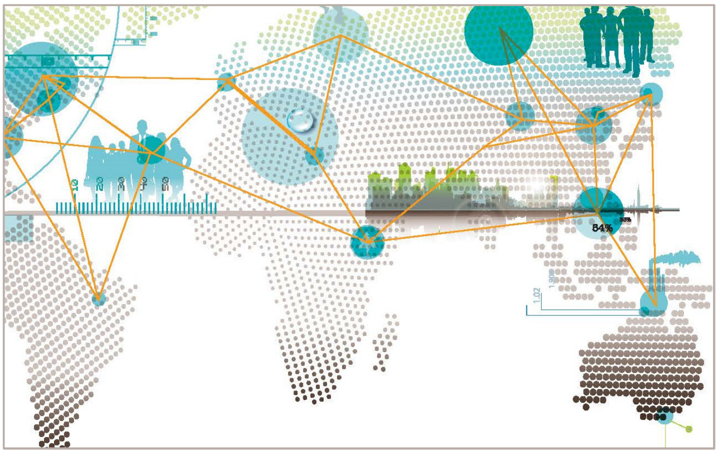
We are Sustainability Investing.

Country Sustainability Ranking Update – June 2019

Switzerland defies Nordic supremacy

- **Environmental risks dominate the global landscape**
- **Sweden remains the world's sustainability leader**
- **Portugal and Indonesia are making progress**
- **Democracy under pressure**



Environmental, social and governance risks continue to dominate the current risks landscape. The Nordic countries and Switzerland maintained their leading positions as they best preserved their democratic institutions and governance quality.

With a considerable number of countries in advanced economies as well as emerging markets, suffering from growing political polarization, populist movements and even more authoritarian rule, good governance is under pressure.

This is problematic at a time when crucial challenges such as climate change, increasing inequality, and latent geopolitical tensions require a consistent, coordinated and decisive policy response.

About this report

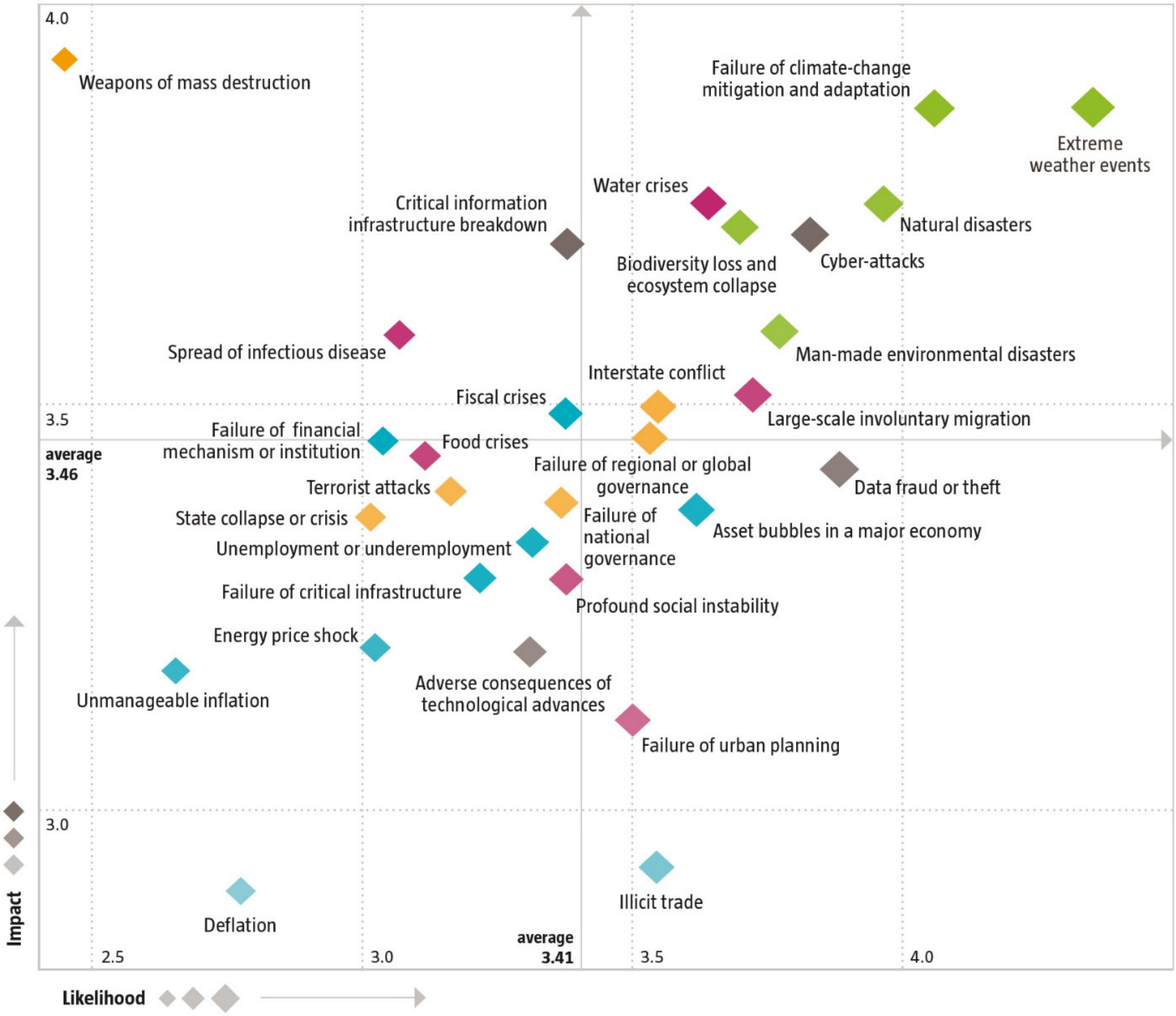
This semi-annual report provides a succinct summary and analysis of the Environmental, Social, and Governance (ESG) profiles of 65 countries around the globe. It builds on the results of RobecoSAM's proprietary Country Sustainability Ranking (CSR) tool which collects and analyzes ESG data from 22 developed and 43 emerging market economies via a structured and comprehensive framework to calculate an overall country score.

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 making comparisons among countries and regions from a risk-return perspective. The summary outlined here complements findings gained from the more traditional country risk assessment and is particularly focused on integrating long-term perspectives.[1)]

For a more detailed outline of the methodology used, please refer to our brochure "Measuring Country Intangibles."[2)]

[1), 2)] Please see the Endnotes for further details regarding data indicators and methodology.

Figure 1: The global risks landscape 2019[1]



Categories
Economic
Environmental
Geopolitical
Societal
Technological

Top 10 risks in terms of Likelihood	Top 10 risks in terms of Impact
1. Extreme weather events	1. Weapons of mass destruction
2. Failure of climate-change mitigation and adaptation	2. Failure of climate-change mitigation and adaptation
3. Natural disasters	3. Extreme weather events
4. Data fraud or theft	4. Water crises
5. Cyber-attacks	5. Natural disasters
6. Man-made environmental disasters	6. Biodiversity loss and ecosystem collapse
7. Large-scale involuntary migration	7. Cyber-attacks
8. Biodiversity loss and ecosystem collapse	8. Critical information infrastructure breakdown
9. Water crises	9. Man-made environmental disasters
10. Asset bubbles in a major economy	10. Spread of infectious diseases

Note: Survey respondents were asked to assess the likelihood of the individual global risk on a scale of 1 to 5, 1 representing a risk that is very unlikely to happen and 5 a risk that is very likely to occur. They also assess the impact on each global risk on a scale of 1 to 5 (1: minimal impact, 2: minor impact, 3: moderate impact, 4: severe impact and 5: catastrophic impact). See Appendix B for more details. To ensure legibility, the names of the global risks are abbreviated; see Appendix A for the full name and description.

Source: World Economic Forum Global Risks Perception Survey 2018–2019

[1] "The Global Risks Report 2019", World Economic Forum, Switzerland; https://www.weforum.org/reports/the-global-risks-report-2019

Environmental risks dominate global concerns

The 2019 edition of the annual WEF Global Risks Report highlights environmental risks as the threat of greatest concern. As in previous years, the report identifies and examines the most critical and disruptive risks for the world over the coming decade. It is based on WEF's latest Global Risks Perception Survey, which reflects the respective risk assessments of nearly a thousand decision makers from the public and private sectors, academia and civil society. **Figure 1** shows that environmental concerns account for three of the top five risks by likelihood and are among the top four by impact. More precisely these risks include: extreme weather events, failure to address climate change, natural disasters and biodiversity loss & ecosystem collapse.

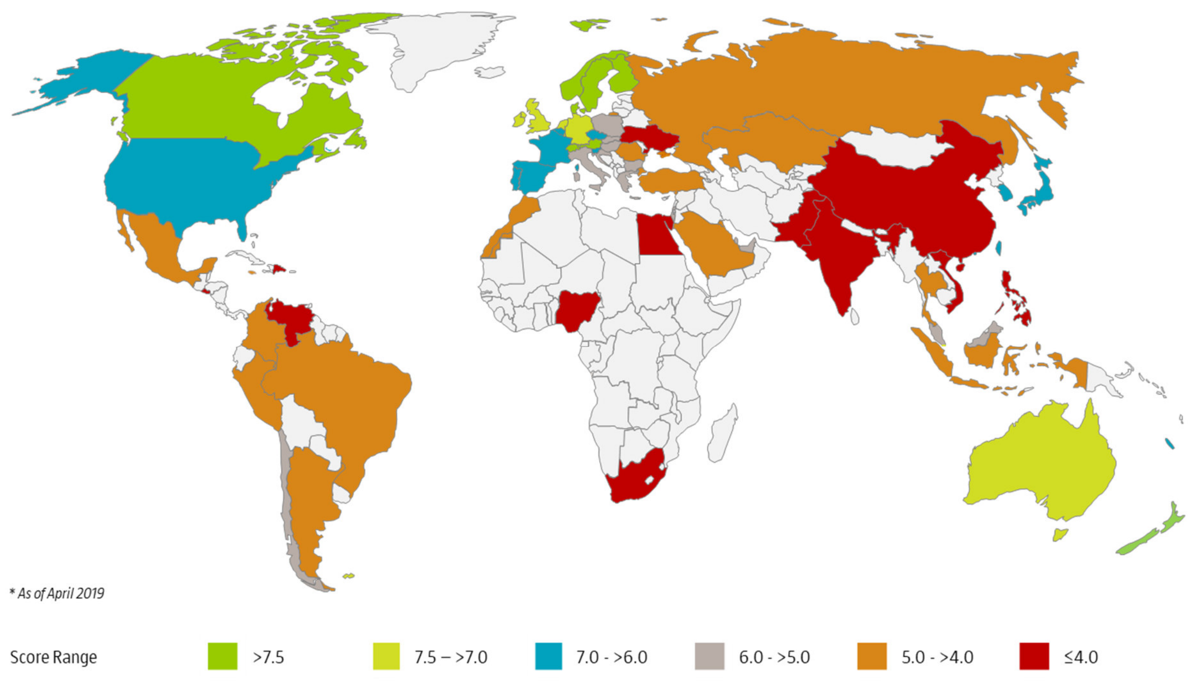
The current risk landscape points to an ever-increasing need for decisive policy action in response to climate change...especially in times of deteriorating collaboration and souring international relations.

Apart from these environmental concerns, societal risks (e.g. displaced populations), geopolitical risks (e.g. interstate conflicts and regional/global governance failures), economic risks (e.g. asset bubbles) and technological risks (e.g. cyber-attacks and information security) are all considered important threats[1]. The current risk landscape points, above all, to an ever-increasing need for decisive policy action in response to climate change and enhanced efforts to protect the environment, especially in times of deteriorating collaboration and souring international relations.

Sweden leads a Scandinavian phalanx – Switzerland marches close behind

With an ESG score of 8.04, Sweden has successfully defended its position as the world's most sustainable country, just ahead of Switzerland and its Nordic neighbors Norway, Denmark and Finland. All enjoy a very robust and well-balanced sustainability profile across all three ESG dimensions and have displayed continuously strong performance since the start of our country ESG database in 2006. These five countries' ESG scores sit within a narrow range between 8.04 and 7.89 and have set themselves apart from sixth-ranked New Zealand (7.55) and seventh-ranked Canada (7.50), the other two countries which round out the top group of sustainability performers (see country sustainability map, **Figure 2**).

Figure 2: RobecoSAM's country sustainability ranking map



Source: RobecoSAM

The map shows the best and worst ESG performers globally. Countries with ESG scores of 7.5 or above are in the top performing group and include Sweden, Switzerland, Norway, Denmark, New Zealand, and Canada. The worst performing countries had ESG scores at or below 4.0 and include Vietnam, Venezuela, India, Nigeria and Pakistan. Scores are on a scale of 1 to 10.

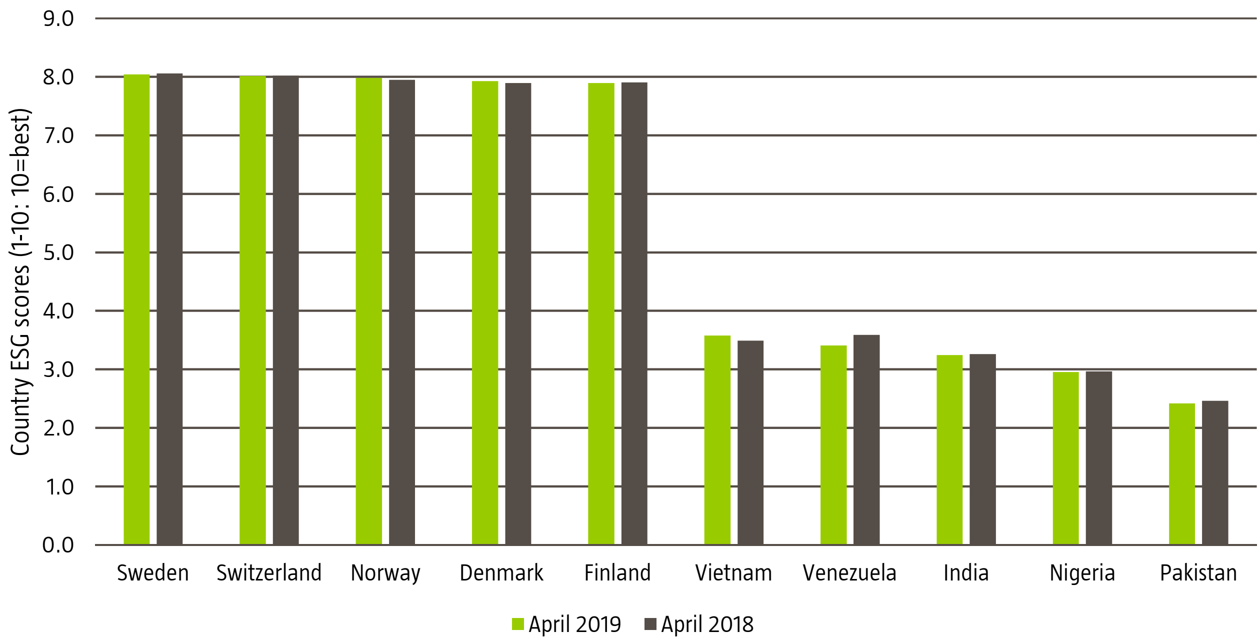
Governance issues affect large and small on the world stage

As is visible from the map, some major economies—most notably France, Japan and the US—did not qualify for the groups with the strongest ESG performance, due to lower scores in the governance sphere. Also obvious, was that China, India and South Africa, three out of five BRICS countries, continued to exhibit pronounced weakness in their ESG profiles keeping them among the countries with the lowest ESG scores (see **Figure 3**, for further details on South Africa, see pages 8-9 of this report).

Some major economies—most notably France, Japan and the US—did not qualify for the groups with the strongest ESG performance.

In India, barely any progress has been made in terms of ESG performance during the first term of Prime Minister Narendra Modi. Despite the launch of important anti-poverty programs, revisions to bankruptcy law, tax reforms on goods and services, and currency reforms targeting black market activities, Modi's government has failed to deliver promised jobs and economic opportunities. It remains to be seen whether his Bharatiya Janata party's (BJP) recent landslide election win will help drive new structural reforms and enhance efforts for more broad-based poverty reduction and social progress. This would also require Modi to contain the resurgent Hindu nationalism which has benefited from the BJP's polarizing style. Polarization also raises legitimate fears about the country's future political and social climate, partly reflected in a slight slippage in PRS's political risk rating from 61.5 at the start of Modi's first term to 59.5 in March 2019.

Figure 3: Top 5 and bottom 5 country ESG scores



Source: RobecoSAM

The graph provides a snapshot of country ESG scores in 2018 and 2019 for the best and worst performers. Performance at the top remained more or less constant. Among low performing countries, Venezuela, India and Pakistan lost even more ground over the course of the year.

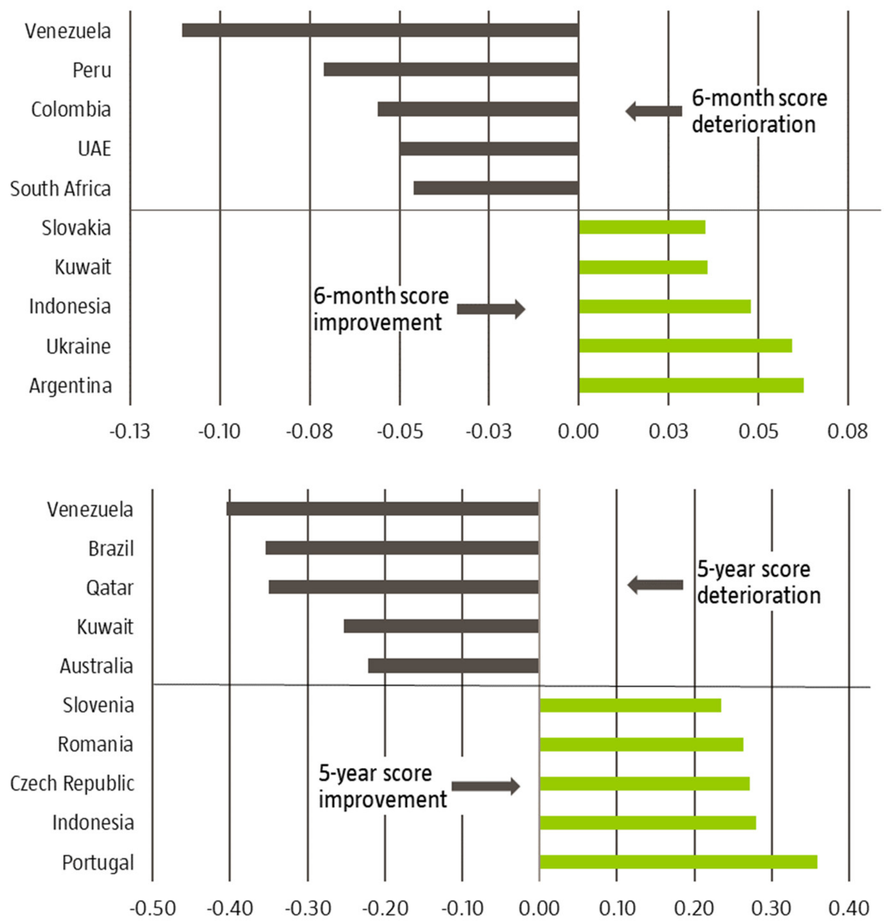
Venezuela—from bad to worse

ESG performance, among the best and worst countries, have changed very little over the short (6 months) and medium term (5 years)—a trend also mirrored in results overall (see **Figure 4**). With its score decreasing by another 0.11 to 3.40, it comes as no surprise that Venezuela tops the list of losers. The country's misery has only worsened across all relevant areas that shape its ESG profile, a fact reflected in the declines of its environmental, social and governance scores. The economy has collapsed, social conditions are dire, and state institutions have disintegrated. As if the situation were not sufficiently grim, the country is experiencing a leadership crisis brought on by the ongoing standoff between President Nicolás Maduro and the self-proclaimed interim president, Juan Guaidó, who has been recognized as the acting president of Venezuela by 54 countries as of last month. The May talks between the Venezuelan government and the opposition ended without any agreement, dashing hopes of a rapprochement process for the moment. These latest developments are simply the culmination of a prolonged downward spiral that will further impair its sustainability profile.

In Venezuela, the economy has collapsed, social conditions are dire, state institutions have disintegrated, and the government is deadlocked—all factors that will further impair its sustainability profile.

For the past 20 years, Venezuela has been governed by the socialist PSUV (United Socialist Party of Venezuela), first by Hugo Chávez and since 2013 by Nicolás Maduro. During its tenure, the PSUV has managed to gain control over many key institutions (including the judiciary, the electoral council and the supreme court), and has adopted an increasingly authoritarian style. All of which are reflected in a dramatic decline in its political risk score over the past five years (from 3.04 in 2014 to 2.23 in April 2019), as well as a slightly less dramatic decrease in its score for institutions (from 2.65 to 2.03) during the same period. These events have had an adverse effect on policy making, the economy, and its ESG profile overall. It suffered the biggest score decrease of any country over the short (6 months) and medium (5-years) terms. Compared to spring 2014, Venezuela suffered a decline of 0.41 in its ESG score, making the country among the poorest sustainability performers in our country sustainability ranking.

Figure 4: Countries with the largest gains and declines in ESG scores in the short- & medium term



Source: RobecoSAM

Although countries have shifted ranks and positions, ESG scores among countries at the top, bottom and overall have changed only slightly. This trend holds in the short term (6 months) and the medium term (5 years).

Brazil and Qatar—modest losses

Though to a lesser extent, both Brazil and Qatar have also lost ground in the mid-term (the last five years from 2014-2019). Brazil's most recent ESG score in April 2019 stood at 4.31 (down 0.35 since April 2014), suffering declines in all three ESG dimensions. Though its ESG score did not deteriorate further since the takeover of Bolsonaro as president, it is still difficult to assess the longer-term impact of his policies on the country's ESG profile. Positive policy initiatives, like pension reform, are being counteracted by worrying developments in other areas, like accelerated deforestation in the Amazon, including in protected areas and indigenous reserves. The latter development has already been visible for quite some time and has resulted in a decline in Brazil's score for environmental performance (from 5.19 to 4.61) over the past 5 years.

In the case of Qatar, a downgrading of its ecosystem quality, poorer environmental performance, weakening institutional frameworks and increased political risk – with the latter mainly resulting from the heightened tensions with its Arab neighbors – led to the overall setback in its ESG score.

Brazil and Qatar have also lost ground in the mid-term—while Portugal and Indonesia have made the most significant advances.

Argentina – holding steady...for now

In the short-term, Argentina has enjoyed the biggest (albeit modest) advance, improving 0.06 to 4.64 over the past six months. The increase is partly due to an improved World Risk Indicator (an assessment of a country's disaster risk). In addition, it also made gains in the PRS Group's higher political risk index, up by 4 points to 67.5. However, the political environment remains fluid and this recent improvement may reverse once again. The ongoing economic malaise is weighing heavily on President Macri's popularity and threatens his chances of re-election in October, raising concerns about political upheaval and the return of a populist Peronist president.

Portugal and Indonesia stand out as the countries with the most significant advances over the past 5 years. Further details on their ESG performance are outlined in the following paragraphs.

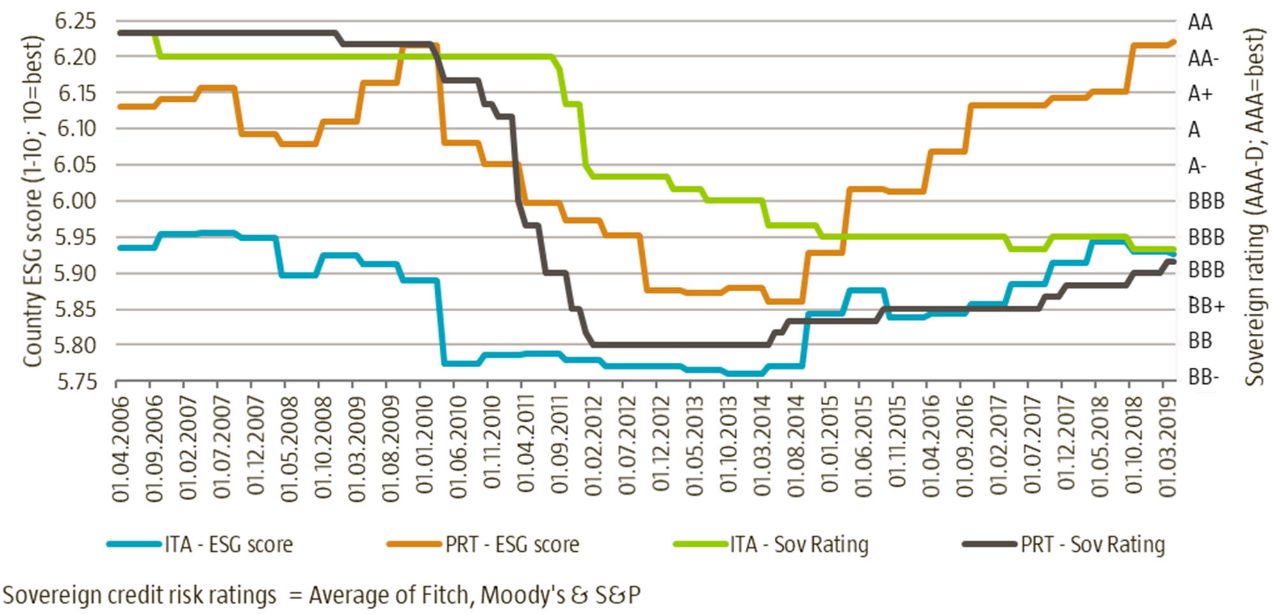
Portugal's encouraging recovery

As noted in previous country sustainability reports, Ireland is the one European peripheral economy that has been able to turn around its economic fortunes since the financial crisis. However, much less attention has been paid to Portugal which has made remarkable progress since the time of its adjustment program. With the support of the EU and the IMF, it has been very active in pursuing important reforms in key areas such as employment skills, labor market, investment, business environment and public finances, all of which have served to strengthen productivity and competitiveness.

Portugal has made remarkable progress in the decade after the financial crisis and has been active in pursuing important reforms in key areas to strengthen productivity and competitiveness.

As a result, economic conditions have improved significantly, GDP is now back to its pre-crisis levels, the unemployment rate has declined massively to below 7%, and public debt ratios, though still elevated, have declined. Partly as a driver for recovery and partly because of it, the ESG profile has steadily improved. These improvements have mainly been achieved with regards to the business environment, the institutional framework and the political stability within the governance dimension.

Figure 5: Portugal outpacing Italy on the road to recovery



Source: Fitch, Moody's, S&P, RobecoSAM

The graph tracks the ESG scores and Sovereign Bond Ratings of Italy (ITA) and Portugal (PRT) from the years prior to the financial crisis (2006) to the beginning of 2019. Historically, despite having lower ESG scores, Italy still enjoyed higher ratings for its sovereign bonds. The situation is slowly changing as the ESG performance of both countries is more accurately reflected in their sovereign bond ratings.

In the social dimension, areas such as inequality and social conditions have benefitted most from the economic recovery. No improvements have been made in the environmental dimension score. Progress in decoupling emissions from GDP has stalled in recent years, even though greenhouse gas emissions per unit of GDP are still below the OECD average. Overall, Portugal's country ESG score has increased by 0.36 to 6.22 over the past 5 years and it has clearly outpaced Italy (presently the Eurozone's biggest problem child) in terms of sustainability performance as is visible from **Figure 5**.

Indonesia's ESG profile on a gradual upward trend

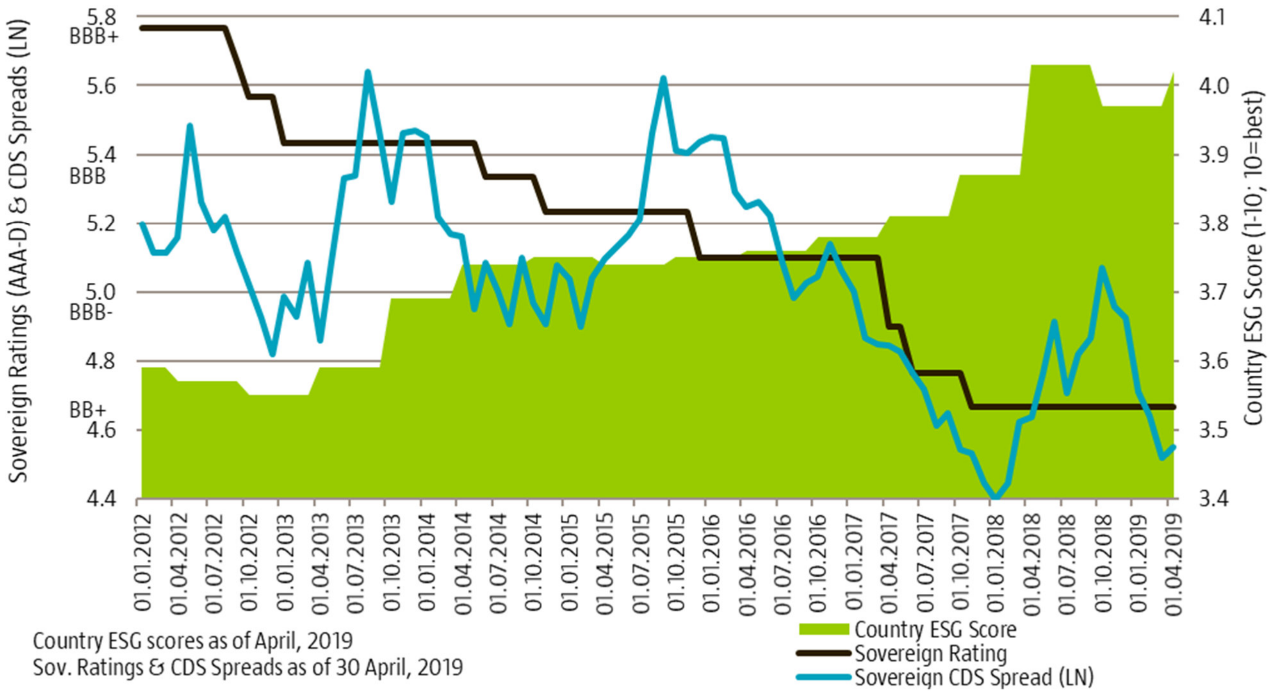
Despite gradual improvements in recent years, Indonesia still belongs to the weakest ESG performers with an ESG score of 4.02 and a rank of 52 within the RobecoSAM country universe. In the aftermath of the Asian financial crisis, the country has adopted various economic and political reforms, allowing it to achieve some notable economic, political and social progress. More importantly, advances have been made in areas such as reducing poverty and infant mortality, increasing life expectancy, and access to clean water and sanitation. Advances have also been made in the governance sphere, where a military-led political system has been replaced by a democratic multiparty system. These improvements were the key drivers for the increase in the overall ESG score by 0.64 to 4.02 since 2006 (the start of our ESG dataset), which puts the country above the average of the lower-middle-income economies (3.51) and helped it to move up from the initial rank of 61 to #52 in April 2019.

Indonesia still belongs to the weakest ESG performers but as a result of economic, political, and social reforms, its prospects are improving.

The environmental dimension has proven to be the most fragile in the overall ESG profile, resulting not only from the country's heavy exposure to natural disasters, but also from massive deforestation and significant air and marine pollution. On April 17, President Joko Widodo was re-elected with 55.5% of the votes for a second, five-year term. Even though the losing opposition candidate, Prabowo, will challenge the result, Widodo's re-election should give him a stronger mandate to continue his pragmatic policies and undertake further structural reforms.

Indeed, despite the achievements in recent years, he is still faced with a laundry list of significant challenges, such as making better use of favorable demographics (by far the strongest ESG feature), further improving public services (such as education and health), expanding infrastructure, decreasing inequality, fighting corruption, strengthening the legal system, and containing the growing influence of ultra-conservative Muslims. As evident from **Figure 6,** and in stark contrast to the steady improvement in its sustainability sphere, Indonesia's sovereign credit rating has suffered several downgrades in recent years. Even as recent as May, Indonesia's creditworthiness underwent a positive re-assessment (from BBB- to BBB) by Standard & Poor's based on strong economic growth prospects, supportive policy continuity and President Widodo's refreshed mandate.

Figure 6: Indonesia—ESG improvements not reflected in sovereign ratings[2]



Source: Bloomberg, Fitch, Moody's, S&P, RobecoSAM

ESG scores tend to positively correlate with sovereign ratings but Indonesia is an anomaly. Despite increasing ESG scores, its sovereign bonds ratings remain flat. Note: data is as of April 30 and so does not incorporate S&P's positive reassessment of Indonesia's sovereign credit on May 30,2019.

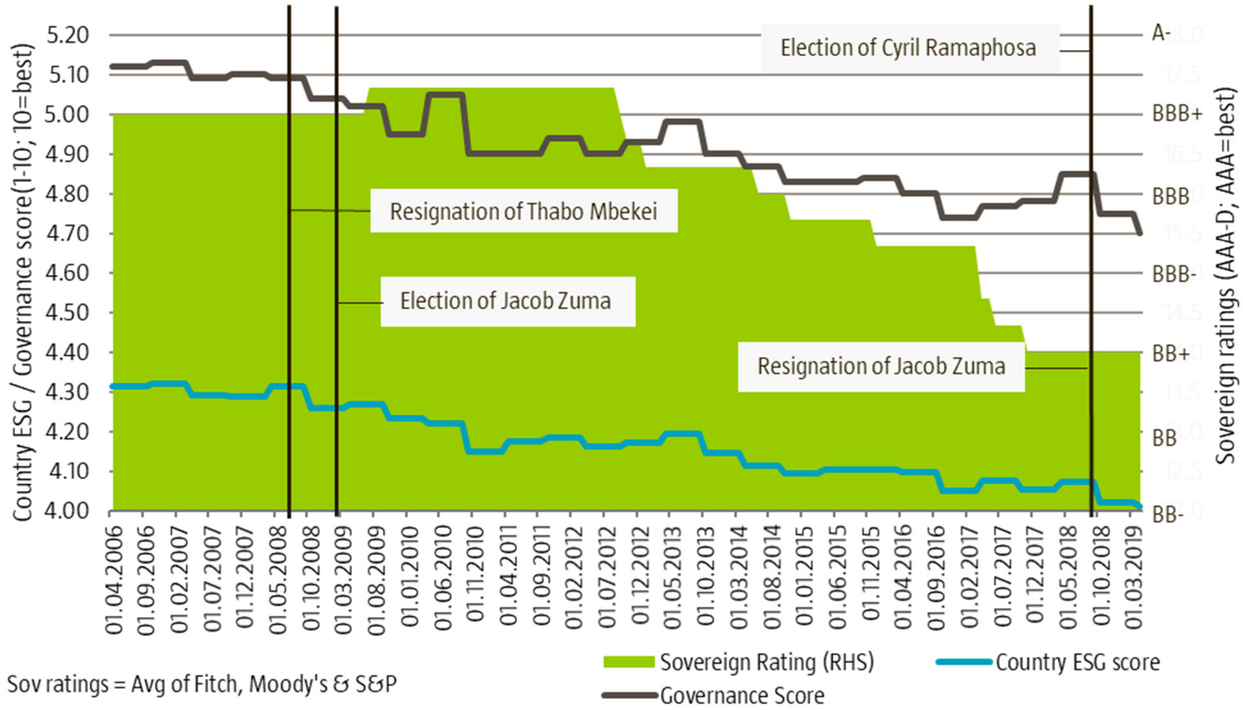
South Africa—one man's legacy, another man's challenge

In early May, President Cyril Ramaphosa and his party the African National Congress (ANC) won re-election in South Africa, gaining slightly more than 57% of the vote—its worst election result since the end of apartheid in 1994. Since then, the country has been poorly governed, especially in the nine years of scandal-hit rule by former president Jacob Zuma. Indeed, a generation after the ANC took power, the country is plagued by economic stagnation, inadequate infrastructure, high unemployment, rampant corruption, widespread violent crime and persistent racial inequalities in housing, services and land distribution. These facts are also confirmed by the data: the country ranks poorly (73rd out of 180) in Transparency International's corruption perception index, 40% of South Africans still live in poverty and with a GINI coefficient of 0.62, South Africa is the most unequal of all economies within our country universe. See **Figure 7** for a look at how poor governance continues to encumber ESG scores and the country's bond ratings.

Inadequate infrastructure, high unemployment, rampant corruption, racial inequality and poor governance—just a few of the ills that continue to plague South Africa, encumbering both ESG scores and bond ratings.

These severe shortcomings are also well-reflected in the country's poor ESG performance. The overall ESG score declined steadily from 4.27 at the start of the Zuma regime in May 2009 to its current 3.97; the same can be observed for the scores in the social and governance areas, which slipped by 0.09 to 0.92 and by 0.17 to 2.33, respectively, over the same period. This not only shows the urgent need of new and serious reforms, but also the sheer size of the challenges President Ramaphosa faces, including the internal rivalries within the ANC.

Figure 7: South Africa: erosion of governance & ratings during Zuma presidency



Source: Fitch, Moody's, S&P, RobecoSAM

For South Africa, constant corruption during the presidential terms of Mbekei and Zuma, parallels deteriorating social and economic conditions, governance scores, and sovereign ratings.

Turkey—encouraging signals emerging despite authoritarian grip

Though not among the worst performers over the past five years, Turkey's performance has not been stellar. Ranked 53rd, the country's overall score at 4.01 is slightly down from 4.06 in spring 2014, mainly resulting from the gradual erosion of governance scores due to its authoritarian policy actions. Although restricted electoral conditions have made it increasingly difficult for opposition parties to threaten the AKP's (the Justice & Development Party) power, Erdogan's party has surprisingly suffered losses in the most recent municipal elections across the country including: Istanbul, its economic center, Ankara, its capital, and other commercial centers in the south. Claiming widespread voting irregularities, the AKP has demanded a re-run of the Istanbul election, which took place on June 23. Securing 54% of votes, Ekrem Imamoglu of the main opposition Republican People's Party (CHP) won the repeat election by an even wider margin than his narrow win three months ago. The result signifies not only an election blow to Erdogan's AKP party, but is also a sign that the Turkish democracy may be more resilient than commonly assumed.

Turkey's overall country ESG score over the past 5 years would have declined even more if the slippage in the governance score (from 2.02 to 1.82) had not been offset by an increase in the environmental (from 0.94 to 1.02) and social (from 1.10 to 1.17) scores. The positive development in the social score is mirrored by the corresponding findings in the "Sustainable Governance Indicators 2018 edition", showing that Turkey has made significant progress in health care quality and health insurance coverage[3]. The advance in the environmental sphere results from an improvement in the environmental performance criteria grade from 3.90 to 4.36 since 2014. Encouragingly, economic growth during recent years has been

[3] "Policy Performance and Governance Capacities in the OECD and EU – Sustainable Governance Indicators 2018", Bertelsmann Stiftung, 2018

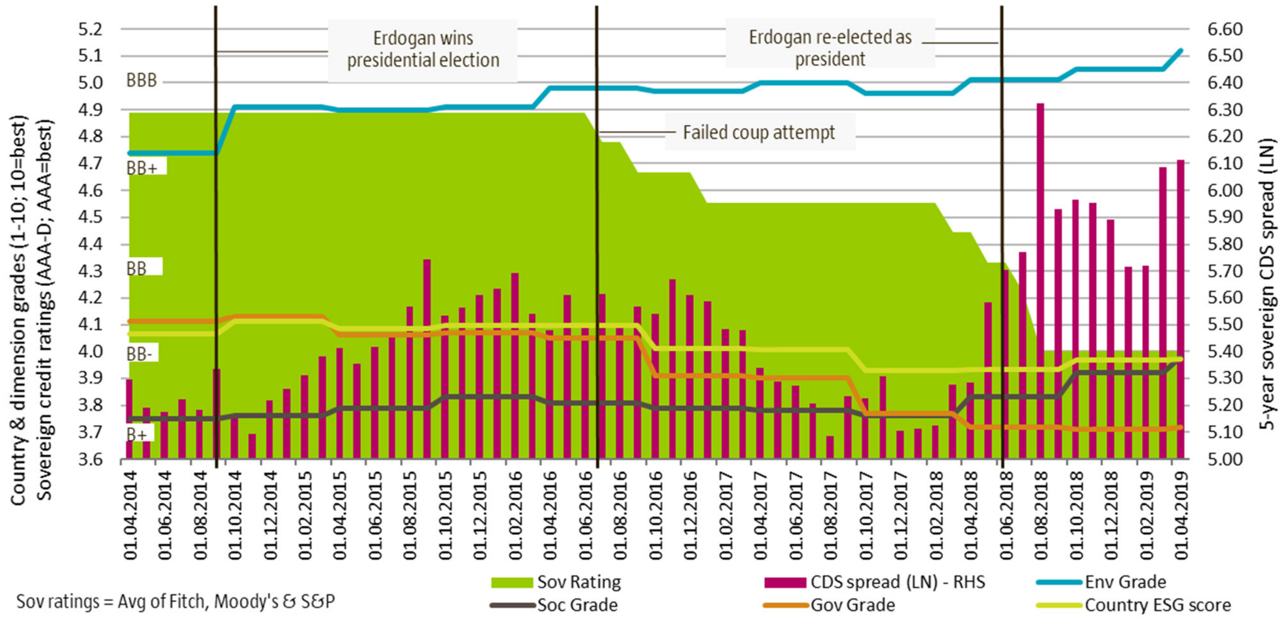
relatively decoupled from air emissions, waste generation and water consumption (see **Figure 8** to follow trends in Turkey's environmental, social, and governance scores over the past 5 years).

Slippage in Turkey's governance score was offset by increases in its environmental and social scores—in the former, economic growth has been decoupled from air emissions, waste generation, and water consumption.

Moreover, environmental regulations have been strengthened, environment-related taxes increased, investments in renewable energies and energy efficiency made, and considerable progress in urban wastewater management achieved—all favorable developments that have been summarized in the OECD's latest "Environmental Performance Review of Turkey" [4]. However, as also stated in the OECD report, Turkey still faces many environmental challenges and needs to step up its efforts to move towards a greener and low-carbon economy. Moreover, gains in the social sphere recorded in the past few years are unlikely to be maintained as some of the adverse impacts of poor governance and erratic policy measures will only become visible over time. For example, the negative consequences on the quality of the country's educational system after thousands of academics and teachers were dismissed when they criticized the failed coup attempt in July 2016.

In view of these developments it is no surprise that on June 14, Moody's cut Turkey's sovereign credit rating to Ba from Ba3, citing, among other things, "an erosion of institutional strength and policy effectiveness on investor confidence " [5].

Figure 8: Turkey—ESG scores remain stable, despite governance failures



Source: Bloomberg, Fitch, Moody's, S&P, RobecoSAM

A timeline of political events since Erdogan gained power reveals how, despite major governance issues, gains in the environmental & social areas have prevented a more pronounced decline in Turkey's ESG profile overall.

The start of a beautiful relationship—Country ESG rankings and sovereign credit ratings

As is increasingly evident, a sovereign nation's ability and willingness to honor its financial obligations is not only affected by financial and macroeconomic variables, but also by a country's political and social climate, the quality of governance, and environmental factors. Robust sustainability performance helps to promote macroeconomic performance and stronger creditworthiness in the long run. This is nicely illustrated in **Figure 9**, where a comparison of RobecoSAM's country ESG scores

[4] "OECD Environmental Performance Reviews: Turkey 2019", OECD, 2019

[5] This most recent downgrade from June 14, 2019 is not reflected in Figure 8.

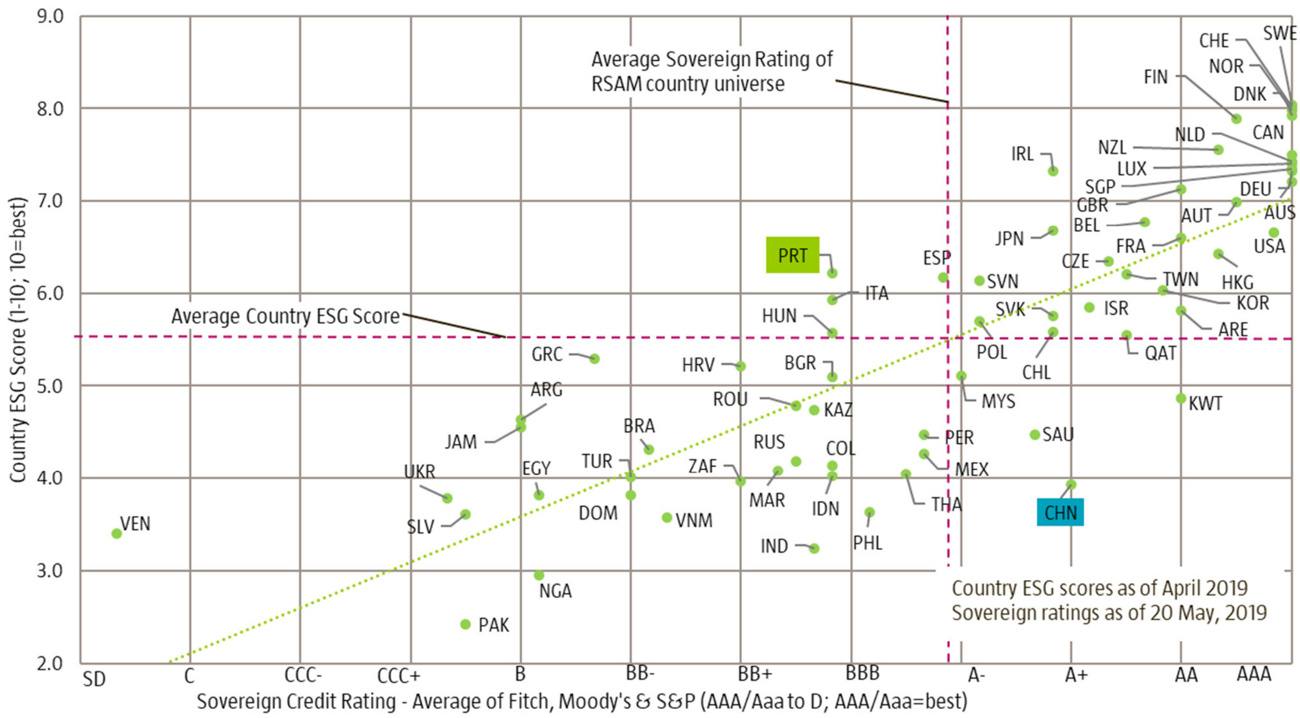
and sovereign credit ratings display a highly positive correlation (correlation coefficient r=0.83). Of course, there will always be exceptions.

In France, for example, the high positive correlation holds. However, Portugal's sovereign credit appears somewhat undervalued relative to its sustainability score. China, on the other hand, enjoys strong sovereign ratings despite weak ESG scores. Despite exceptions, in general, the data demonstrates that countries with better sustainability performance also benefit from stronger sovereign risk assessments.

Robust sustainability performance helps to promote macroeconomic performance and stronger creditworthiness in the long run.

This conclusion is corroborated by a recent OECD study, which notes: "Beyond government effectiveness, other institutional features such as the rule of law, regulatory quality, political stability, voice and accountability and control of corruption are also highly correlated with default episodes and should be considered when assessing sovereign risk" [6]. These are the same institutional features considered within the six worldwide governance indicators incorporated into RobecoSAM's country sustainability assessment.

Figure 9: A positive pairing—Country ESG rankings and sovereign credit ratings



Source: Fitch, Moody's, S&P, RobecoSAM

Mapping ESG scores against sovereign credit ratings demonstrate a highly positive correlation. However, the correlation is not perfect—Portugal's sovereign credit is undervalued, whereas China appears overvalued relative to their sustainability scores.

Corruption—a detrimental effect on ESG performance and fiscal profiles

It is widely acknowledged that macroeconomic performance as well as sustainable and inclusive economic growth are being impaired by systemic corruption. For this reason, corruption (composed of both corruption control measures and corruption perception indicators) is also a key criterion in our country sustainability ranking framework. In its latest Fiscal Monitor of April

[6] Jean-Marc Fournier, Manuel Bétin: "Limits to government debt sustainability in middle-income countries", OECD Working Papers No. 1494, OECD, 10 November 2018, page 6

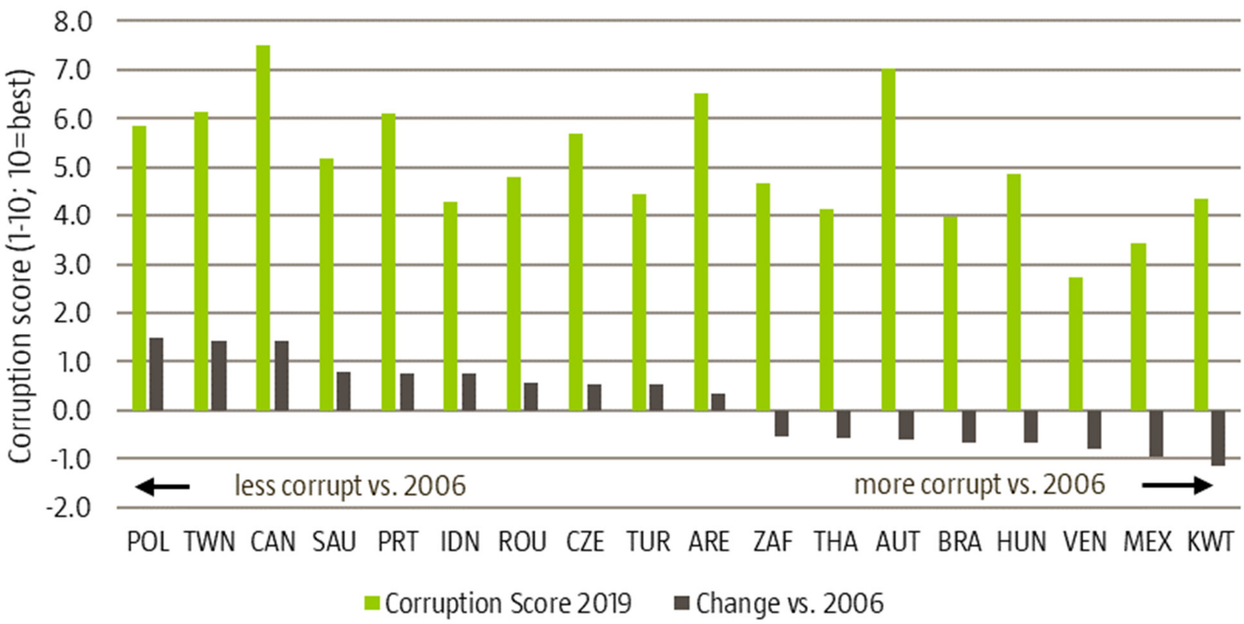
2019, the IMF dedicated a special chapter to corruption, in which it assesses the fiscal costs of corruption[7]. This research has shown that corruption is a persistent factor that has not substantially improved in the past two decades (see also **Figure 10**) and that perceptions regarding the control of corruption are positively correlated with GDP per capita.

Reducing corruption could raise annual tax revenues by USD 1 trillion (or 1.25% of global GDP)

Reducing corruption could raise annual tax revenues by USD 1 trillion (or 1.25% of global GDP), if the world's most corrupt countries were to make progress in tackling the issue in the years ahead. A cross-country comparison reveals that among advanced economies, countries with the lowest levels of corruption collect 4.5% more in tax revenues (as a % of GDP) compared to countries perceived to be more corrupt. The same pattern also holds for emerging markets, where the gap in tax revenue collection amounts to 2.75% of GDP and 4% of GDP for the low-income countries. It is therefore not surprising to reach the conclusion that the level of corruption is highly correlated with the sovereign creditworthiness (see **Figure 11**).

Moreover, corruption not only impacts public finances, but usually goes hand-in-hand with lower spending for health care and education, lower quality infrastructure investments and public services. As such, it affects much broader swaths of civil society including individual health, economic interests and overall well-being. These in turn can hurt other crucial ESG aspects such as the effectiveness of government policies, political stability, the institutional framework, inequality, social conditions and social unrest. For this reason, the UN Sustainable Development Goal 16 (SDG 16) makes an explicit link between corruption and "peaceful, just and inclusive societies", and aims to substantially reduce corruption and bribery in all its forms.

Figure 10: Change in corruption—top and worst performers since 2006

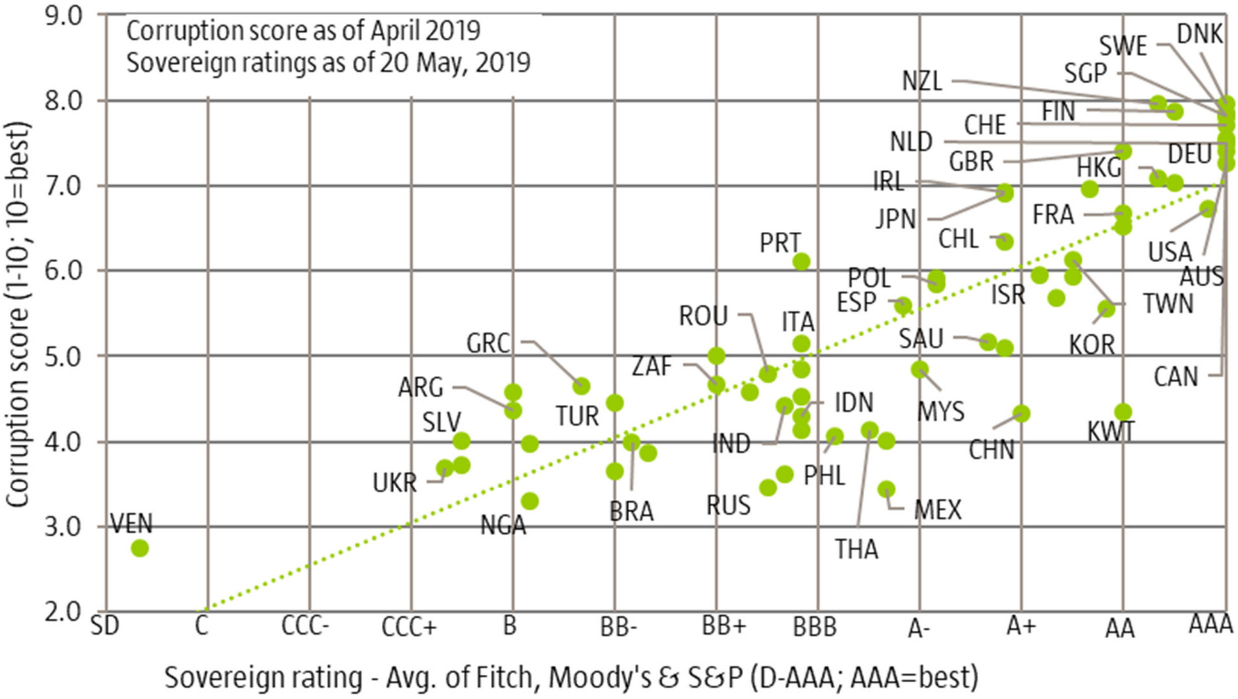


Source: RobecoSAM, Transparency International, Worldwide Governance Indicators

In the graph, countries are ranked from left to right by the gains (or losses) they have made in their corruption scores since 2006. Higher corruption scores on the graph correspond to lower corruption in the respective country. Poland (POL), Taiwan (TWN) and Canada (CAN) have had the most significant advances in lowering corruption whereas Hungary (HUN), Venezuela (VEN), Mexico (MEX) and Kuwait (KWT) had the largest decreases in their corruption scores, meaning corruption actually increased in these countries over the same time period.

[7] IMF Fiscal Monitor, April 2019: Chapter 2. Curbing Corruption, IMF, April 2019

Figure 11: Honesty is good policy— Countries with low corruption have high credit ratings



Source: Fitch, Moody's, S&P, RobecoSAM, Transparency International, Worldwide Governance Indicators

The data shows that corruption is negatively correlated with sovereign creditworthiness. Countries with lower corruption levels (represented here by high corruption scores) have higher sovereign credit ratings and vice versa. Scandinavian countries like Denmark (DNK), Sweden (SWE), and Finland (FIN), as well as vibrant Asian economies like Singapore (SGP) and Taiwan (TWN) have low corruption and, as a result, enjoy high credit ratings.

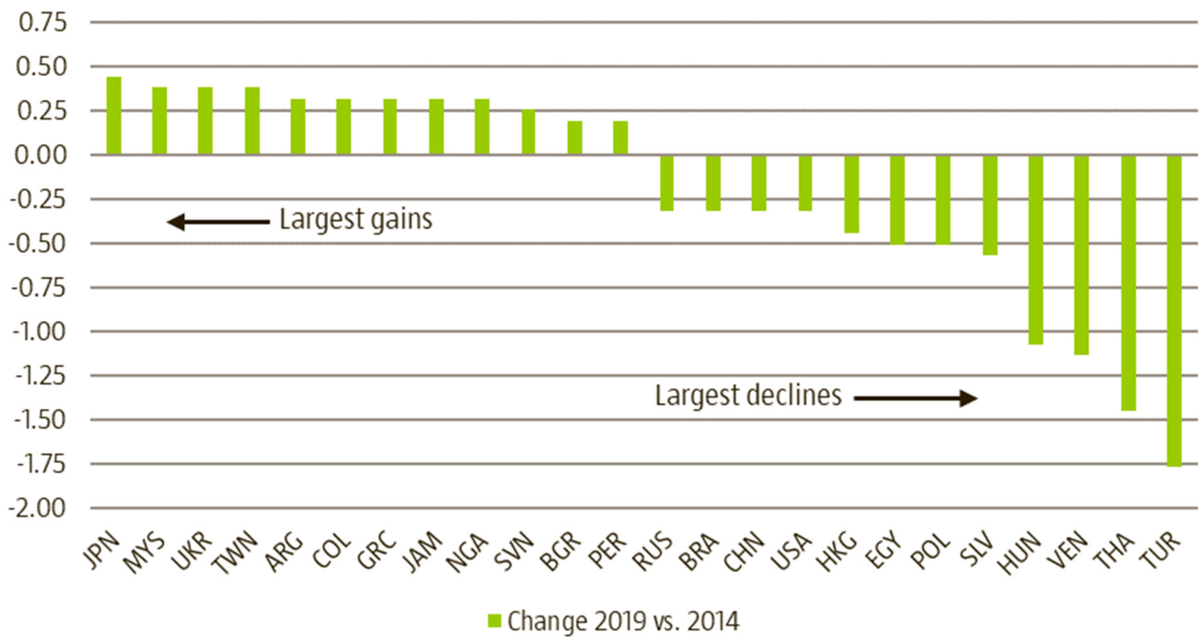
ESG Scores—important signals of democratic health

Freedom House's, "Freedom in the World 2019" measures the state of political rights and civil liberties globally and found that a total of 68 countries suffered net declines in their freedom status[8]. This is the 13th consecutive year that the number of countries with a net decline outnumber those with a net improvement—a trend already noted in our country sustainability ranking update a year ago. Several countries which democratized at the end of the Cold War have regressed in view of endemic corruption, authoritarian populist movements and erosions in the rule of law. This development is clearly illustrated by the progression of relevant ESG indicators for the countries with the greatest change between 2014-19 (see **Figures 12 & 13)**.

Political rights and civil liberties suffered net declines globally

[8] " Freedom in the World 2019: Democracy in retreat", Freedom House, 2019

Figure 12: Losses outweigh gains for Civil Liberties & Political Rights

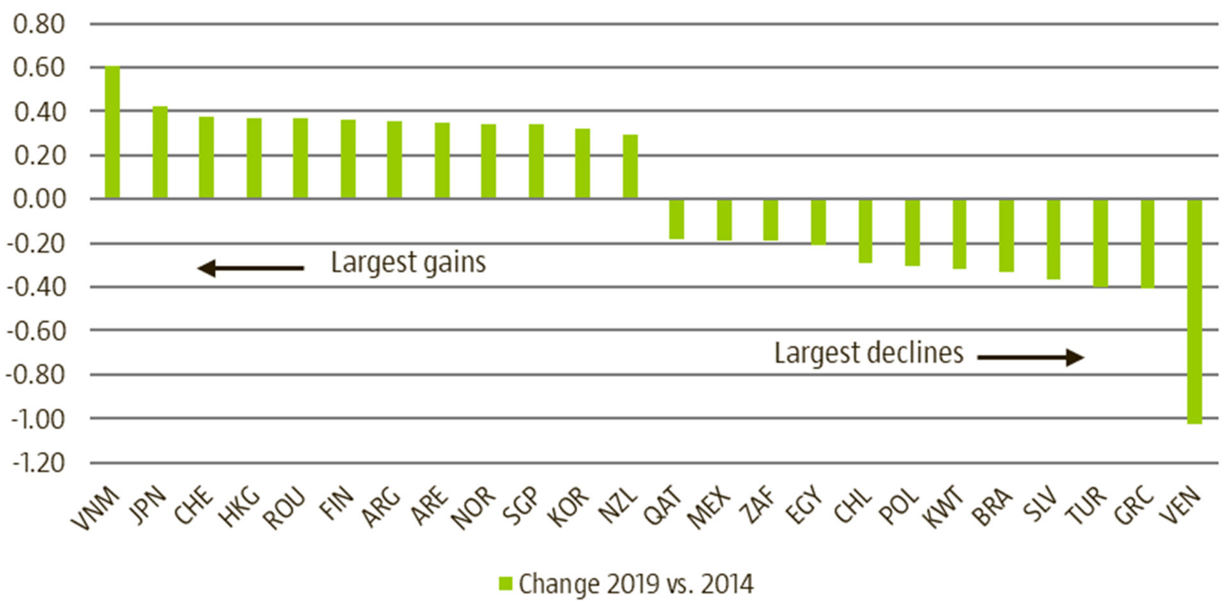


Source: Freedom House, RobecoSAM

The graph shows the best and worst performers in terms of change in their civil liberties and political rights between 2014 and 2019. The best performers had the largest gains (Japan (JPN), Malaysia (MYS), Ukraine (UKR)) whereas the worst performers (Hungary (HUN), Venezuela (VEN), Thailand (THA), and Turkey (TUR)) had the largest declines.

The quality of democracy has deteriorated significantly over the past four years, with democratic standards declining in 26 (of 41) countries—including the US and Japan.

Figure 13: Rule of Law – top & worst performers 2019 vs 2014



Source: RobecoSAM, Worldwide Governance Indicator

The graph denotes those countries with the greatest net changes to indicators measuring the rule of law in the last five years from 2014-2019. Vietnam (VNM), Japan (JPN), Switzerland (CHE) saw the largest positive gains meaning there was a strengthening of the rule of law. Venezuela (VEN), Greece (GRC), and Turkey (TUR) saw the largest declines meaning rule of law has weakened in these countries.

Freedom House's observations coincide with results of the previously mentioned Bertelsmann study which points to the waning quality of democracy in 41-member states of the EU and the OECD[9] . Based on 140 indicators, the Bertelsmann study evaluates democratic standards, the quality of governance and reforms in the areas of economics, social affairs and the environment. It concludes that the quality of democracy has deteriorated significantly over the past four years, with democratic standards declining in 26 countries. The democracy index as shown in **Figure 14** is based on an assessment of four criteria: electoral process, access to information, media pluralism & freedom, civil rights & rule of law.

It is not surprising to find poor governance performers like Hungary, Mexico, Poland and Turkey on the list. More interesting is that the US has dropped 9 places since 2014 (from #9 to #18) in Bertelsmann's democracy rankings due to strains on the country's democratic institutions. Rather unanticipated is the poor ranking of Japan (#33), mainly resulting from the fact that the courts and major media outlet have only exert limited checks on the government. Media criticism has increased in recent years and Japan is now at the bottom of industrialized countries in terms of press-freedom ratings (ranked 67th in "The 2019 World Press Freedom Ranking" by Reporters without Borders). And last but not least, effective oversight by the opposition is hindered by the super-majority of Prime Minister Abe's coalition.

Just as ESG scores correlate with sovereign credit ratings, they also serve to predict democratic health.

Just as ESG scores correlate with sovereign credit ratings, they also serve to predict democratic health. Countries that suffered declines in their country sustainability scores, also had deteriorations in democratic standards, while those with high ESG scores (e.g. the Nordic countries and Switzerland) also ranked highest on democratic health measures. Italy's upward move in **Figure 14** may come as a surprise, but the assessment was completed prior to the election of the current populist government and so excludes recent developments. Overall, eroding democratic standards, ailing institutions, growing political polarization and spreading populism are not only threatening good governance, but also the implementation of meaningful reforms. Such developments will have adverse repercussions on countries' economic, environmental and socio-political sustainability. Turkey and Venezuela are telling examples, where the dismantling of democratic structures and poor governance have greatly contributed to the current economic and social malaise.

[9] "Policy Performance and Governance Capacities in the OECD and EU – Sustainable Governance Indicators 2018", Bertelsmann Stiftung, 2018

Figure 14: EU & OECD member states: quality of democracy ranking

Country	Rank	Score	Change vs 2014	Country	Rank	Score	Change vs 2014
Sweden	1	9.19	-0.06	Italy	21	7.30	0.45
Finland	2	9.15	0.05	Belgium	23	7.27	-0.10
Norway	3	8.93	-0.08	France	24	7.14	0.21
Denmark	4	8.85	-0.10	Spain	25	7.11	0.16
Germany	5	8.70	0.06	Iceland	26	6.80	-0.77
Switzerland	6	8.68	-0.02	Slovakia	27	6.79	-0.26
New Zealand	7	8.43	-0.17	Greece	28	6.76	-0.21
Estonia	7	8.43	0.15	Chile	29	6.71	0.04
Ireland	9	8.27	-0.07	Israel	30	6.43	-0.48
Lithuania	10	8.12	0.00	South Korea	31	6.22	0.59
Latvia	11	7.87	-0.20	Cyprus	32	6.20	-0.17
Luxembourg	12	7.83	0.07	Japan	33	5.80	-0.33
Canada	13	7.82	0.15	Croatia	34	5.78	0.15
Australia	14	7.58	-0.25	Malta	35	5.74	0.42
Portugal	15	7.49	-0.02	Bulgaria	36	5.73	-0.07
Slovenia	16	7.46	0.00	Poland	37	5.29	-3.08
United Kingdom	16	7.46	0.12	Romania	38	5.10	-0.10
USA	18	7.41	-0.95	Mexico	39	4.67	-1.24
Austria	19	7.36	-0.02	Hungary	40	3.50	-1.53
Czech Republic	20	7.31	-0.30	Turkey	41	2.96	-1.78
Netherlands	21	7.30	-0.40				

Green shadings indicate an improvement since 2014 | Red shadings indicate a deterioration since 2014

Score range from 1(lowest) to 10 (highest)

Source: Bertelsmann Stiftung – Sustainable Governance Indicators 2018

Max Schieler
Senior SI Country Analyst

"A proper country sustainability assessment provides additional information and valuable insights into a country's underlying risk drivers that we believe are critical to making balanced investment decisions".

Endnotes

About this report

1) There have been some changes in the set indicators, data sources and indicator/dimension weights within this update. This has been done in accordance with our methodology governance policy and to incorporate newly available data and evidence with regards to the importance of ESG factors into consideration. Comparisons with past scores must thus be made in recognition of this methodology change. Past scores have always been re-calculated. They can differ from the originally published scores as they take potential changes in data sources, (external and internal) methodologies and/or data revisions into account.

2) "Measuring Country Intangibles," June 2015, is available on the RobecoSAM website: http://www.robecosam.com/en/sustainability-insights/about-sustainability/country-sustainability-ranking.jsp. An updated version will be available later in the year.

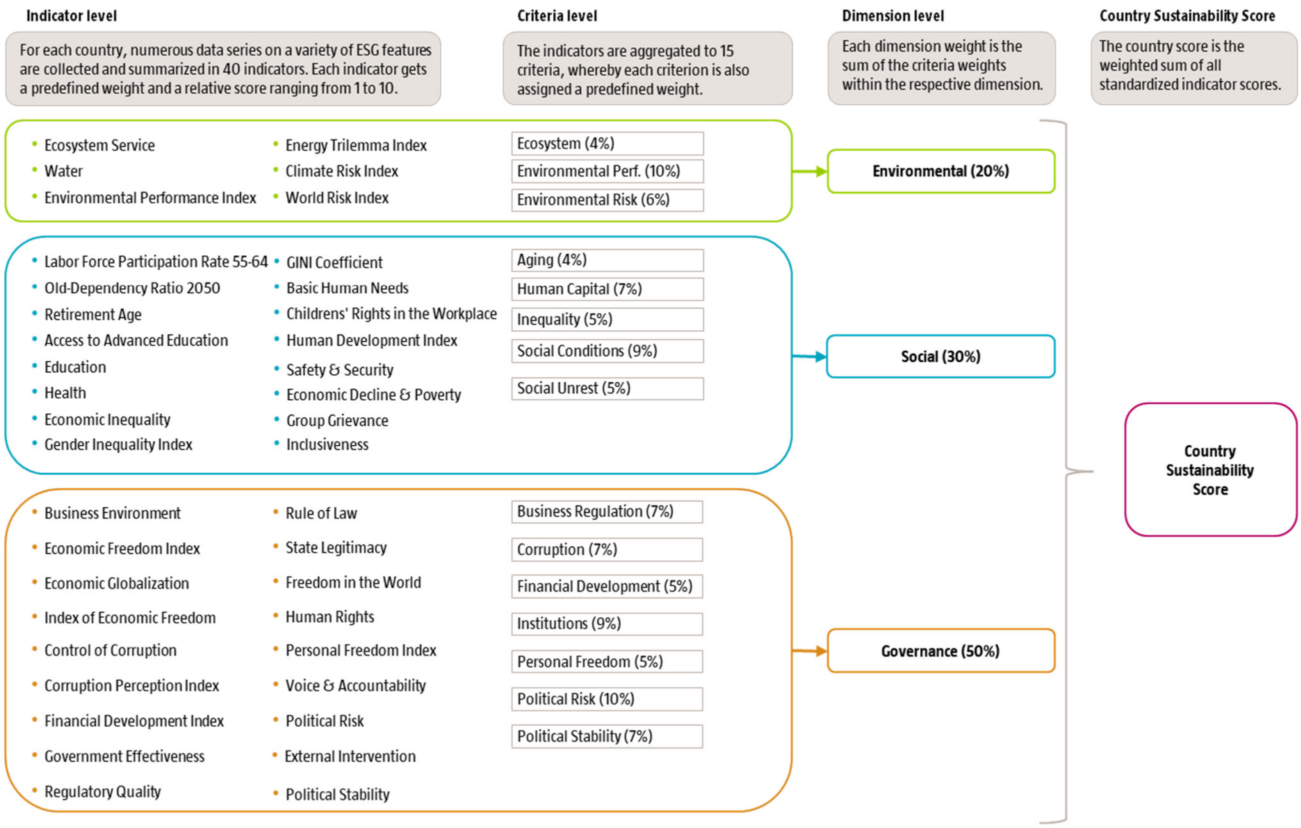
Appendix

Ongoing reviews of the underlying data & data providers and maintenance of the methodology used to construct any model is an integral part of ensuring its completeness and ongoing predictive power. In the following pages, we provide our source data as well as framework in which it is weighted and measured.

Since the last country ESG ranking update in October 2018, there have been some changes in the set indicators, data sources and indicator/dimension weights included as part of this update. The new methodological framework shown in Figure 15 below comprises 40 indicators, which are combined into 15 criteria covering the three main ESG dimensions (environmental, social & governance).

The incorporation of newly accessible data, enhancements to data disclosure, and adjustments to weightings in our revised approach are all aimed at capturing several new relevant ESG features. It takes into account newly gained evidence and industry trends and enables us to provide a more comprehensive appraisal of a country's underlying sustainability profile. An updated methodology brochure with a more detailed description of the approach will be available later in the year.

Figure 15: RobecoSAM country sustainability ranking tool



As of April 2019

Source: RobecoSAM

Appendix

Ecosystem	University of Notre Dame; *Ecosystem Service* (Component of ND-GAIN) https://www.nd.edu/ University of Notre Dame; *Water* (Component of ND-GAIN) https://www.nd.edu/
Environmental Performance	Yale University; *Environmental Performance Index* https://epi.envirocenter.yale.edu/ World Energy Council/Oliver Wyman; *Energy Trilemma Index* https://trilemma.worldenergy.org/
Environmental Risk	Bündnis Entwicklung Hilft; *World Risk Index* https://entwicklung-hilft.de/ Germanwatch; *Global Climate Risk Index* https://germanwatch.org/en/cri
Human Capital	Social Progress Imperative; *Access to Advanced Education* (Component of Social Progress Index) https://www.socialprogressindex.com/ Legatum Institute; *Education* (Pillar of Prosperity Index) https://www.prosperity.com/ Legatum Institute; *Health* (Pillar of Prosperity Index) https://www.prosperity.com/
Inequality	Fund for Peace; *Economic Inequality* (Indicator of Fragile States Index) http://fsi.fundforpeace.org/ UNDP – Human Development Reports; *Gender Inequality Index* http://hdr.undp.org/ World Bank; World Development Indicators – *GINI Coefficient* http://databank.worldbank.org/data/ OECD; Income Distribution Database http://www.oecd.org/social/income-distribution-database.htm
Social Conditions	Social Progress Imperative; *Basic Human Needs* (Component of Social Progress Index) https://www.socialprogressindex.com/ Global Child Forum/UNICEF; *Children's Rights in the Workplace Index* (Pillar of Childrens' Rights Atlas) https://www.globalchildforum.org/ UNDP – Human Development Reports; *Human Development Index* http://hdr.undp.org/ Legatum Institute; *Safety & Security* (Pillar of Prosperity Index) https://www.prosperity.com/
Social Unrest	Fund for Peace; *Economic Decline & Poverty* (Indicator of Fragile States Index) http://fsi.fundforpeace.org/ Fund for Peace; *Group Grievance* (Indicator of Fragile States Index) http://fsi.fundforpeace.org/ Social Progress Imperative; *Inclusiveness* (Component of Social Progress Index) https://www.socialprogressindex.com/
Business Regulation	Legatum Institute; *Business Environment* (Pillar of Prosperity Index) https://www.prosperity.com/ Fraser Institute; *Economic Freedom Index* (Sub-index of Human Freedom Index) https://www.fraserinstitute.org/ KOF -ETH; *Economic Globalization* (Dimension of Globalization Index) https://www.kof.ethz.ch/ Heritage Foundation; *Index of Economic Freedom* https://www.heritage.org/
Corruption	Transparency International; *Corruption Perception Index* https://www.transparency.org/ World Bank; *Control of Corruption* (Worldwide Governance Indicator) https://info.worldbank.org/governance/wgi/#home
Financial Development	IMF; *Financial Development Index* https://data.imf.org/?sk=388DFA60-1D26-4ADE-B505-A05A558D9A42

Institutions	World Bank; *Government Effectiveness* (Worldwide Governance Indicator) https://info.worldbank.org/governance/wgi/#home World Bank; *Regulatory Quality* (Worldwide Governance Indicator) https://info.worldbank.org/governance/wgi/#home World Bank; *Rule of Law* (Worldwide Governance Indicator) https://info.worldbank.org/governance/wgi/#home Fund for Peace; *State Legitimacy* (Indicator of Fragile States Index) http://fsi.fundforpeace.org/
Personal Freedom	Freedom House; *Freedom in the World Index* https://freedomhouse.org/ Fund for Peace; *Human Rights* (Indicator of Fragile States Index) http://fsi.fundforpeace.org/ Fraser Institute; *Personal Freedom Index* (Sub-index of Human Freedom Index) https://www.fraserinstitute.org/ World Bank; *Voice and Accountability* (Worldwide Governance Indicator) https://info.worldbank.org/governance/wgi/#home
Political Risk	PRS Group; *Political Risk Rating* http://www.prsgroup.com/
Political Stability	Fund for Peace; *External Intervention* (Indicator of Fragile States Index) http://fsi.fundforpeace.org/ World Bank; *Political Stability and Absence of Violence* (Worldwide Governance Indicator) https://info.worldbank.org/governance/wgi/#home

About RobecoSAM
Founded in 1995, RobecoSAM is an investment specialist focused exclusively on Sustainability Investing. It offers asset management, indices, impact analysis and investment, sustainability assessments, benchmarking services, as well as ESG data. Together with S&P Dow Jones Indices, RobecoSAM publishes the globally recognized Dow Jones Sustainability Indices (DJSI) as well as the S&P ESG Factor Weighted Index Series, the first index family to treat ESG as a standalone performance factor using the RobecoSAM Smart ESG methodology.

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