

Sustainable Sovereign Risk Methodology

An ESG credit risk model

Overview

Sovereign credit risk analysis has struggled to systematically integrate climate and ESG metrics. However, there is growing pressure from investors, regulators and academics to better consider the importance of ESG metrics on creditworthiness analysis. Since 2013, we have pioneered a quantitative sovereign risk methodology combining climate and ESG factors that are financially material.

Based on an advanced quantitative methodology covering 151 countries, the Sustainable Sovereign Risk Methodology (2SRM) offers an augmented assessment of the sovereign credit risk. Calibrated and back-tested since 2000, this exclusive quantitative model has demonstrated a high correlation to financial market data (five-year CDS and 10-year yields).

Benefits

- **Integrates new financially material ESG risk factors:** sovereign ESG risk assessments are correlated with sovereign credit risk, thus providing useful information on the financial materiality of sovereign ESG risks
- **Develops innovative forward-looking indicators:** our model allows for a better understanding of countries' vulnerability levels between 2030 and 2050, considering both transition risk and physical risk due to climate change

Features

Comprehensive coverage

Covers 151 countries, with historical data covering around 100 quarters from 2000 to present

Data granularity

Scores available on multiple levels, allowing insights to be drawn at pillar, sub-pillar and theme levels

Transparent methodology

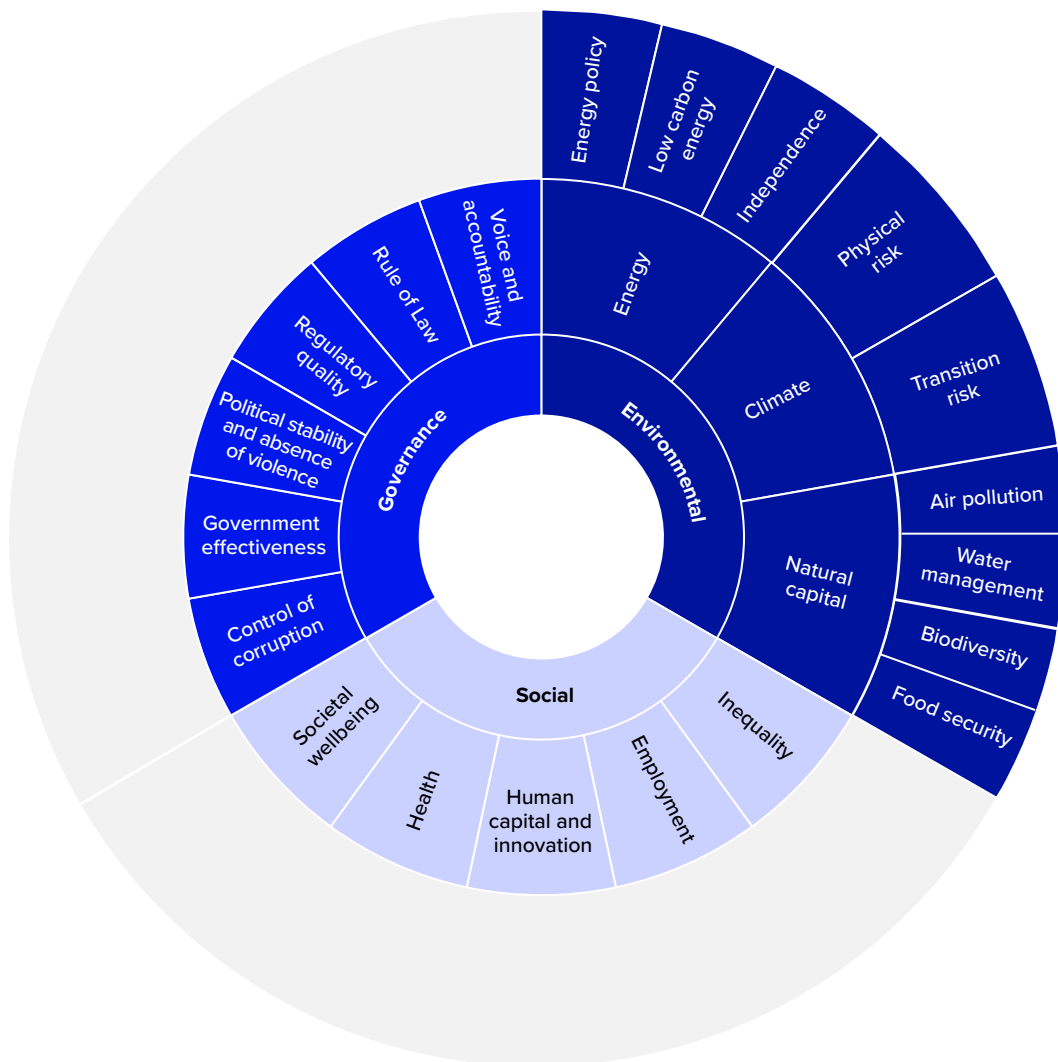
Our quantitative framework provides clarity on the materiality of ESG factors in sovereign credit risk assessment

Flexible access

Access our data directly via sftp. Yield Book clients can access data within the Yield Book Add-In and API as well as in LSEG Datastream to facilitate incorporation of sustainability into investment decision-making

Sustainable sovereign risk methodology: model structure

2SRM relies on the quantitative assessment of environmental, social and governance (ESG) pillars which characterise sovereign creditworthiness. Each pillar is structured around sub-pillars, which consist of several risk themes that include a number of indicators. The weights for each indicator are estimated using an econometric modelling technique called partial least squares regressions. Country exposure to climate and ESG risks are weighted according to their respective level of wealth (developed vs. emerging markets). Our methodology is explained in detail [here](#).



Source: LSEG Sovereign Sustainability

Using Sustainable Sovereign Risk Methodology

The Sustainable Sovereign Risk Methodology can be used to integrate ESG considerations in sovereign bond investments, including active and passive portfolio management as well as improved pricing models.

Risk management



The Sustainable Sovereign Risk Methodology enables investors to identify the ESG risks that present a financially material risk to sovereign credit, offering a complement to traditional credit assessments.

Portfolio evaluation and manager due diligence



When selecting and evaluating asset managers, institutional investors are increasingly assessing how they integrate ESG aspects into their processes. The Sustainable Sovereign Risk Methodology can help assess the range, average and variance of asset manager portfolios with respect to ESG integration on sovereign bonds.

Improved pricing models



By integrating new factors with material impact on sovereign credit risk not currently captured by CRA ratings, the Sustainable Sovereign Risk Methodology allows investors to improve internal pricing models, demonstrated [here](#).

Active portfolio management



The Sustainable Sovereign Risk Methodology data set can be used to help establish ESG eligibility criteria for an investment universe (SFDR and/or labelling) or can be applied to a proprietary quant or fundamental model. For example, how we apply this model to government bond indices is explained [here](#).

Internal research



The risk and return relationships of different ESG aspects will vary. The Sustainable Sovereign Risk Methodology provides a granular and comprehensive data set for research and analysis that allows users to develop their own views on how, or how not, to manage long-term new risks such as climate change on sovereign debt.

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