

The Robeco Country Sustainability Framework

GENERAL QUESTIONS

1. What is Robeco's CSR framework?

Robeco's CSR framework is a comprehensive framework for analyzing countries' performance on a wide range of ESG metrics. By focusing on relevant ESG factors, our country sustainability assessment offers a comprehensive view into a country's strengths and weaknesses that complements traditional sovereign risk analyses which have traditionally tilted towards macro-economic and debt-sustainability variables.

2. Why did Robeco develop its own CSR framework?

The development of our own proprietary methodology ensures alignment with Robeco's strategic SI priorities. The selection of datasets, determination of weights and aggregation techniques reflects our SI values and unique house view of the material significance and likely impact of different ESG variables. We also develop and maintain the ability to better understand the tool's underlying mechanics and gain a deeper understanding of a country's underlying ESG profile.

3. What is the philosophy of the framework?

The CSR is the outgrowth of the belief that a country's performance on ESG factors will impact its future development and solvency. Weak performance will result in squandered environmental, social and financial capital and ultimately sub-optimal development. Strong performance, the converse. Using the CSR framework to assess ESG performance, we hope to gain a better understanding of the variables that contribute to sustainable economic and financial development and help preserve the long-term solvency of the respective sovereign.

4. Why do you believe the CSR is relevant for investors?

Past sovereign defaults, the global financial crisis as well as the recent eruption of a series of regional crises gone global demonstrate that traditional sovereign risk analysis, with its narrow focus on macro-economic variables, is insufficient for capturing and distilling all the risks that can potentially disrupt an economy. We believe a better understanding of how a nation is managing its environmental resources, its social capital and its governing structures contains significant value that extends far beyond financial capital statistics. These non-financial but material indicators can provide valuable signals of a country's overall health, leading to more informed investment decisions.

Furthermore, empirical research findings from leading institutions (including the World Bank and the UN PRI) as well as the academic community confirm the relevance of ESG factors and more importantly our scores for influencing financial market indicators such as sovereign CDS spreads.

5. How do you know that the CSR measures what it is intended to measure?

We monitor the performance of our sovereign bond portfolios that incorporate our ESG assessments, checking specifically for how ESG factors are evolving within the countries that constitute our investment universe. In addition to internal research conducted on our investment portfolios, we continuously monitor the CSR tool's predictive performance against important industry benchmarks such as credit ratings, default spreads and other indices associated with measuring a country's overall resilience. As previously mentioned, external empirical research also corroborates our internal findings.

6. Why are you publishing your CSR scores?

We want to share our methodology and findings with a broader public to support the use of country ESG scores, promote ESG analysis in countries and sovereigns, as well as encourage feedback from key stakeholders, whether they be investors, researchers, institutional partners or policymakers. We value a closer read of the outside impulses that drive sustainable investing and development which may help refine the CSR methodology and strengthen resulting scores.

ABOUT THE METHODOLOGY

7. How does the CSR framework work?

The process starts with the collection and preparation of the input data across more than 50 indicators obtained from some of the world's leading research institutions for ESG data. Raw data is pre-processed and normalized to a common scale over several sequential steps (at the indicator, criteria, dimension, and country level) using z-score distributions.

The normalization process makes scores compatible for further analysis. In a final step, the country z-score is converted into a final score scaled from 1 to10 (1=lowest, 10=highest). Please see the Methodology for more detail on the scoring process.

8. How do you score and rank countries?

We apply the CSR methodology for calculating a country sustainability score for each country and rank the countries according to their final score within our 150-country universe.

9. What do CSR and E, S, G scores mean?

The CSR stands for country sustainability ranking which shows a peer group comparison of a country's sustainability performance based on aggregated ESG scores (separate scores are calculated for each environmental, social and government dimension). A separate score for each of the three dimensions reveals particular strengths or weaknesses in a country's overall ESG profile.

10. Is the framework forward- or backward-looking?

Most input data show a one- or two-year time lag, which is typical given the on-the-ground resources needed and complexities involved with collecting, analyzing, confirming (and even revising based on rapidly changing dynamics) ESG data. Where possible, we have included several explicitly forward-looking indicators such as projections for biodiversity intactness, GHG emissions and water stress through 2030 as well as future estimates of old-agedependency ratios. Though recent scores are important, it is equally critical to follow a country's ESG trend over time, as this often predicts a country's future trajectory.

11. For how long is a CSR rating valid?

Scores are assessed and updated semi-annually (in April and October), meaning CSR ratings are technically valid for six months. However, given the rather sticky nature of the data and the update frequency, scores are unlikely to change dramatically from one update to the next.

12. Is financial materiality of country sustainability taken into consideration?

Yes, financial materiality is a critical factor in selecting input indicators for the CSR framework. ESG data can detect material strengths and weaknesses in a country. For example, how it manages its natural and human resources as well as its institutional structures in the short- and mid-term will have indirect and direct impact on its long-term economic performance and the attractiveness of its sovereign bonds.

Moreover, within Robeco's ESG integration framework for sovereign bonds, the final country ESG score is considered alongside traditional analysis, such as debt servicing capacity and macroeconomic variables.

13. What is the coverage of CSR scores?

The CSR framework is broad, encompassing a comprehensive range of in-depth ESG metrics for 150 of the world's most significant countries around the globe. These include 23 developed and 127 emerging market & developing economies.

At present the CSR framework includes more than 50 underlying indicators aggregated into 15 criteria across the three primary ESG dimensions – four of which are environmental with a weight of 30%, five are social with a weight of 30%, and six are governmental with a weight of 40%.

14. How do you deal with missing data, data quality, and data timeliness?

First, we ensure that the datasets are available for most countries in our investible universe. We avoid using indicators where data coverage falls below 80%. Data gaps are eliminated using proxy estimates, meaning we calculate the average of a comparable regional peer group with similar socio-economic, political, cultural or climate conditions. Moreover, quality, accuracy and reliability are of the utmost importance. ESG data is sourced from the world's foremost institutions for researching, financing, monitoring and advocating sustainable development in developed and emerging markets around the world. They include development banks, private institutions, NGOs, thinktanks, rating agencies and universities. Where possible, we also compare our data providers with alternative indicators/data sources.

15. How does Robeco's methodology differ from other country sustainability data providers in the market?

Given that most country sustainability providers are proprietary, we are not privy to specific details of their methodologies which limits our ability to make reliable comparisons. However, we observe differences on the number and choice of indicators, the weighting assignments, and the aggregation methodology.

Moreover, we also observe that some providers differentiate between developed and developing countries or adjust the ESG scores based on a country's income level. A World Bank paper of 2020 ("Demystifying Sovereign ESG") compared the ESG methodologies and scores of seven major ESG rating providers (including Robeco) and found that sovereign ESG scores are highly correlated. This may be explained by the fact that country-level ESG data is more limited than company ESG data. As a result, country ESG providers rely largely on the same data sets.

16. Is there a bias in the framework, given it was developed by an investor?

While it is true that the CSR framework has been designed primarily for investment purposes as reflected in the use of financial material indicators, we strive to provide a balanced perspective and use a variety of data sources including NGOs such as Fund for Peace, Freedom House and Transparency International. These institutions are focused on fighting corruption, strengthening democracy and reducing conflict – all pursuits that are free of investor bias. Moreover, the calculation of scores is consistent, transparent and objective with no overrides or manual adjustments of the final scores.

17. Does the framework include a "Western bias"?

The lack of alternative data sources from other world regions means the bulk of CSR input data comes from Western providers. However, most of these rely on local experts which helps to preserve the authenticity and diversity of views and perspectives captured in the data. Also, whenever possible, we compare our assessment with those of non-Western geographies. Early in 2023, for example, we evaluated our Governance ratings against those of the Good Government Index by the Chandler Institute of Governance in Singapore (and found a high correlation of 0.95).

18. Do you adjust CSR scores for a country's income level to avoid an income bias?

No, we do not adjust the country ESG score for the level of income. There is a high positive correlation between income levels and ESG scores; a country with a higher income has more resources available to strengthen its ESG profile. However, adjusting the ESG score of a low-income country to eliminate the "income bias" would simply lift its ESG score to levels associated with a much stronger highincome country.

However, having income-adjusted ESG scores does not imply that the two countries have a similar ESG risk profiles. The low-income country would still have a much higher sovereign default risk than the high-income counterpart when looking at the absolute levels of various ESG indicators. An income adjustment is more meaningful for impact investing purposes, but less so in a country ESG framework aimed at assessing sovereign default risk.

19. Do you differentiate between developed and developing countries?

No, we use the same data and model for all countries, irrespective of their developed, developing or emerging market status. We prefer to use a consistent approach across all countries. This allows us to make country-by-country comparisons on the same set of ESG criteria. Moreover, it would add additional complexity and raise questions on the country allocation processes, where even experts are divided.

20. How did you select the indicators and weightings?

The weighting of the individual indicators, summary criteria and ESG dimensions that determine the final country score are based on expert judgement, evidence from external research, statistical analysis and peer comparisons.

ESG data is sourced from the world's foremost institutions for researching, financing, monitoring and advocating sustainable development in developed and emerging markets around the world.

21. What data providers do you use?

Currently we collect data from more than 20 different organizations, many of which contribute multiple datasets covering different ESG indicators. For example, the European Commissions' Emissions for Global Atmospheric Research contributes four separate data sets from emissions per capita and emissions intensities relative to GDP to 5-year trends that that can be used to chart future trajectories on these variables. Data providers include international organizations, NGOs, financial institutions, universities, research institutes, private thinktanks and institutions as well as rating agencies.

22. How often do you review the methodology?

Ongoing monitoring of the underlying data and data providers and maintenance of the methodology used to construct the model is an integral part of ensuring its accuracy, completeness, and ongoing predictive power. In that sense, we amend our approach as needed periodically to make sure it remains state-of-the art. More information on oversight and governance are available in the Methodology.

23. Why don't you publish the underlying data that is used to score a country?

We are not permitted to redistribute the data received from most of our data providers according to their terms of use.

ABOUT AN INDIVIDUAL COUNTRY SCORE

24. What factors influence a country's score? Can you demonstrate the rationale?

The overall score is based on the aggregation of all individual indicator scores. Even without calculating a final country score, a country's strengths and/or weaknesses are already evident in its E, S, and G dimension scores. Digging a bit deeper at the underlying criterion or indicator level further reveals the factors that led to high or low performance.

25. Do you have a time series of the data?

Yes, the time series goes back to the year 2000 on a semi-annual basis. The scores from 2000-10 have been calculated retrospectively as the country ESG ranking tool was launched only in 2010. For newer datasets that do not extend back to 2000, we populate historic scores with proxy estimates. Please note that we are only able to share scores that are available via the SI Open Access Portal. Data may be shared on a discretionary basis upon request.

26. Can the CSR scores be assessed retrospectively?

Yes, however, there are some caveats to consider. First, older country scores were based on slightly different input metrics, some of which have been updated or completely replaced as new data became available. Second, based on internal and external collaborations, we have also slightly modified the calculation methodology so that scores accurately reflect the changing significance of underlying ESG variables.

ABOUT THE GOVERNANCE OF THE FRAMEWORK

27. Who is responsible for the Country Sustainability Ranking?

The Country Sustainable Investing (SI) colleagues, and Robeco's ESG Data Scientists are primarily responsible for the ongoing operational oversight of the CSR framework and the calculation of scores. However, each CSR score update involves a consistent end-to-end process whereby a team of experts source, validate, analyze/calculate and distribute the CSR data, CSR scores and country ranks for use by investment, engagement and other relevant teams.

Moreover, in order to ensure the CSR's methodology and data remain state-of-the-art and materially relevant for investment portfolios, the CSR framework is governed by our Country Sustainability Committee comprising country sustainability specialists, representatives from our investment teams including fixed income, equity and multi-asset, our SDG Strategist and Head of Engagement. For framework updates, a broader internal stakeholder group is consulted based on relevance. External experts may also be consulted for feedback.

28. What resources are involved in updating the scores?

As discussed above, the Country SI Analyst together with the ESG Data Scientist share operational oversight of the scoring process. The scores are also shared with colleagues within the FI Global Macro team for a second, objective quality review.

USING CSR SCORES

29. How can CSR scores be used in the investment process?

The country ESG scores can be used to integrate country ESG information into investment decision making either through an ESG integration framework, via a universe screening or to inform engagement activities.

30. How can I use the CSR scores to assess my portfolio(s) exposure to country ESG performance?

The CSR scores can be downloaded at the country level. In this way, institutions are able to assess the ESG performance of their assets under management. These results can also be compared to the fund's benchmark through the same method (i.e., analyzing the ESG scores of the benchmark constituents). Please be aware that in order to improve our services and enhance the end-user experience, we log downloads made from the Sustainable Investing Open Access Initiative.

31. Can Robeco create an ESG exposure report for me?

Unfortunately, not at this stage. Robeco is neither a data provider nor a reporting agency.

32. My organization wants to use CSR scores in its investment processes, reporting and research work. How do I acknowledge your work?

Use of Robeco's CSR data is encouraged. However, redistribution requires explicit consent from Robeco. When using the scores, please add the following acknowledgement: "CSR scores powered by Robeco".