- Data comparable over time
- Reliable data sources, with publicly available methodologies

Our environmental indicators capture the carbon dependency of the countries we invest in through the carbon intensity indicator we construct using Greenhouse Gas (GHG) emissions data provided by Trucost and GDP data provided by the IMF. As an organisation, we subscribe to Trucost's carbon data, which is a consistent and comprehensive adaption of the PRIMAP dataset, one of the most reliable data sources on GHG emissions. Another aspect measured in our model is renewable energy supply as a share of total energy supply, calculated using Trucost data, which helps us understand the diversity of a country's energy mix and assess which countries are falling behind on tapping into their renewable energy resources in order to help reduce the dependency on fossil fuels.

We use World Bank data across all of our ESGP pillars, from topics such as air quality and health, to measures of institutional quality, basic human rights and rule of law. The World Bank has done extensive research in sovereign ESG and promotes high quality sovereign ESG data.



Other organisations on which we rely for ESG data are:

- The United Nations Development Program; with its presence across the globe aiming to eradicate poverty and protect the planet, its data provides insightful knowledge into key social issues such as education and inequality.
- International Budget Partnership, whose global research and advocacy program promotes public access to budget information and the adoption of inclusive and accountable budget systems.
- Transparency International, which promotes transparency, accountability and integrity across all level of society. We use its Corruption Perceptions Index in our ESG model as we consider it to be one of the most comprehensive ranking of countries on perceived level of corruption in the public sector, offering over 20 years of data from which we can assess which countries are tackling corruption effectively.
- Reporters Without Borders; we share their values of democracy, freedom of information and independent journalism, which are utmost important in the markets we analyse.
- World Economic Forum (WEF) – we find this source particularly insightful for the emerging markets asset class as their yearly Global Competitiveness Report shows the areas of strength and weakness each country needs to tackle to improve their long term growth prospects and competitiveness. Although we only use one indicator from the WEF report (Quality of Infrastructure), we find the whole dataset very useful in our research.

We have aligned our indicators to 9 out of the 17 UN Sustainable Development Goals, with the aim to cover more SDGs as new ESG data becomes available.

Pillar	Environmental	Social	Governance	Politics
Sustainable Development Goals	<ul style="list-style-type: none"> • SDG 13 Climate action • SDG 7 Affordable and clean energy 	<ul style="list-style-type: none"> • SDG 3 Good health and wellbeing • SDG 4 Quality education • SDG 5 Gender equality • SDG 9 Industry, innovation and infrastructure • SDG 10 Reduced inequalities 	<ul style="list-style-type: none"> • SDG 16 Peace, justice and strong institutions • SDG 8 Decent work and economic growth 	<ul style="list-style-type: none"> • SDG 16 Peace, justice and strong institutions
Indicator 1	Air Pollution Source: World Bank	Life Expectancy Source: World Bank	Voice and Accountability Source: World Bank	Corruption Perception Source: Transparency International
Indicator 2	Carbon Intensity Source: Trucost, IMF	Infant Mortality Source: World Bank	Government Effectiveness Source: World Bank	Political Stability Source: World Bank
Indicator 3	Renewable Energy Source: Trucost	Mean Years of Schooling Source: Human Development Report (UN Development Program)	Regulatory Quality Source: World Bank	State Fragility Source: Fund for Peace
Indicator 4		GINI Coefficient Source: World Bank	Rule of Law Source: World Bank	Press Freedom Source: Reporters without Borders
Indicator 5		Gender Inequality Index Source: Human Development Report (UN Development Program)	Open Budget Index Source: International Budget Partnership	
Indicator 6		Quality of Infrastructure Source: Global Competitiveness Index (World Economic Forum)		
Indicator 7		Access to Electricity Source: World Bank		



2. Calculation method

There are two parts to the framework: a quantitative part, where we calculate a relative score ranging from 0-100 for each issuer in the model, and a qualitative forward looking assessment, where we assign a positive, negative or neutral Direction of Travel to each country.

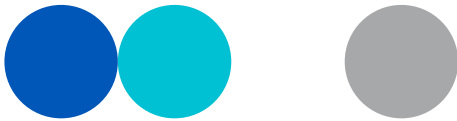
In arriving at the overall ESGP score, we apply the following data transformations:

- We standardise the data points using z-scores, which signal where each country lies relative to the average of all countries on each particular indicator. Z-scores are then averaged within each of the four dimensions, resulting in a score for each pillar.
- We removed the income bias by adjusting the social scores for GDP per capita, using the residuals from a regression of each indicator's z-score on the logarithm of GDP per capita. As social indicators are highly correlated to GDP, we believe through this adjustment we can better compare the ESG performance of countries with different levels of development.
- Our overall ESGP score is calculated as an equally-weighted average of each pillar's score.

The resulting ESG scores provide useful information in identifying long-term factors and tendencies that might not be fully factored into sovereign bond spreads. The additional use of the Direction of Travel assessments ensures we are looking at the ESG factors more in depth and assessing their materiality as well, which is essential in investment decisions.

3. Direction of Travel assessments

The Direction of Travel is our internal EMD assessment of whether a country is on an improving or deteriorating ESG trend, on the basis of our internal research focused on material ESG factors. By materiality we mean any environmental, social, governance or political factor which can have a significant impact on the valuation of an asset in our investment portfolio over the investment horizon, or may have a major reputational or legal impact on abrdn. Many ESG indicators are only available with a lag of one or two years, so they might not reflect recent changes in the political landscape and their influence over institutional quality, or policies the governments are currently or due to implement to address climate change, which may impact their long-term economic growth. Therefore, supplementing the indicators with our internal analysis offers significant value to our investment process.



4. ESG Screening

In the investment process for our Sustainable and Responsible Investment Fund and any other funds which are adopting our ESGP framework, we exclude the lowest scoring countries (captured on an exclusion list). We also employ SOE screens, combining a number of norms based screens (UN Global Compact compliance) and screens of intensive fossil fuel producers.

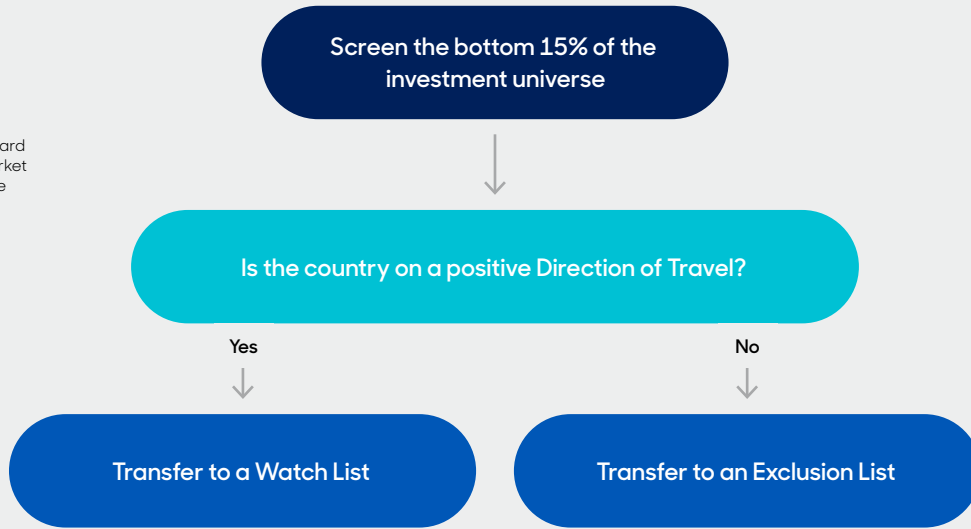
4.1. Sovereign exclusions

Our sovereign exclusion method relies on our Direction of Travel assessments, as these would determine whether lowest scoring countries are excluded or not.

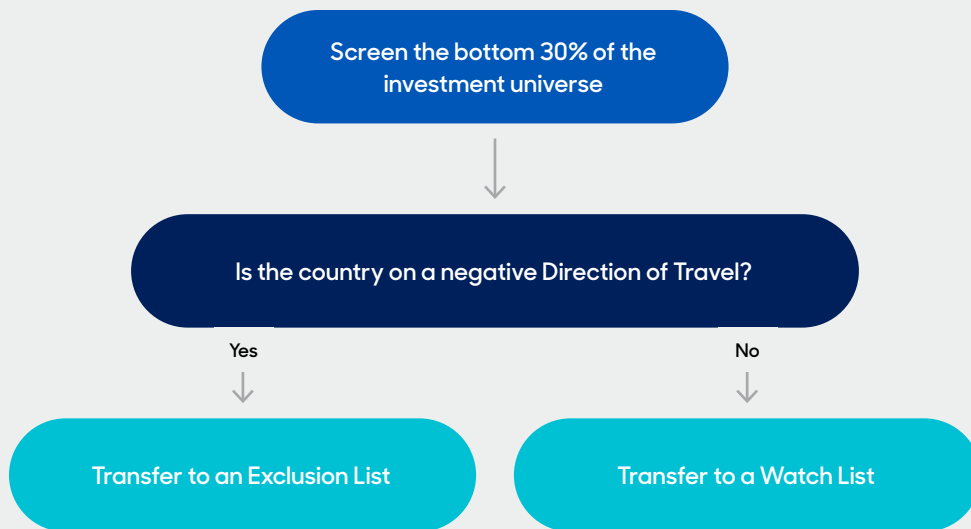
There are two ways for a country to be placed onto the Exclusion list. Steps we take in screening our sovereign investment universe¹:

1)

¹ Here it is an investment universe suitable for a hard currency emerging market fund, not necessarily the same as the list of countries we score.



2)



Summary of the exclusion and watch lists:

- Exclude the bottom 15% of countries in our investment universe
- Countries excluded but assessed on a Positive Direction of Travel are re-included in the permissible investment universe, but transferred to a Watch List in order to make sure that the improvement is sustained
- The Watch List is augmented by including countries in the bottom 30% of the investment universe which also have a Neutral or Positive Direction of Travel
- Countries in the bottom 30% of the investment universe, but assessed on a Negative Direction of Travel are also excluded, as a deterioration in these countries will ultimately lead to their scores dropping below our threshold, thus ending up in the bottom 15% of the investment universe

4.2. State-owned Enterprise screens

In addition to sovereign bond exclusions, we apply the following screens for state-owned enterprises (SOEs), using MSCI and internal abrdn research:

- a. Exclusion of all SOEs of excluded countries;
- b. UN Global Compact – exclusion of SOEs which are not compliant;
- c. abrdn Credit ESG Risk Rating – exclusion of SOEs with a High ESG Risk Rating;
- d. Environmental screens: Thermal coal extraction (more than 5% of revenue)
 - Thermal coal power generation (more than 5% of revenue), where company is not identified as an energy Transition Focused Company
 - Companies directly investing in new thermal coal generation capacity in their own operations
 - Unconventional (current and new) oil and gas extraction (>5% of revenue)
 - Conventional oil and gas extraction unless the company has material natural gas or renewables alternatives (more than 40% of revenues) or is identified as an energy Transition Focused Company
 - One of the following, where the company is not identified as an energy Transition Focused Company:
 - (i) electricity generation with a high carbon intensity, or
 - (ii) electricity generation focussed on oil and gas or nuclear (electricity generation with high carbon intensity defined as companies not aligned to 2 degree transition pathway based on total gCO₂/kWh; or conventional oil and gas and nuclear power generation (greater than 30% of revenues for each)

The majority of these screens are also applied by Article 8 corporate bond funds at abrdn.

In order to arrive at an exclusion list, we apply the screens to the JP Morgan EMBI Global Diversified index, which is the benchmark for our Sustainable and Responsible Investment Fund. The exclusion lists for sovereigns and SOEs issuers is shared internally with Risk and Compliance, in order to be coded into our investment management systems.

5. Engagement and ongoing updates

We engage with all sovereign issuers during roadshows and ad-hoc investor meetings, where we make best efforts to discuss material ESG issues. Engagement with sovereign issuers also helps the team understand plans to address those issues; this is then accounted for in the Direction of Travel assessment. Through regular roadshows or meetings with senior government officials across those countries, we are often able to gather unique insights into the ability and willingness of such governments to tackle key ESGP issues.

The framework is updated twice per year, which could lead to some changes in the methodology in order to meet the changing regulatory environment, as well as changes in the group of countries being excluded as a result of data and Direction of Travel updates.

6. Governance process

Model updates are assessed within the EMD team before being proposed to a number of stakeholders and committees within abrdn.

The Head of ESG Fixed Income and the Sustainability Standards group analyse and sign off any changes in the Direction of Travel assessments which would impact the exclusion list.

The Head of ESG Fixed Income and Head of Responsible Investment analyse and sign off any methodological changes, including new data sources, scoring and exclusion methods.



Important Information

The value of investments and the income from them can go down as well as up and investors may get back less than the amount invested. Past performance is not a guide to future results.

Emerging Markets risk – Investing in emerging markets involves a greater risk of loss than investing in more developed markets due to, among other factors, greater political, tax, economic, foreign exchange, liquidity and regulatory risks.

ESG Investment Risk – Applying ESG and sustainability criteria in the investment process may result in the exclusion of securities within the fund's benchmark or universe of potential investments. The interpretation of ESG and sustainability criteria is subjective meaning that the fund may invest in companies which similar funds do not (and thus perform differently) and which do not align with the personal views of any individual investor.

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