

COUNTRY ESG REPORT
AUTUMN 2024

Denmark takes the lead

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About this report

This semi-annual report provides a summary of Robeco's latest Country Sustainability Ranking, a comprehensive assessment of the performance of 150 countries on environmental, social, and governance (ESG) criteria. It builds on the results of Robeco's proprietary Country ESG Framework which collects and analyses relevant ESG data to calculate country scores.

The resulting scores offer insights into the investment risks and opportunities associated with each country and provide investors with a better frame of reference for comparing countries and regions from a risk/return perspective.

In addition to the ESG score developments, in each of these update reports we delve into case studies of interesting ESG-related developments in particular countries or regions, illuminate specific indicators that are part of our Country ESG Framework, and highlight relevant updates from our sovereign engagement and sustainability research.

ESG data contained in this report is as of October 2024 unless otherwise indicated. Commentaries, summaries, and analyses are as of November 2024. Please see the Appendix for further details regarding data indicators and methodology.

For complete rankings and scoring details, please visit Robeco's SI Open Access Portal for Country ESG Scores.

Sovereign sustainability – the two lenses applied by Robeco

In addition to the Country ESG Framework, in 2023, Robeco launched the Country SDG Framework to inform investments into sovereign assets. Where the Country ESG Framework helps avoid ESG risks and seize investment opportunities, the SDG Framework aims to identify which countries should be prioritized among government bond portfolios in order to further support sustainable development.

In Appendix A we elaborate on the main similarities and differences between them.

Executive Summary - Country ESG scores

Denmark tops, Finland drops

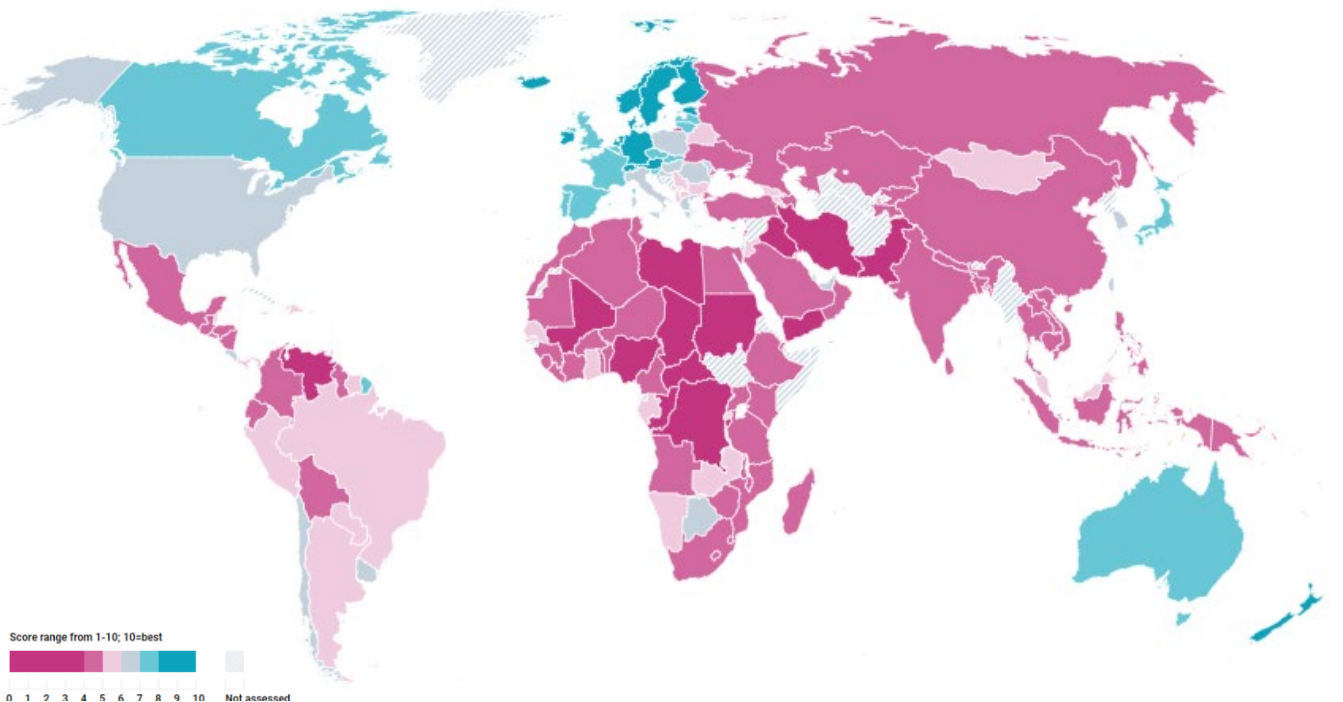
The autumn 2024 update of the Country ESG Ranking brought some interesting changes. Denmark has overtaken Finland, Norway, and Sweden to now claim the top spot. While the scores of other Scandinavian nations decreased to below 9.00, Denmark's has remained consistent over the past few years, even improving slightly since the spring update.

Social and environmental issues were facilitating factors in Finland and Sweden's declines. In Finland, the right-wing coalition government's proposed asylum reforms undermine its commitment to human rights. Meanwhile, in Sweden, Tesla and IF Metall, a prominent trade union representing a large part of the country's manufacturing sector, have refused to enter into collective bargaining talks, threatening worker protections and workforce stability. As a result, both countries saw their positions in the Global Rights Index deteriorate. Furthermore, progress on decarbonization targets has also slowed for both compared to previous years.

Fourteen countries display excellent ESG scores (>8.0), exhibiting robust and well-balanced ESG profiles. The United Kingdom rejoined this group despite declines in its social score (now < 7) with the passage of the regressive Strikes Bill which is seen as an infringement of public service workers' right to protest. This was outweighed by higher environmental (+0.39) and governance (+0.12) scores. Most significantly, the UK recently became the first G7 country to completely phase out coal-fired power generation and announced a new emission reduction target of 81% by 2035 from 1990 levels.

The two largest sovereign debt issuers slightly improved their scores. Japan moved up by +0.03 as a result of its continuing decarbonization efforts, and the US advanced by +0.04. The US's ESG scores in this update are calculated at the end of October and do not reflect the outcomes of the recent presidential elections. With a Republican sweep of the White House and Congress, E, S, and G scores will most likely decline as policies related to climate, human development and equality (e.g., reduced health insurance coverage, reproductive services and anti-discrimination protections), and democratic governance are dialed back.

Figure 1 | An overview of ESG scores by country



Source: Robeco Country ESG Scores as of October 2024. Complete scores are available on Robeco's SI Open Access Portal.

Scores around the globe

Some of the largest climbers in the ranking include Kazakhstan (20 places), Côte d'Ivoire (14 places) and Guatemala (13 places). Kazakhstan's score reflects lower GHG intensities and improved political stability. Similarly, the Côte d'Ivoire has enhanced its environmental score but has also made incremental strides in advancing labor rights.

Figure 2 | Ten largest ranking increases

TOTAL SCORE		DIMENSIONS			6M CHANGE	
Country	Score	40% weight Governance	30% weight Environmental	30% weight Social	Score Δ	Rank Δ ↓
73. Kazakhstan	5.05	5.25	4.05	5.92	+0.26	20 ↗
85. Cote d'Ivoire	4.90	4.91	5.29	4.67	+0.22	14 ↗
115. Guatemala	4.35	4.52	4.78	4.03	+0.21	13 ↗
77. Benin	4.99	4.69	5.69	4.83	+0.16	11 ↗
113. Sri Lanka	4.35	4.83	3.75	4.66	+0.12	11 ↗
88. El Salvador	4.85	4.85	4.98	4.90	+0.09	8 ↗
43. Bulgaria	6.23	6.05	6.09	6.40	+0.29	7 ↗
107. Philippines	4.46	5.11	3.58	4.78	+0.07	7 ↗
110. India	4.43	5.47	3.26	4.52	+0.06	7 ↗
124. Djibouti	4.23	4.29	5.41	3.34	+0.12	7 ↗

Source: Robeco Country ESG Scores as of October 2024. Complete scores are available on Robeco's SI Open Access Portal.

Conversely, Papua New Guinea, Russia, Gabon, Mauritania, and Lao PDR lost momentum and dropped several ranks. Weakened human and labour rights was a common feature leading to lower social scores. Moreover, higher climate emissions was a factor in reducing the environmental scores of Papua New Guinea, Lao PDR and Gabon, putting them at odds with the global climate agenda. With this update, scores for Sudan (2.96) and Iran (2.89) are now below 3.00, moving them closer to Iraq (2.89), Libya (2.64) and Yemen (2.54) at the bottom of the ranking.

Figure 3 | Ten largest ranking declines

TOTAL SCORE		DIMENSIONS			6M CHANGE	
Country	Score	40% weight Governance	30% weight Environmental	30% weight Social	Score Δ	Rank Δ ↑
123. Papua New Guinea	4.25	4.50	4.75	3.76	-0.28	18 ↘
134. Russia	4.13	3.93	4.02	4.92	-0.25	18 ↘
80. Gabon	4.96	4.42	6.29	4.52	-0.37	17 ↘
119. Mauritania	4.28	4.14	4.93	4.17	-0.29	17 ↘
130. Lao PDR	4.15	4.45	3.96	4.35	-0.26	17 ↘
95. Bolivia	4.79	4.45	4.53	5.71	-0.11	14 ↘
98. Oman	4.75	5.69	2.53	5.95	-0.10	14 ↘
81. Mongolia	4.93	5.55	3.35	5.84	-0.22	10 ↘
91. Colombia	4.82	5.15	5.19	4.21	-0.04	8 ↘
38. Israel	6.53	6.40	6.20	6.75	-0.38	7 ↘

Source: Robeco Country ESG Scores as of October 2024. Complete scores are available on Robeco's SI Open Access Portal.

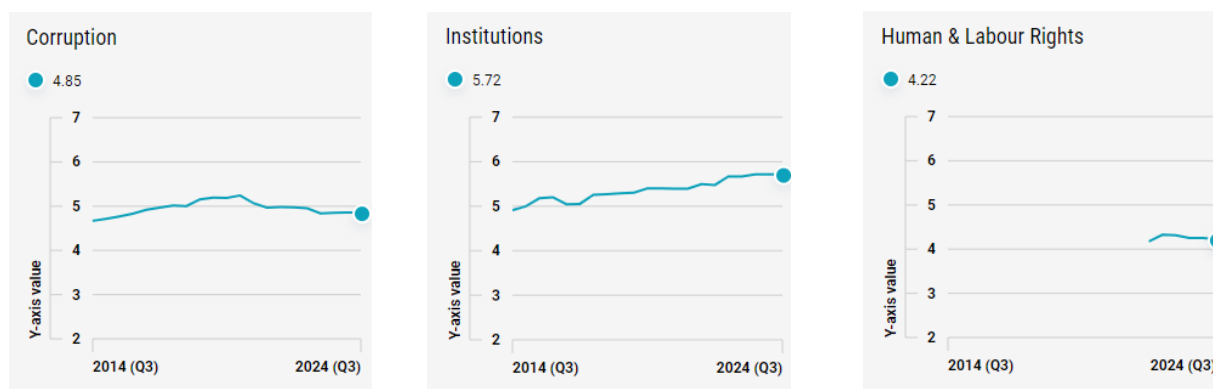
Country case study - Indonesia

Can an OECD bid boost investor confidence?

In February 2024, Indonesia became the first Southeast Asian country to bid for OECD membership. This is an important signal of Indonesia's willingness to align its policies with international best practices and governance standards. However, OECD accession will require meeting stringent standards across a range of areas. Countries wishing to become OECD members must demonstrate a "readiness" and a "commitment" to adhere to essentially two fundamental requirements: (i) democratic societies committed to rule of law and protection of human rights; and (ii) open, transparent and free-market economies.

Indonesia has a long way to go on both. It currently ranks 115th out of 180 countries in Transparency International's 2023 Corruption Perception Index, which measures perceived corruption of a country's public sector. Corruption distorts information flows and damages the ability of free markets to efficiently operate. To meet the OECD's anti-corruption requirements, Indonesia needs to get busy cutting corruption in its ranks. Another problem relates to respecting and protecting human rights. While Indonesia has ratified most core international human rights treaties, it is accused of serious human rights breaches by international watchdogs. What is more, substantial reforms in areas such as climate policy, digital transformation (particularly of micro, small, and medium enterprises), and institutional capacity are needed.

Figure 4 | Indonesia's mixed performance on Corruption, Institutions, Human & Labor Rights



Source: Robeco, October 2024.

Note: The scoring methodology for the Human and Labor Rights criterion changed in 2022, complicating historic score comparisons.

The rewards of reform

Although the road ahead is long, the country has already made some notable progress in embracing OECD principles, adopting legal instruments, and actively engaging with the organization's core bodies. Should the bid turn out to be successful, it could enhance Indonesia's annual economic growth and help the nation escape the middle-income trap that characterizes so many Southeast Asian economies.

More importantly, OECD membership is not required to reap the benefits of reforms. Any tangible efforts made will enhance its ESG standing and subsequently its investment appeal, as the indicators which the OECD uses to evaluate a country's commitment to combating corruption, protecting human rights, and strengthening the rule of law are the very same used in calculating Robeco's Country ESG scores. ESG scores are used by investors to assess the risk-reward profile of a country's sovereign bonds. Better ESG scores may boost investor confidence, attracting new waves of investments that unlock more of Indonesia's untapped economic potential.

Country case study - Hungary

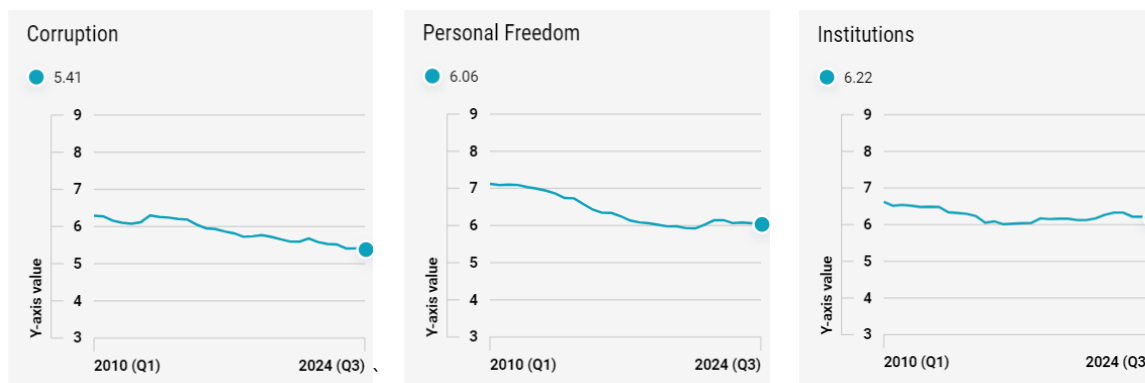
Degraded democracy, elevated corruption

From a sovereign debt investor's perspective, understanding how political shifts might affect key governance indicators such as the rule of law, democratic accountability, and institutional transparency is crucial. Governance is a cornerstone of a country's economic stability and risk profile. The rise of populist or nationalist governments can complicate this landscape, introducing new risks and uncertainties.

One of the most striking examples of how a populist government can undermine a country's governance is Hungary under Prime Minister Viktor Orbán. Since taking power in 2010, Orbán has systematically weakened Hungary's democratic institutions, turning the country into what many analysts describe as an "illiberal democracy." His ruling Fidesz party has increasingly compromised judicial independence, suppressed media freedoms, and limited the power of civil society. This erosion of governance has had a direct negative impact on Hungary's reputation as an attractive destination for investment, particularly from those concerned with political and institutional stability.

For instance, Hungary has seen declines in Transparency International's Corruption Perceptions Index and Freedom House's Freedom in the World scores, both important metrics for assessing governance quality. Orbán's government has also clashed with the EU with respect to rule-of-law issues, leading to the suspension of EU funds, further underscoring the direct impact of poor governance on economic stability.

Figure 5 | Hungary's Corruption, Personal Freedom and Institutions score developments during Viktor Orbán's reign



Source: Robeco, October 2024. Complete scores are available on Robeco's SI Open Access Portal.

High on populism, low on investor confidence

In the short term, countries that shift to the far right may enjoy a period of political stability and voter support due to populist policies. These policies often promise quick fixes to complex problems, appealing to a broad base of voters who feel left behind by globalization and economic changes. However, in the long term, the deterioration of governance can lead to economic instability, strained international relations, and a higher cost of borrowing.

Hungary, for example, has seen its bond yields rise substantially as the central bank fought to control inflation and re-establish its credibility after years of government intervention. It took significant rate hikes to create a climate in which sovereign bonds could recover. Despite hawkish monetary policy, its credit default swap spreads (a critical gauge of investor confidence) have yet to return to their 2022 levels before the Russian invasion of Ukraine. In contrast, CSD spreads for Poland, which is led by a centrist coalition government, have nearly recovered in the same timeframe. Hungary's situation can create a vicious cycle where higher borrowing costs lead to greater fiscal pressure, which in turn can exacerbate economic and political instability.

The case of Hungary serves as a cautionary tale for other European countries, most notably Austria, the Netherlands, and Slovakia, which have experienced similar political shifts toward extreme right-wing policies. Should their governments follow

Hungary's lead in weakening democratic institutions in favor of populist or nationalist agendas, they could face similar consequences: deteriorating governance, strained relationships with the EU and other international organizations and, ultimately, a loss of investor confidence.

The much bigger threat

The rise of far-right parties also poses challenges for the EU as a whole. The EU's cohesion relies on shared values of democracy, rule of law, and human rights. When member states deviate from these principles, it creates friction, complicating collective decision-making and undermining the EU's ability to present a united front on global issues. This internal discord can have economic repercussions, affecting everything from trade policies to financial markets.

For sovereign investors, the political trend towards populism adds a layer of risk to their decision-making process. It requires a deeper analysis of how political shifts might affect a country's long-term financial stability. Investors must consider not only the immediate economic policies of these governments but also the broader implications for governance and institutional integrity.

The case of Hungary demonstrates the potential pitfalls for countries moving towards populist governments, especially in the realm of governance. For sovereign debt investors, this political trend necessitates a more nuanced approach to risk assessment, taking into account the complex interplay between politics, governance, and economic stability. As Europe continues to navigate this shifting political landscape, the importance of robust governance as a foundation for economic stability cannot be overstated.

Thematic spotlight - Education

Education's impact on growth

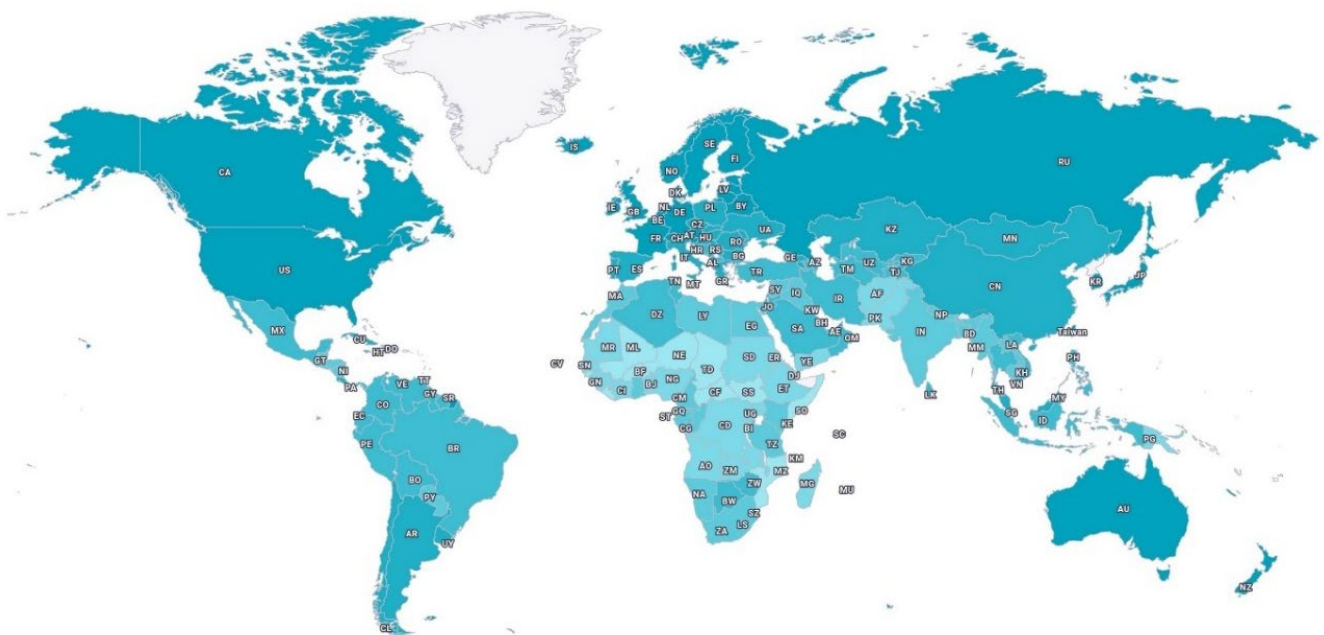
Education is a primary driver of long-term prosperity. More than imparting knowledge, education equips individuals with the skills and competencies necessary to thrive in a rapidly changing world. A robust education system fosters a skilled and knowledgeable workforce, which is essential for driving innovation, economic growth, and competitiveness in the global marketplace.

For sovereign debt investors, the quality of a country's education system is an important indicator for future economic potential. A well-educated population can drive sustainable economic growth, which in turn enhances the country's ability to service its debt. Countries with strong education systems can thus be seen as lower-risk investments, as they are typically better positioned to achieve long-term economic stability and growth. Additionally, a focus on education can lead to a more diversified economy, reducing reliance on a single industry and mitigating economic risks. This diversification is particularly important in a global economy where market conditions can change rapidly and reliance on a single sector can make a country economically vulnerable.

More specifically in the context of global competition, countries with strong educational systems are better positioned to adapt to technological advancements and shifts in the global economy. The rapid pace of technological change requires a workforce that is not only skilled but also adaptable and capable of continuous learning. Educational systems that emphasize critical thinking, problem-solving, and lifelong learning prepare individuals to navigate the complexities of the modern economy and contribute to innovation and growth.

In our ESG Framework, Robeco focuses on education as part of its group of broader human development indicators. We specifically refer to the education index of the Legatum Institute, which looks at pre-primary education (5% weight), the availability, quality, and enrollment in primary education (20%), secondary education (30%), and tertiary education (20%). Legatum also analyzes the skills-base of the existing working-age population (25%), which reflects the historic quality of education.

Figure 6 | Legatum Prosperity Education scores across the world



Source: Legatum Institute, 2023.

Education not enough

Sadly, some countries are strongly investing in education but are unable to reap the benefits. For many this may be due to the “brain drain” phenomenon, where educated individuals move to other countries in search of better opportunities. When talent exits, the country loses valuable human capital which can trigger a vicious cycle where the lack of opportunities leads to more emigration, further depleting the country’s human capital and hindering its development prospects. Taiwan and Albania are good examples of countries that score well on the Legatum Index, but at the same time suffer economically from brain drain.

The Human Flight and Brain Drain Index measures the economic impact of this phenomenon, commonly referred to as “brain drain”, within a country. It cites Samoa, Jamaica and Ukraine as countries which are most strongly experiencing this form of human capital loss. After the Russian invasion, Ukraine saw its position in the index change from 92nd (out of 179 countries) in 2022 to 18th in 2023. In contrast, Australia, Sweden and Norway are the least exposed.

Holistic thinking is paying off

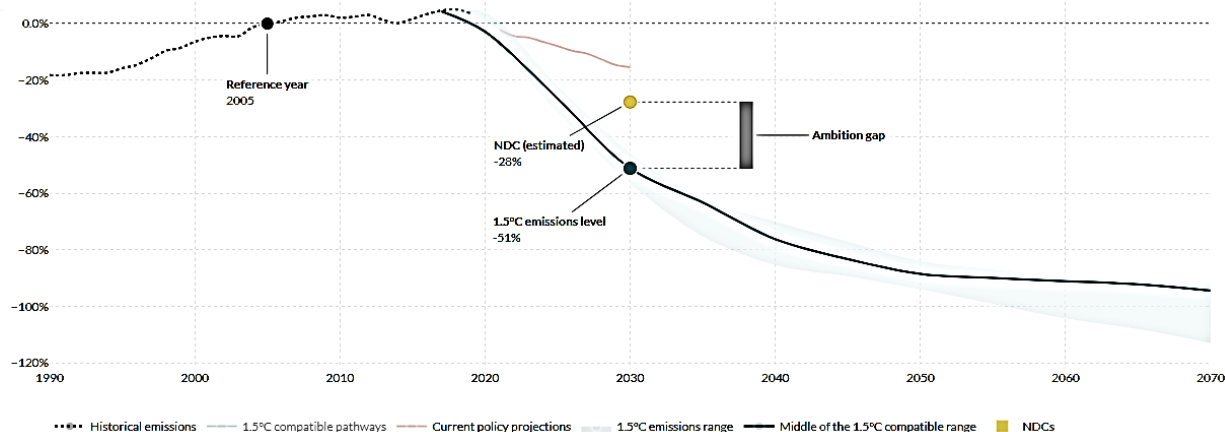
Some drivers of brain drain, such as armed conflict, geography or economic conditions, are difficult to overcome. Beyond these special situations, most countries have levers to foster an environment that offers more attractive opportunities for skilled individuals. They can implement policies that encourage the retention of talent, such as tax incentives for businesses that hire local graduates, investment in research and development to create high-skilled job opportunities, and initiatives to improve the overall quality of life, including healthcare, housing, and public services. Qatar, Belize and India are countries that have implemented such policies and have seen human capital loss decline in recent years.

While investing in education is important for a country’s long-term prosperity and a positive signal for sovereign debt investors, to retain talent, it must be complemented by strategies and investments in other critical areas. To maximize the benefits of educational investments and achieve sustainable economic growth, countries need to adopt a holistic approach to development that includes education, healthcare, infrastructure, and good governance. Obviously, that is easier for high-income countries, but illustrative examples among other income cohorts show that progress is possible.

Sovereign engagement in Australia

Australia is a poor performer on the Climate & Energy component of our Country ESG Framework. It has one of the highest GHG intensities in the world (per capita denominated) and despite recent progress in terms of reducing GHG emissions, a significant gap persists between the emission reduction targets cited in Australia's Nationally Determined Contributions (NDCs) and a 1.5°C-aligned trajectory. What is more, its current climate policies are projected to fall short of the targets set out in its NDCs (see Figure 7, red line). The country received a score of 4.36 (scale of 1-10) on the Climate & Energy component of our Country ESG Framework, which at 10% carries the largest weight of all environmental indicators and therefore significantly impacts the total environmental score.

Figure 7 | The widening gap between Australia's stated ambitions versus their actual policies



Source: 1.5°C national pathway explorer. <https://1p5ndc-pathways.climateanalytics.org/countries/australia>

Australia – a prime target for sovereign engagement

Australia is one of the world's largest exporters of coal, LNG, and iron ore, making its economy critically dependent on energy exports and highly vulnerable to disruption. Cognizant of this vulnerability, in recent years it has pushed through significant climate mitigation reforms, including the transformative, Climate Change Act of 2022, which legislated into law its ambitious GHG-emissions reduction plan to align with the Paris Agreement. This makes it a strategically important model and influencer of the energy transition for investors and countries to follow.

Robeco joined forces with the PRI and the IGCC¹ in a collective sovereign engagement initiative with the Australian government to ensure momentum continues and that announced policy directives translate into policy actions that support investment opportunities and reduce transition risks for Australian companies and their assets. In August, the group met with key decision-makers at the regional and national levels to continue a series of engagement talks that began in early 2023.

In meetings with Australia's Treasurer and Minister for Climate and Energy, the group reiterated that by meeting its NDCs in the short and long term, Australia will enhance its sustainability credentials which are critically needed to secure capital flows from European investors for its federal and state-issued green bonds and other transition investments. The group continued to push for at least a 70% reduction in emissions through 2035. Ministers confirmed that concrete measures have been taken with the latest "[Future Made in Australia](#)" bill, a sweeping economic plan which aims to make Australia a leader in renewable energy as well as in the supply of critical minerals and transition-enabling resources.² Moreover, nuclear energy will almost certainly be part of its decarbonization strategy but that the effort will be fully funded from public rather than private sources.

Beyond the ministerial level, the group engaged with several department heads, opposition representatives, and climate advisors to the Prime Minister. Overall progress of the sovereign engagement program in Australia has been strong, demonstrated not only with positive actions but also with increasing recognition of investor requests and access to key government decision-makers.

¹ PRI, Principles for Responsible Investment is an international network of investors committed to incorporating environmental, social, and governance (ESG) factors into investment decisions to enhance long-term returns and better manage risks. The IGCC, Investor Group on Climate Change is a network of institutional investors from Australia and New Zealand with the same focus on managing financial risks and opportunities related to climate change and the energy transition.

² See <https://futuremadeinaustralia.gov.au/> for more information for the latest policy updates for the "Future Made in Australia" plan.

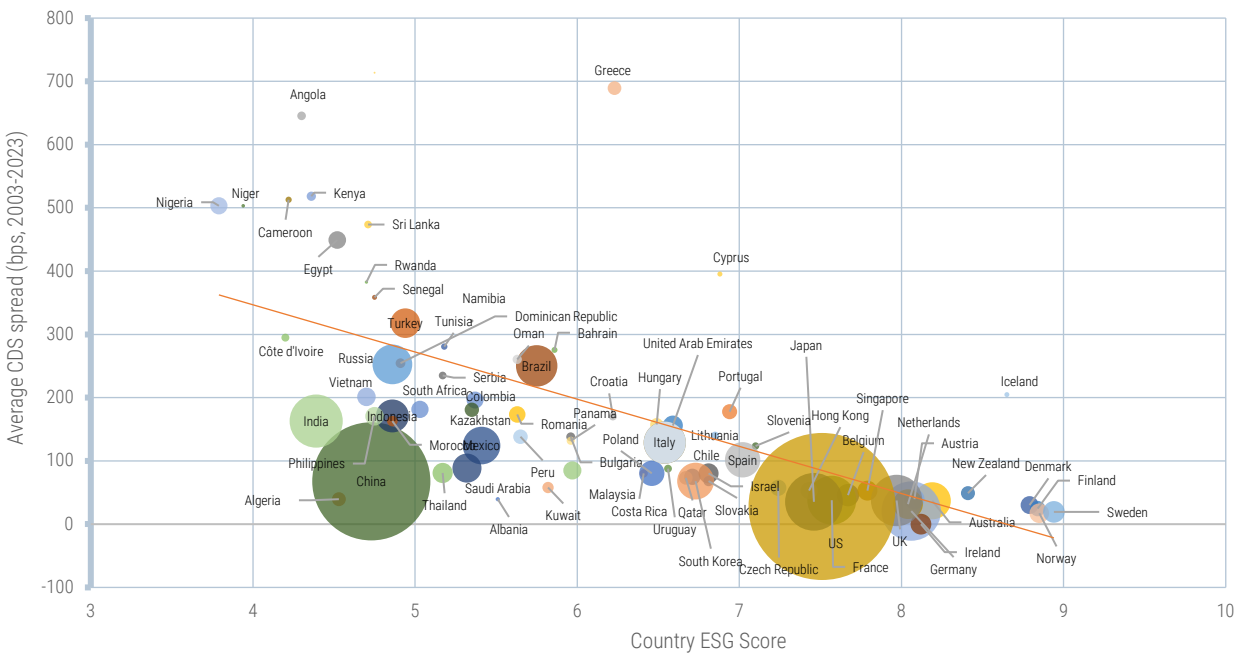
Research insights - Country ESG scores and investment risks

Higher ESG ratings coincide with lower default risk

Credit default swaps (CDS) provide fixed income investors with protection in case a country defaults on its debt. In essence, CDS spreads serve as an insurance premium: the riskier the investment, the higher its spread. If it is true that ESG scores are negatively correlated with ESG risk, then countries with high ESG scores should have lower default risks and lower insurance premiums, which in the sovereign bond world, is indicated by a lower CDS spread.

A recent study validates this assumption between ESG performance and measures of its default risk as measured by its CDS spread (see Figure 8). An upward or downward trend in its ESG scores signals potential moves in the pricing of sovereign credit risk. In numerical terms – considering the average CDS spread is 196, a 0.1 higher country ESG score is on average associated with a 10bps lower CDS spread.³

Figure 8 | Average CDS spread and Country ESG rating (size of bubble represents GDP)



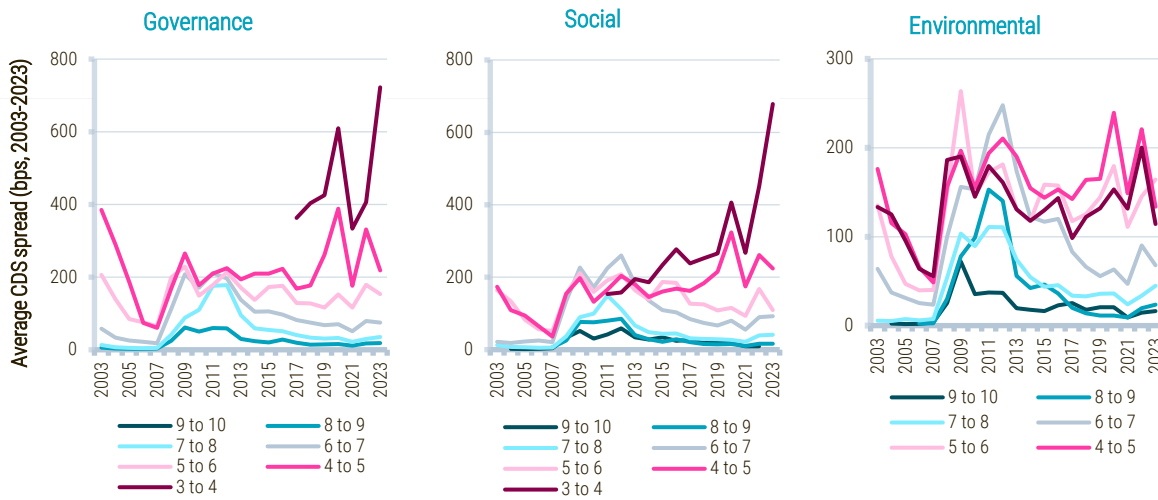
Source: Robeco, 2024. An analysis of 83 countries between 2003 and 2023 showed a statistically significant negative relationship between their Country ESG ratings and 5-year CDS spreads. This relationship persists even after controlling for various macroeconomic and financial variables such as GDP/capita, GDP growth, fiscal balance, inflation, debt, current account, reserves and export ratios, demonstrating the robust relationship which is not due to omitted variable bias but holds true across different conditions. For more details, please see the recent white paper, "Sovereign sustainability: What are the risk implications?" Robeco, November 2024.

³ For more details, please see the recent white paper, "Sovereign sustainability: What are the risk implications?" Robeco, November 2024.

Strong governance associated with lower CDS spreads

We also looked beyond overall ESG scores and sought to identify which individual pillar (E, S, or G) primarily drives the negative relation between ESG scores and CDS spreads. The findings indicate that governance is the main driver, as countries with stronger governance practices tend to have narrower CDS spreads, reflecting enhanced investor confidence and reduced sovereign credit risk. In contrast, no meaningful relationship was found between environmental scores and CDS spreads, while social scores showed a weak but present relationship, with improvements in social scores linked to lower default risk.

Figure 9 | Average default risk per E, S, and G pillar



Country ESG scores on a scale of 1-10, lowest to highest.

Source: Robeco, 2024. For more details, please see the recent white paper, "Sovereign sustainability: What are the risk implications?" Robeco, November 2024.

Appendix A - Two sovereign sustainability lenses

ESG and SDG - complementary approaches

Robeco has been actively incorporating sustainability analysis in its investment decisions for sovereign bonds since 2010. Over this period, the Robeco Country ESG Framework has been our main sustainability analysis tool for avoiding sustainability risks and seizing opportunities related to sovereign bond investments.

Optimizing the risk-return tradeoff is one approach to investing in sovereigns, however, it may prevent low-income countries with poor sustainability performance from accessing desperately needed financing.

While as investors, we want the lower risks and positive returns associated with top ESG performers, we also want to help low-ranking countries forge a path towards sustainable economic growth and development. In 2023, our in-house SDG strategist and global macro and fixed income teams developed the Robeco Country SDG Framework. The framework integrates material UN SDG criteria into country analysis in order to identify which countries should be prioritized in government bond portfolios.

Each framework has a distinct purpose which is reflected in differences in measurement criteria, how final scores are calculated, as well as how country performance is ranked or rated. Moreover, there are also differences in the sustainability outcomes that can be expected as well as how they are applied to sovereign portfolios. The main similarities and differences between the two approaches are summarized in the table below.

Table 1 | An overview of the tools used in Robeco's sovereign sustainability analysis

	Country Sustainability Ranking	Country SDG Framework
Purpose	Identifying sustainability risks and opportunities for sovereign bonds, in order to make better informed investment decisions	Identifying which countries should be in/excluded in government bond portfolios, in order to support sustainable development
Lens	Uses sustainability criteria as input	Uses sustainability criteria as output
Model	The model consists of three pillars, Environment (30%), Social (30%) and Governance (40%), that comprise 51 indicators related to 15 criteria	The framework consists of three steps that gauge if: (1) countries have good policies for the SDGs; (2) the country shows clear investment potential that could be realized with access to capital; and (3) a country is involved in controversies that diminish SDG progress.
Output	ESG Score on a 1-10 scale (two decimals)	SDG Score on a -3 to +3 scale (integers)
Similarities	Countries that have high levels of corruption and are involved in environmental, social, or governance controversies will receive poor scores in both assessments.	

Source: Robeco

Please refer to the white paper, "Sovereign Sustainability – the two lenses applied by Robeco", which is available on Robeco's website and further elaborates on the development and application of these two investment approaches.

Appendix B - Country Sustainability Framework

Ongoing monitoring of the underlying data, data providers and methodology used to construct a model is an integral part of ensuring its accuracy, completeness, and ongoing predictive power. Here, we provide our data sources as well as how sustainability scores are weighted and calculated.

As shown in the Table 2, the current methodological framework comprises 51 indicators, which are combined into 15 criteria covering the three main ESG dimensions (environmental, social and governance).

The framework captures a broad set of relevant ESG factors with the ultimate aim of providing an assessment of whether a country's development in the E, S and G areas helps preserve the long-term solvency of its bonds. The country sustainability assessment framework presently covers a universe of 150 countries, 23 of which are considered industrialized countries or advanced economies, and 127 emerging market and developing countries.

Table 2 | Underlying indicators and weightings in Robeco's Country ESG Framework

Indicators	Criteria	Weight	Dimensions	Weight	Country
<ul style="list-style-type: none"> > Forest Cover Net Change > Natural Resources Rent > Red List Index > Ecological Deficit/Reserve > Consumption CO2 per Capita > GHG Emissions per GDP > Consumption CO2 5-Yr p/C Change > GHG Emissions 5-Yr p/GDP Change > GHG p/C Reduction 2015-30 > Integrated Water Management > Water Stress Level > Water Use Efficiency > ND-GAIN Index 	<ul style="list-style-type: none"> > Marine Protected Area > Ocean Health Index > Terrestrial Protected Area > GHG Emissions per Capita > Share of Renewables > GHG Emissions 5-Yr p/C Change > Share of Renewables 5-Yr Change > GHG Emissions p/C Target 2030 > Wastewater Treatment > Water Stress 2030 Projection > Waste Management > Natural Hazard Index 	<ul style="list-style-type: none"> Biodiversity 7.5% Climate & Energy 10% Water & Waste 7.5% Environmental Risk 5% 	<ul style="list-style-type: none"> Environmental 30% 	Country ESG Score	
<ul style="list-style-type: none"> > Labor Force Participation Rate 55-64 > Education > Human Development Index > Global Rights Index > Gender Inequality Index > Fragile States Index 	<ul style="list-style-type: none"> > Old-Age Dependency Ratio 25Y Projection > Health > Human Rights > GINI Coefficient > Socio-Economic Vulnerability 	<ul style="list-style-type: none"> Aging 7.5% Human Development 5% Human & Labor Right 7.5% Inequality 5% Social Unrest 5% 	<ul style="list-style-type: none"> Social 30% 		
<ul style="list-style-type: none"> > Control of Corruption > Globalization Index > Government Effectiveness > Rule of Law > Freedom in the World > Political Risk Rating EIU > Human Hazard 	<ul style="list-style-type: none"> > Corruption Perception Index > Global Innovation Index > Regulatory Quality > Voice & Accountability > Political Risk Rating PRS > Political Stability/No Violence 	<ul style="list-style-type: none"> Corruption 7.5% Globalization & Innovation 5% Institutions 10% Personal Freedom 5% Political Risk 7.5% Political Stability 5% 	<ul style="list-style-type: none"> Governance 40% 		

Source: Robeco, November 2024.

Appendix C - Data sources

Criterion	Indicator	Source*	URL
Biodiversity	Ecological Deficit or Reserve	Global Footprint Network	Global Footprint Network
	Forest cover Net Change	Global Forest Watch	Global Forest Watch (GFW)
	Marine Protected Area	WDPA - World Database of Protected Areas	WDPA (World Database of Protected Areas)
	Natural Resource Rent	World Bank	World Bank
	Ocean Health Index	Ocean Health Index Team	Ocean Health Index team
	Red List Index	ICUN/UN Statistics Division	UN Statistics Division
	Terrestrial Protected Area	WDPA - World Database of Protected Areas	WDPA (World Database of Protected Areas)
Climate & Energy	Consumption CO2 Emissions per Capita	Our World in Data/Global Carbon Project	Per capita consumption-based CO₂ emissions, 2021
	GHG Emissions per Capita	EDGAR	EDGAR - The Emissions Database for Global Atmospheric Research (europa.eu)
	GHG Emissions per GDP	EDGAR	EDGAR - The Emissions Database for Global Atmospheric Research (europa.eu)
	Share of Renewables to Energy Consumption	U.S. Energy Information Administration (EIA)	International - U.S. Energy Information Administration (EIA)
	Consumption CO2 Emissions p/C 5-Yr Change	Our World in Data/Global Carbon Project	Per capita consumption-based CO₂ emissions, 2021
	GHG Emissions per Capita 5-Yr Change	EDGAR	EDGAR - The Emissions Database for Global Atmospheric Research (europa.eu)
	GHG Emissions per GDP 5-Yr Change	EDGAR	EDGAR - The Emissions Database for Global Atmospheric Research (europa.eu)
	Share of Ren/Energy Cons. 5-Yr Change	U.S. Energy Information Administration (EIA)	International - U.S. Energy Information Administration (EIA)
	GHG Emissions p/C Reduction 2015-30	Climate Resource	NDCs - Climate Resource (climate-resource.com)
	GHG Emissions p/C Target 2030	Climate Resource	NDCs - Climate Resource (climate-resource.com)
Water & Waste	Integrated Water Management	UN Water - UNEP	Home SDG 6 Data
	Wastewater Treatment	Socioeconomic Data & Applications Center	Environmental Performance Index (EPI) SEDAC (columbia.edu)
	Water Stress Level	UN Water - FAO Aquastat	Home SDG 6 Data
	Water Stress Projection 2030	World Resources Institute - Aqueduct	Data, Aqueduct Projected Water Stress Country Rankings World Resources Institute (wri.org)
	Water Use Efficiency	UN Water - FAO Aquastat	Home SDG 6 Data
	Waste Management	Socioeconomic Data & Applications Center	Environmental Performance Index (EPI) SEDAC (columbia.edu)
	Environmental Risk	Natural Hazard Index	DRMKC - INFORM - European Commission
ND_GAIN Index		University of Notre Dame	Download Data // Notre Dame Global Adaptation Initiative // University of Notre Dame (nd.edu)
Aging	Labor Force Participation Rate 55-64	ILOSTAT - International Labour Organization	https://ilostat.ilo.org/data/
	Old-Age Dependency Ratio 25-Year Projection	UN - Population Division	Population Division (un.org)
Human Development	Education	Legatum Institute	Rankings :: Legatum Prosperity Index 2023
	Health	Legatum Institute	Rankings :: Legatum Prosperity Index 2023
	Human Development Index	UNDP	Human Development Data Center Human Development Reports (undp.org)
Human & Labour Rights	Global Rights Index	ITUC - International Trade Union Confederation	Global Rights Index - International Trade Union Confederation
	Human Rights	Fund for Peace	Fragile States Index The Fund for Peace
Inequality	Gender Inequality Index	UNDP	Human Development Data Center Human Development Reports (undp.org)
	GINI Coefficient	Our World in Data	Income inequality: Gini coefficient, 1963 to 2023
Social Unrest	Fragile States Index	Fund for Peace	Fragile States Index The Fund for Peace
	Socio-Economic Vulnerability	DRMKC - INFORM - European Commission	INFORM - Global, open-source risk assessment for humanitarian crises and disasters
Corruption	Control of Corruption	World Bank	Home Worldwide Governance Indicators
	Corruption Perception Index	Transparency International	https://www.transparency.org/en/cpi/2022
Globalization & Innovation	Globalization Index	KOF/ETHZ	KOF Globalisation Index - KOF Swiss Economic Institute ETH Zurich
	Global Innovation Index	WIPO	Indicator Rankings & Analysis Global Innovation Index
Institutions	Government Effectiveness	World Bank - Worldwide Governance Indicators	Home Worldwide Governance Indicators
	Regulatory Quality	World Bank - Worldwide Governance Indicators	Home Worldwide Governance Indicators
	Rule of Law	World Bank - Worldwide Governance Indicators	Home Worldwide Governance Indicators
Personal Freedom	Freedom in the World	Freedom House	Freedom in the World Freedom House
	Voice & Accountability	World Bank - Worldwide Governance Indicators	WGI 2022 Interactive > Home (worldbank.org)
Political Risk	Political Risk Rating	Economist Intelligence Unit	Economist Intelligence Unit subscription
	Political Risk Rating PRS	PRS Group	PRS Group subscription
Political Stability	Human Hazard	DRMKC - INFORM - European Commission	INFORM - Global, open-source risk assessment for humanitarian crises and disasters
	Political Stability/No Violence	World Bank - Worldwide Governance Indicators	Home Worldwide Governance Indicators

Source: Robeco, as of October 2024.

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