

Country ESG Ranking Update – December 2019

Norway – the world's most sustainable country

- Nordics dominate country sustainability rankings
- Anti-government backlash in South America
- Hong Kong shaken by ongoing turmoil
- Strong governance linked with lower public debt



Scandinavia continues to dominate sustainability rankings, lead this time by Norway.

The Nordic 4 along with Switzerland maintain their strong position thanks to leadership in governance, innovation, human capital, and environmental indicators.

Elsewhere on the globe, resurgent discontent and waves of protests mark this year's geopolitical landscape. From the Americas to Europe, governance and democratic institutions are under increasing pressure from populist forces. Meanwhile, Hong Kong fears its institutions, governance, and democracy are threatened by forces of a different kind.

Geopolitical developments along with other sustainability indicators are absorbed and reflected in the country ESG scores and rankings presented in this report.

About this report

This semi-annual report provides a succinct summary and analysis of the Environmental, Social, and Governance (ESG) profiles of 150 countries around the globe. It builds on the results of RobecoSAM's proprietary Country Sustainability Ranking (CSR) tool which collects and analyzes relevant ESG data via a structured and comprehensive framework to calculate an overall country sustainability score. Along with a revision of our country ESG methodology, the country coverage has been extended from 65 to 150 countries (23 developed and 127 emerging market & developing economies).

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.

Scandinavian still on top – Switzerland close behind

With an ESG score of 8.64, Norway tops the current country ESG ranking, just ahead of its Nordic neighbors Sweden, Denmark and Finland. Switzerland follows in fifth place. Thirteen countries, ten of which are European, achieved an ESG score of 8.0 or higher. Ostensibly missing from the top group are a few economic giants, including the US and Japan (see Country ESG ranking map, **Figure 1**).

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All top-performing countries have robust, well-balanced sustainability profiles across all three ESG dimensions and have displayed continuously strong sustainability performance since we established our country ESG database in 2006. Of the 23 developed countries included in our country ESG assessment, 21 are in the top two ESG categories (represented by the green and light green areas of Figure 1); only Greece and Italy scored lower (blue areas).

At the other end of the rankings sits a group of 27 countries with scores below 4.0 (represented by the red areas in Figure 1). This group, with a few exceptions, is dominated by low- to lower-middle-income developing economies.

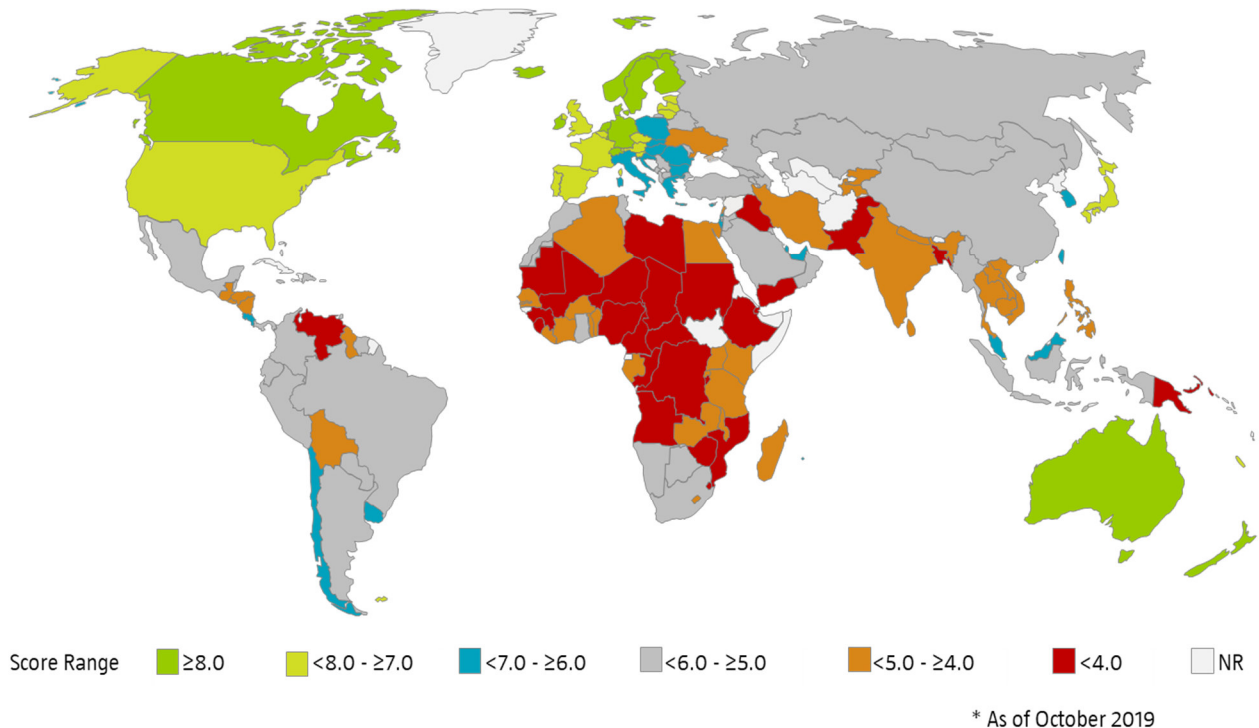
Hong Kong is holding steady at rank 24 although continued turbulence is likely to hit the territory's ESG score in the future.

Of the 127 emerging market and developing countries assessed, only eight made it into the second-highest category with scores between 7.0 and 8.0 (light green). Except for Hong Kong and Singapore, all are located in Europe. With an ESG score of 7.93, Singapore comfortably maintained its position as the top emerging market country ranking 15th overall. Despite the current unrest, Hong Kong is holding steady at rank 24, with a score of 7.36, although continued turbulence is likely to hit the territory's ESG score in the future. Of the remaining developing/emerging markets, roughly a third (42) scored above the mean of our universe (5.50). The ESG performance of the BRICS countries was particularly disappointing, all of which underperformed the universe mean.

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Countries in the top two categories (with ESG scores of 7.0 or above) account for 81% of total outstanding general government securities, according to the latest BIS data.¹

Figure 1: RobecoSAM's country ESG ranking map



Source: RobecoSAM

The map shows the best and worst ESG performers globally. Countries with ESG scores of 8.0 or above are among the top-performing group and include all the Scandinavian countries, Switzerland, Germany, the Netherlands, Luxembourg, Ireland, Canada, Australia and New Zealand. The worst-performing countries had ESG scores of 4.0 or below and include most African countries, Iraq, Yemen, Pakistan and Papua New Guinea. Scores range from 1 (worst) to 10 (best).

Africa—behind and falling further

Most of the worst-ranking ESG performers are located in Africa.²

Most of the worst-ranking ESG performers are located in Africa.³ Along with Yemen, four African countries are among the five countries with the worst sustainability performance in the world (see **Figure 2**). Apart from the small island state of Mauritius – ranked 42nd overall with a score of 6.39 – all other African nations performed poorly scoring below the universe mean. This illustrates just how far behind the continent is in terms of sustainability issues. Even the continent's two economic heavyweights, South Africa and Nigeria, performed poorly. With a score of 5.15, South Africa ranks 79th out of 150 countries and has for several years seen its score on a downward trajectory. Worse still, with a score of 3.38 and an overall rank of 133, is Nigeria whose ESG performance has stagnated over the past several years with no signs of improvement.

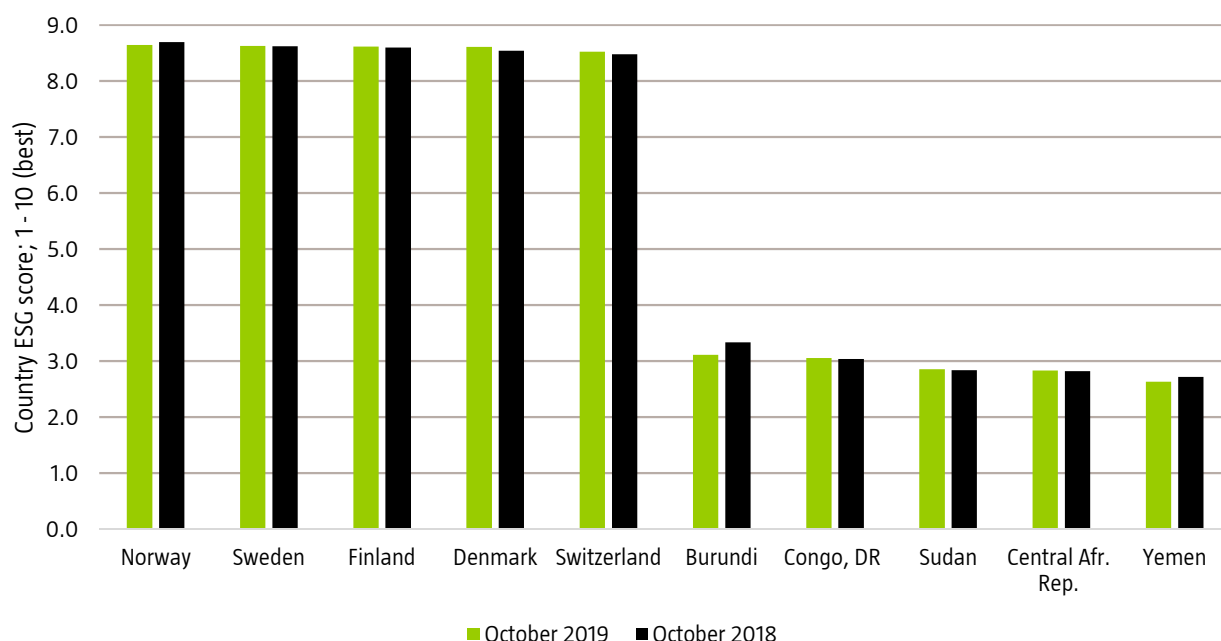
Even the continent's two economic heavyweights, South Africa and Nigeria, performed poorly.

¹ BIS: Debt Securities Statistics, 22 September 2019. According to BIS data, total outstanding general government debt securities amounted to USD 49.7 trillion at the end of March 2019.

² Bangladesh, Iraq, Pakistan, Papua New Guinea, Venezuela and Yemen were also among the worst performers.

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Figure 2: Top five and bottom five country ESG scores



Source: RobecoSAM

Biggest gains and declines over 6-months and 5-years

Of the five countries whose ESG scores deteriorated the most over the six-month period ending October 2019, four are located in Africa, as were the three that made the biggest gains (see Figure 3). Djibouti in East Africa leads the list of short-term winners. This was thanks, in part, to China's interest and presence in the country, which provides a counterbalance to the instability, political uncertainty, and military threats present elsewhere in the region.

Among the larger emerging market economies, Israel and Nigeria saw the largest score declines (-0.07 each) over the past six months, while Argentina experienced the largest gain (+0.08). Russia and Thailand each had a gain of (+0.05) over the same time period.

Despite the short term losses, Africa also contained four of the largest gainers over the past five years. In terms of how these affect overall country rankings, Rwanda has risen most, up 19 positions since 2014, followed by Guinea and Belarus, both of which rose by 16 positions. However, despite gains in recent years, all of these countries still rank poorly overall. The one exception is Belarus, which had improvements in several indicators across all ESG dimensions that boosted its score to 5.50 and pushed it into the top half of the ranking.

Over the last five years, Venezuela leads the list of countries who have lost ground as a result of steadily declining ESG performance.

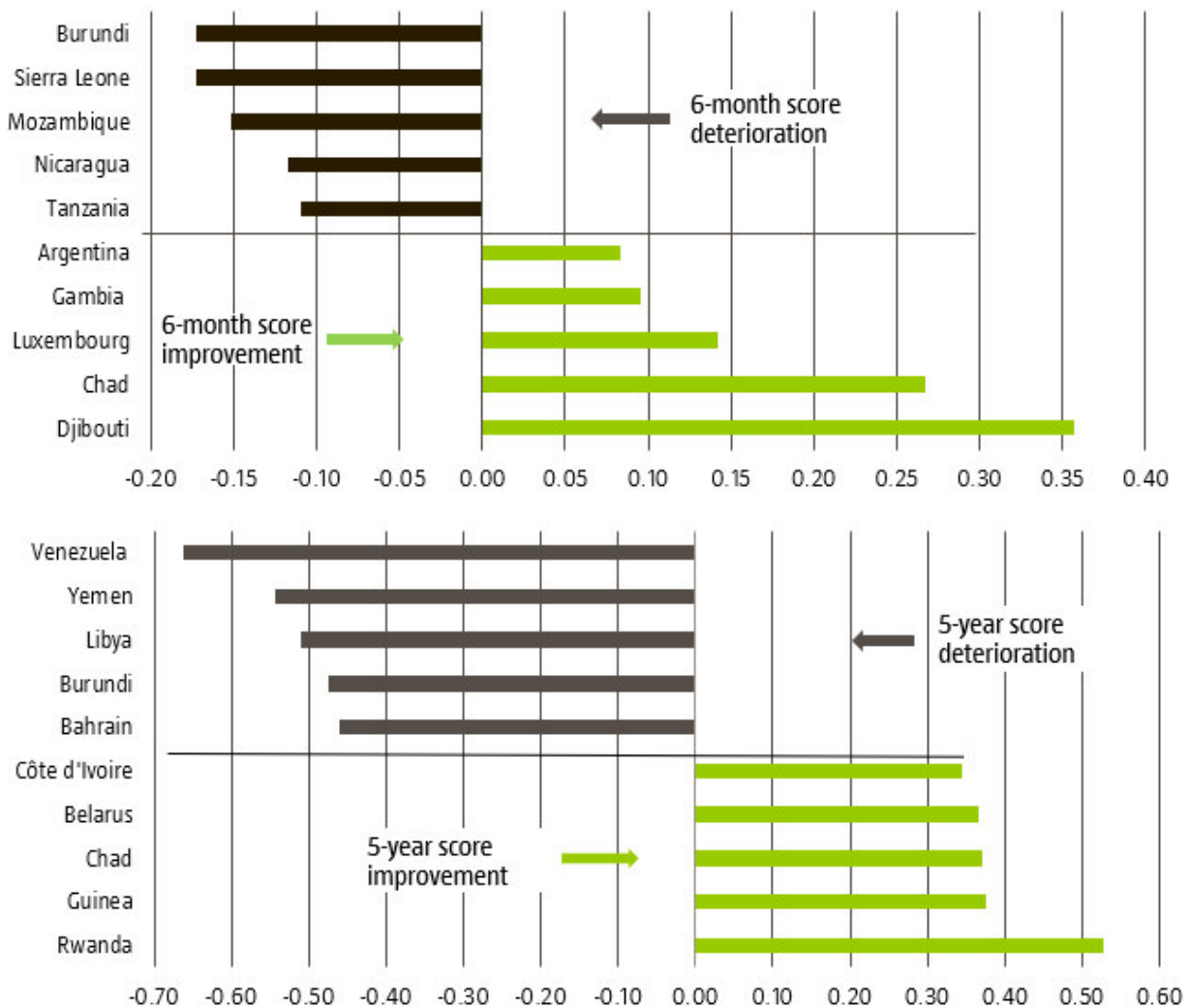
Over the last five years, Venezuela leads the list of countries who have lost ground as a result of steadily declining ESG performance. The country has fallen by 30 places (-30) to position 139. With both countries engulfed in civil war, Yemen and Libya have also suffered substantially. Yemen is now in last place in our country ESG ranking; Libya, ranked 142nd, has fallen by 26 places over the past five years. It is now 56 places lower than its ranking of 88 on the eve of the Arab Spring in early 2010.

With both countries engulfed in civil war, Yemen and Libya have also suffered substantially.

Focusing on larger economies, changes were also pronounced for Indonesia (+15) and Kazakhstan (+13), who saw their ranks improve, while Turkey (-19) and Brazil (-16) saw their ranks decrease. Over a five-year time horizon, Indonesia and Kazakhstan (both with +0.29) show the largest improvement in their sustainability score, followed by Taiwan (+0.20). In addition to Venezuela, Brazil (-0.44), Qatar (-0.36) and Turkey (-0.28) have also suffered losses in ESG scores.

Indonesia and Kazakhstan saw their [sustainability] ranks improve, while Turkey and Brazil saw their ranks decrease.

Figure 3: Countries with the largest gains and declines in ESG scores in the short and medium term



Source: RobecoSAM

The current overview of changes in country ESG scores is of course heavily affected by the extension of the country universe and can thus not be compared directly with the outcome in the previous update. None of the countries showing the largest declines over 6-month and 5-year periods were part of previous country ESG assessments.

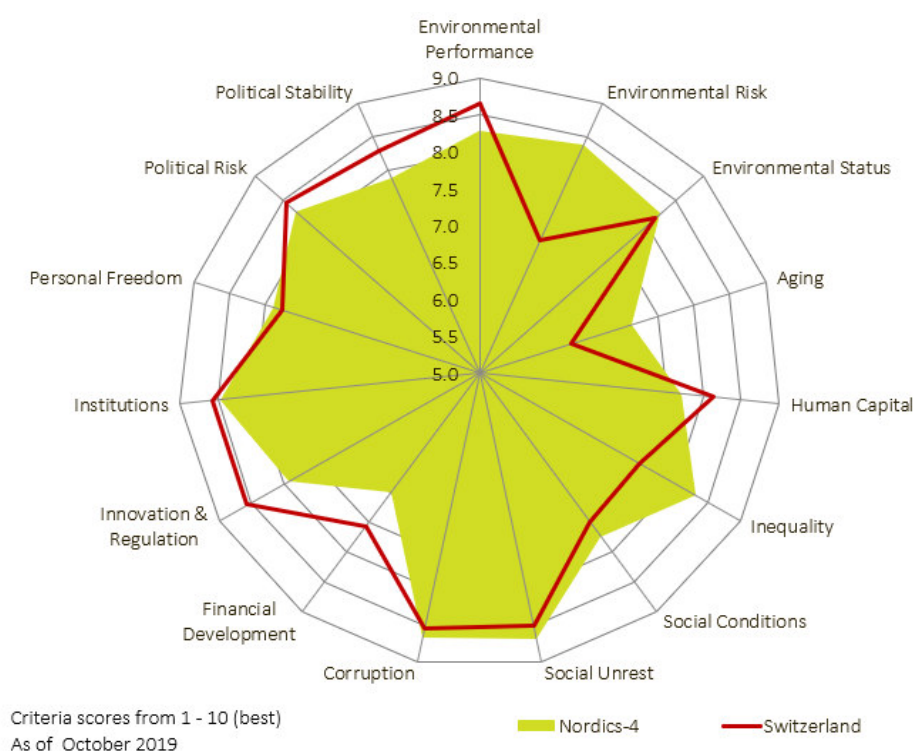
A green wave sweeps Switzerland

The Swiss parliamentary elections in October saw the Green Party become Switzerland's fourth-largest party. The advance of green forces and increased public awareness about environmental issues are likely to result in stronger ecological policies. The government has proposed to significantly increase levies on combustible fuels as well as taxes on airline tickets. Switzerland already leads the world when it comes to taxing carbon, according to OECD data.⁴ The country also tops Yale University's Environmental Performance Index, primarily reflecting its strong performance in air quality and climate protection. Only in the area of environmental risk does Switzerland lag the Scandinavian countries, primarily because it is more affected by extreme weather events (See **Figure 4**).

In the social area, Switzerland compares poorly with the Nordics in terms of inequality and aging (although it does better than Finland with respect to aging). When it comes to aging, in a referendum in May 2019, Swiss voters adopted changes to tax reforms as well as changes to old-age pension and retirement financing, which reduces a financing shortfall. However, the structural reforms needed to make retirement financing more sustainable in the longer term still look inevitable. Reform is also required in the occupational pension scheme, and it remains to be seen whether a new concept presented by the "social partners" (a coalition of employer associations, unions, and trade groups) will be accepted in parliament in 2020.

In governance, Switzerland is on par overall with the Nordic 4 (Norway, Finland, Sweden, and Denmark) thanks to its leading position in financial development and innovation according to the IMF's Financial Development and WIPO's Global Innovation Indices.

Figure 4: Switzerland's ESG profile with respect to the Nordic-4



Source: RobecoSAM

Switzerland leads the Nordic 4 (Norway, Finland, Sweden and Denmark) in governance indicators including Political Stability, Political Risk, Strong Institutions, Innovation & Regulation, and Financial Development. It lags the Nordic 4 in terms of Environmental Risk, as well as on social indicators like Aging, Inequality and Social Conditions.

⁴ "OECD: Effective Carbon Rates 2018 – Pricing Carbon Emissions Through Taxes", OECD, 18 September 2018

Anglo-American parallels in politics, governance, and ESG performance

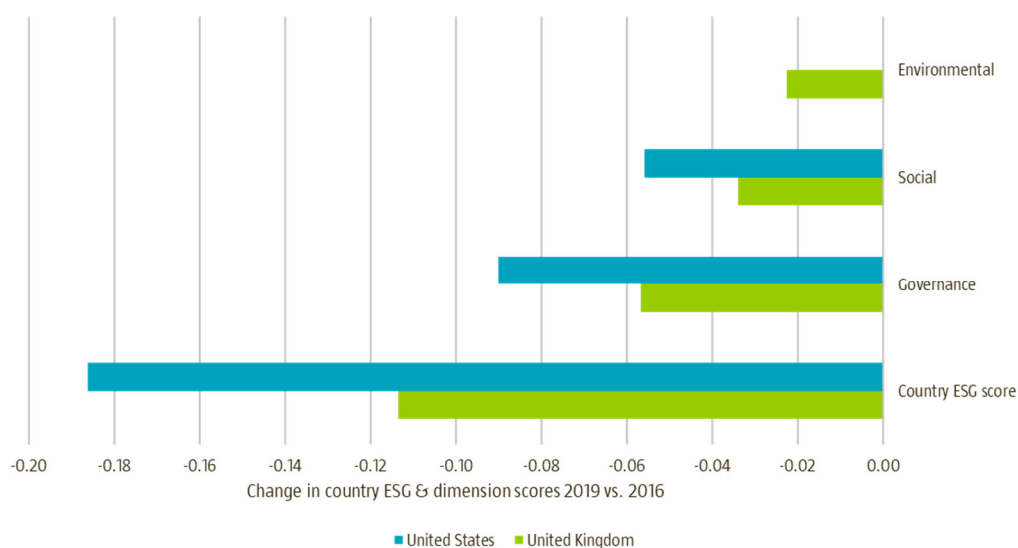
Both the US and the UK have seen their ESG performance gradually worsen since 2016, when the UK voted for Brexit and the US for Donald Trump, especially in terms of governance (See **Figure 5**). This is a tendency that is strongly linked to the political situations in the two countries, which are characterized by increasing polarization, deeply divided populations, growing dissatisfaction with traditional parties, and increasing populism. Since the UK's vote to exit the European Union, the country has been absorbed by the endless Brexit debate, which has resulted in eroding belief in representative democracy and increasing disruption of state institutions.

Both the US and the UK have seen their ESG performance gradually worsen since 2016

With a clear victory of his Conservative Party in the snap elections on December 12, British Prime Minister Boris Johnson has been given a strong mandate to pull the UK out of the EU. After comfortably passing its second reading by 358 votes to 234 on December 20, the withdrawal agreement bill is right on track to complete its passage through both houses of parliament in time to allow Brexit to happen by 31 January 2020. However, this will only mark the beginning of what is certain to be a long, arduous procession of talks on how to frame a future UK-EU relationship. Another major challenge will be to preserve the territorial unity of England, Scotland, Wales and Northern Ireland. The Scottish National Party's success in the polls is likely to raise new questions of independence for Scotland (which voted against Brexit). Moreover, in Northern Ireland there is a risk that the province's ties to the British mainland will weaken given the uncertainty of the future status and relationship with the Republic of Ireland.

There are some obvious parallels with developments in the US under the Trump administration; in fact, the weakening of the ESG score in the US has been more pronounced. Since taking office, Trump has disrupted domestic and foreign politics, damaged state institutions, attacked the media, changed immigration rules, and begun dismantling the health care system. On December 18, President Trump was impeached by the House of Representatives for abuse of power and obstruction of Congress, sending the case to the Senate for trial. Mr. Trump has become only the third president in history to be impeached. While the full effects of the Trump administration's policies on the country's sustainability profile will only emerge over the medium to longer term, there has already been an adverse impact on various ESG criteria. The October 2019 scores for Human Capital, Social Conditions, Social Unrest, Institutions, Personal Freedom, Political Risk and Political Stability are all down from their October 2016 levels.

Figure 5: The UK & US: a gradual, broad-based slide in ESG scores



Source: RobecoSAM

The bar chart shows how US and UK ESG performance scores have worsened over the past 3 years (2016-2019) since Brexit and the Trump presidential victory. Scores have dropped across all three ESG dimensions with governance taking the heaviest hit.

The US has also seen an unprecedented rollback of environmental regulations, and recently Mr. Trump initiated the process of withdrawing from the Paris climate agreement. Unsurprisingly, the US's scores in Yale's Environmental Performance Index have slumped from 84.7 in 2016 to 70.7 in 2019.

Harbingers of a "Latin Spring"? — Anti-government protests across South America

The unexpected, sudden outbreak of popular uprisings across South America in recent months has been the biggest and most widespread to hit the region in decades. This unrest is already being compared with the pro-democracy rebellions across the Arab world in 2010–11, in which oppressed and impoverished populations revolted against their autocratic regimes. However, in the current uprising in South America, the actors and causes vary from country to country, and voters are protesting against leaders from both the left and the right.

In South America, the actors and causes [of protests] vary from country to country... voters are protesting against leaders from both the left and the right.

In Bolivia, pro-democracy and right-wing forces have driven leftist Evo Morales, Latin America's longest-serving president, from office and into exile amid an election fraud scandal. In Ecuador, indigenous groups and left-leaning students paralyzed parts of the country in October, forcing the government of President Lenin Moreno to restore gasoline subsidies. Paraguay has seen massive protests against President Mario Abdo Benítez regarding an agreement with Brazil on the Itaipu hydroelectric dam, that is viewed as detrimental to Paraguay. In Peru, President Martin Vizcarra dissolved parliament to force new elections, leading to protests around the country. And most recently, Colombia has been shaken by nationwide protests against President Iván Duque Márquez, with demonstrators pressing the government to drop labor, tax, and pension reforms. Add to these cases the long-standing problem of Venezuela, where the economic and political crisis has resulted in a humanitarian disaster with no immediate end in sight.

Brazil and Argentina recently held elections that revealed deeply divided populations – Brazil, through the election of right-wing populist Jair Bolsonaro, and Argentina, through the election of Alberto Fernandez. Mr. Fernandez, has brought back the leftist party of former populist president Cristina Kirchner with unclear implications for economic policies and structural reforms. Finally, Uruguay – South America's most stable country, with a political stability score of 7.51, ahead of Chile's 7.19 – will see center-right, pro-business candidate Luis Lacalle Pou form a conservative government after 15 years of rule by the left-wing Broad Front.

Even "role model" Chile engulfed by widespread unrest

While the protests across South America were triggered by country-specific issues, they occur against a common economic backdrop. Since the end of the global commodities boom in 2014, fiscal constraints have increasingly limited governments' ability to maintain their generous public spending policies which had enabled them to reduce poverty and redistribute wealth. This, of course, has been fueling discontent and frustration. There are some other common factors behind this wave of protest including pronounced inequalities, political control and polarization, fragile state institutions, and widespread corruption among the ruling elites.

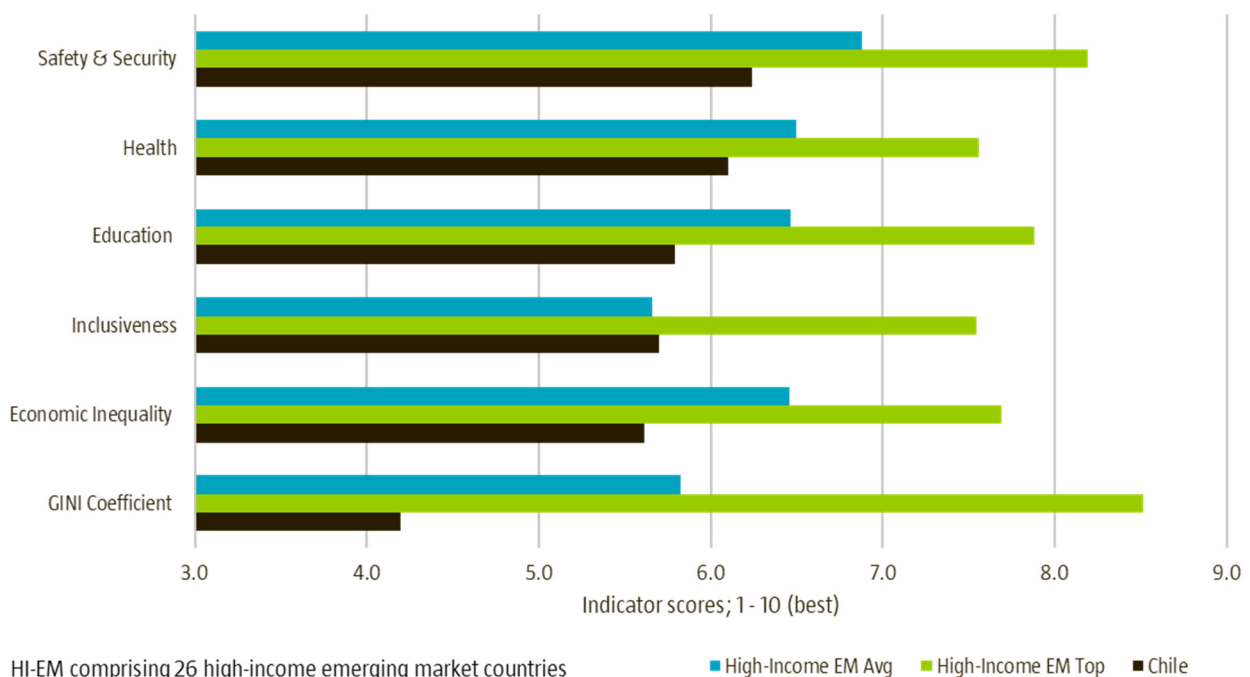
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It is against this backdrop that even Chile has suddenly faced turmoil not seen since the country's re-democratization in 1990 when fury over a subway fare increase snowballed into a much deeper movement against the right-leaning government and ruling elites. Chile has the highest Human Development Index, one of the highest per-capita incomes in the region, and is often cited as Latin America's economic role model. However, its economic growth in recent decades has not benefited all Chileans, and inequality is still deeply entrenched, as is clearly visible in a comparison of relevant ESG indicators with Chile's high-income emerging markets peers.

Even though the country has consistently outperformed its Latin American neighbors, there are legitimate concerns regarding persistent inequality and the need for better access to education, health care, priced public services and higher-quality jobs. Extreme inequality marks both Chile and South America – seven out of the ten countries with the highest GINI coefficients in the world are from the region. There is a critical need for a more inclusive growth model if Chile and the rest of the region are to restore and preserve socio-political stability and improve sustainability performance.

“Seven out of the ten countries with the highest GINI coefficients in the world are [in South America]...There is a critical need for a more inclusive growth model if the region it is to restore and preserve socio-political stability and improve sustainability performance.”

Figure 6: Chile’s social and income inequality profile versus peers



The chart above shows how poorly Chile compares with its High-Income Emerging Market (HI-EM peer group) across a number of critical social indicators.
Source: RobecoSAM

Saudi Arabia still with severe gaps in governance and inclusiveness

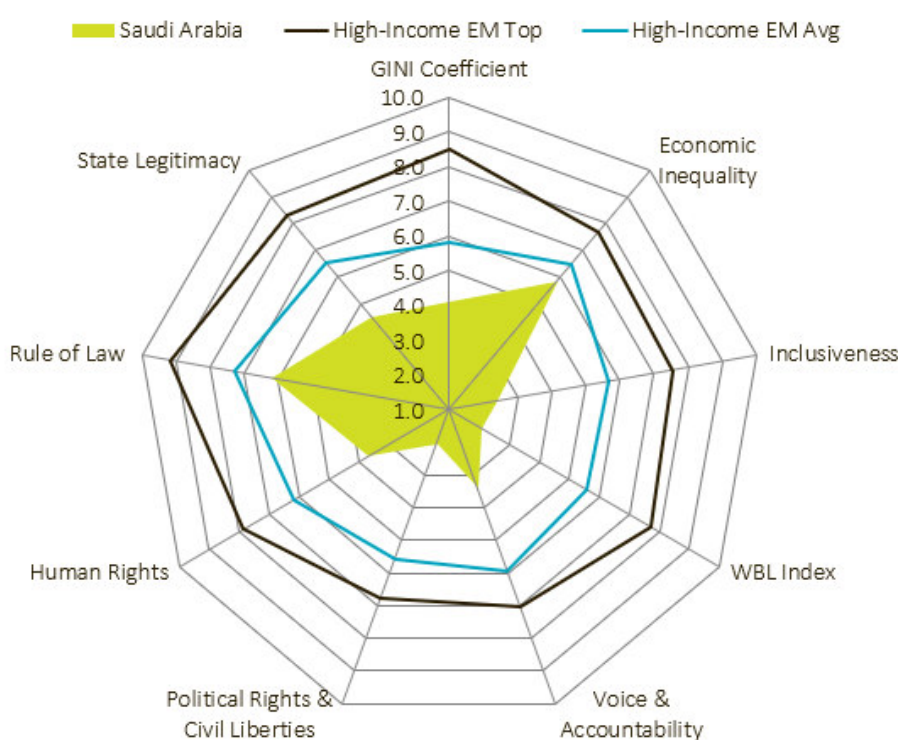
Since 2016, when the “Vision 2030” reform program was launched, Saudi Arabia’s Crown Prince Mohammed bin Salman has pushed through several social and economic reforms in order to modernize the conservative Muslim kingdom and diversify its economy. Measures include lifting a long-standing ban on women driving, a new tourist visa scheme and, most recently, the IPO of the national oil company, Aramco. However, the Prince’s reputation as a reformist leader has been severely tarnished by the assassination of dissident Saudi journalist Jamal Khashoggi by Saudi intelligence agents and the ongoing Saudi-led intervention in Yemen.

Saudi Arabia’s involvement in the Yemeni civil war and the country’s vulnerability to regional and geopolitical tensions were key drivers behind Fitch’s recent downgrade of the country’s sovereign credit rating from A+ to A. This downgrade was another blow to bin Salman’s reform ambitions. What’s more, despite the reformist veneer, Saudi Arabia remains an absolute monarchy that heavily restricts political rights and civil liberties, represses dissidents, and exercises extensive surveillance of citizens. These factors are clearly reflected in the country’s ESG profile, which shows it significantly underperforms its high-income emerging market peers in certain ESG areas (see **Figure 7**).

Despite the reformist veneer, Saudi Arabia remains an absolute monarchy that heavily restricts political rights and civil liberties, represses dissidents, and exercises extensive surveillance of citizens.

Saudi Arabia brings up the rear in our country ESG universe in the current Freedom in the World Index (published by Freedom House); the Women, Business and the Law Index (published by the World Bank); and the Voice & Accountability indicator (one of six Worldwide Governance Indicators); and it takes penultimate place in the Human Rights score (published by the Fund for Peace) – just ahead of Egypt. Even though the government has at its disposal huge oil wealth and maintains high public spending to stay in power, it ranks among the bottom five countries in the State Legitimacy score within the Fragile States Index.

Figure 7: Saudi Arabia’s democracy and inclusiveness deficiencies



Indicator scores from 1 - 10 (best); scores as of October 2019;
HI-EM comprising 26 high-income emerging market countries

Source: RobecoSAM

Hong Kong shaken by violent anti-government protests

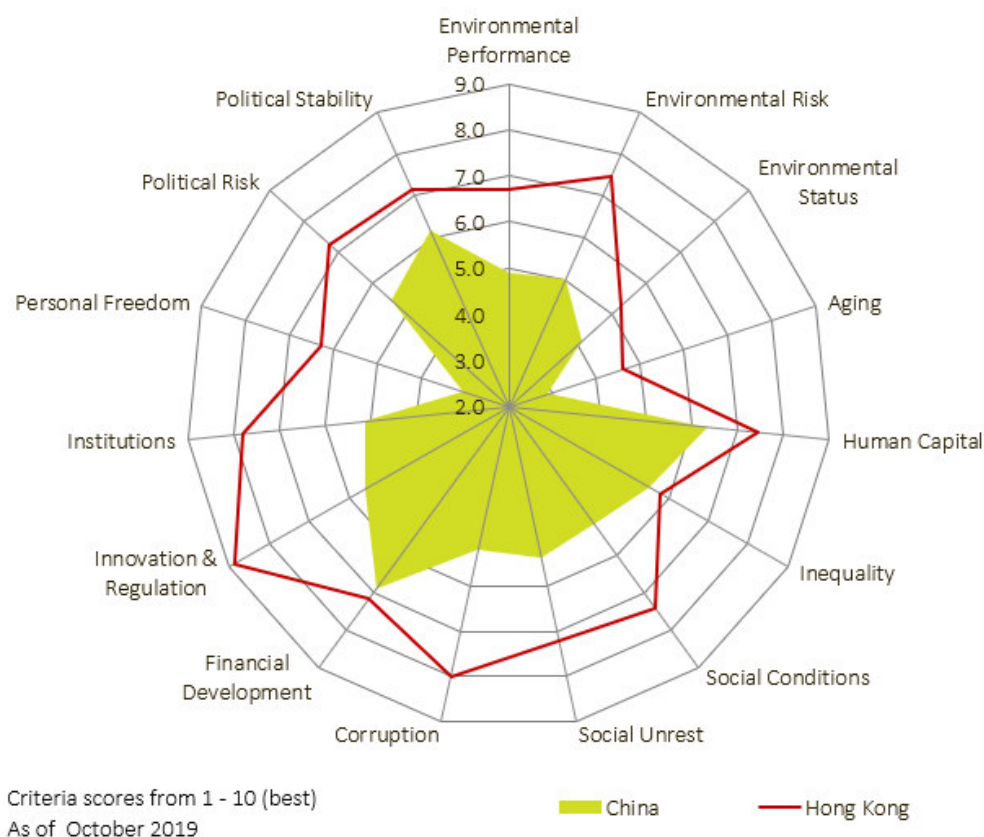
The protest movement in Hong Kong that began peacefully in June has taken a turn for the worse in recent months as it has become increasingly violent and destructive. Initially, the protests focused on contentious legislation that would have allowed the extradition of Hong Kong citizens to mainland China. Critics feared that this would further undermine judicial independence and endanger dissidents at a time when they perceive the territory’s special autonomy status to be eroding. Hong Kong, a former British colony, was handed back to China in 1997 under the principle of “one country – two systems.” Under this principle the city has a high degree of autonomy, its own laws, and its own system of government under a mini-constitution known as the “Basic Law,” which China has promised to respect until 2047.

As we can see in **Figure 8**, these differences are clearly reflected in Hong Kong’s ESG profile, which is stronger than China’s and most EM peers on all key ESG dimensions, but especially in the governance sphere. Hong Kong’s rule of law, which is ranked as one of the best in the world, is one of its distinguishing elements and a key to its attractiveness as a financial center. Hong Kong was 11th out of 209 jurisdictions in the 2019 Worldwide Governance indicators. Although the extradition bill was formally

withdrawn in September, demonstrators have continued to protest. Hong Kong's voters have given their support to pro-democratic candidates in November's local elections. Candidates in favor of more democracy now control 17 of the territory's 18 district councils.

The current social unrest have already had adverse economic impacts: businesses have repeatedly been forced to close, transport has been disrupted, retail sales have plunged, and tourist arrivals have fallen sharply. As a result, the Hong Kong economy slipped into recession in the third quarter of 2019 and the contraction is expected to continue over the remainder of the year. Meanwhile, the wave of protests shows little sign of abating with no clear ending in sight.

Figure 8: China and Hong Kong: one country, two ESG profiles



Source: RobecoSAM

China with grave deficits in key governance areas

The uncertain outlook for Hong Kong must be viewed in the context of overall political developments in China in recent years, which are characterized by an increasingly repressive authoritarian regime and a more assertive foreign policy. Within China, the regime is continuously tightening its control over academia, bureaucracy, business, media, minorities, religious groups and vast parts of civil society. This has been most apparent in China's harsh repression of the Muslim ethnic minority in Xinjiang. Reports outline a systematic policy of mass detainment in so-called "re-education" camps, which has led to serious questions about human rights violations.

The uncertain outlook for Hong Kong must be viewed in the context of overall political developments in China.

It is no surprise that such deficiencies are weighing on the country's sustainability score. China's overall ESG score of 5.12 puts it in 80th place in our 150-country universe, slightly below the average of the upper-middle-income country group to which it

belongs. It scores particularly poorly in Political Rights & Civil Liberties (published by Freedom House), Human Rights and State Legitimacy (indicators of the Fragile States Index by Fund for Peace) and Voice & Accountability (part of the Worldwide Governance Indicators). China ranks among the bottom five within RobecoSAM's country ESG universe for all of these indicators.

“China ranks among the bottom five across a number of key social indicators within RobecoSAM's country ESG universe... such deficiencies are weighing on the country's sustainability score.”

Country ESG rankings interacting with sovereign credit ratings

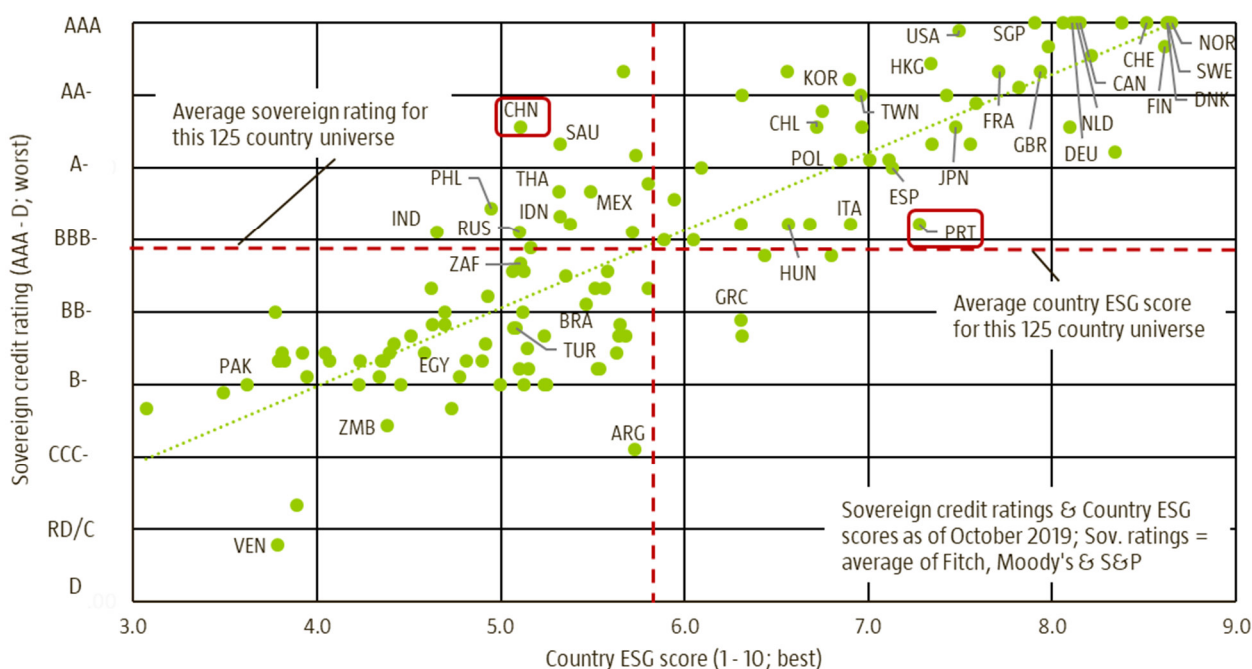
It has become increasingly evident that a nation's ability and willingness to honor its financial obligations are not only affected by financial and macroeconomic variables, but also by its political situation, social climate, quality of governance, and environmental factors. Robust sustainability performance helps to promote economic growth and contributes to a healthy fiscal and balance of payments position, and thus to higher long-term sovereign creditworthiness. This is nicely illustrated in **Figure 9**, which shows a high correlation between RobecoSAM's country ESG scores and sovereign credit ratings (correlation coefficient $r=0.86$).

“Robust sustainability performance helps to promote economic growth, contributes to a healthy fiscal position, and to higher long-term sovereign creditworthiness.”

However, there are some exceptions to the generally positive correlation. For example, Portugal's sovereign credit rating appears somewhat undervalued relative to its sustainability score, suggesting the country is long overdue for an upgrade to its credit rating. It has been assigned a positive rating outlook by Fitch, Moody's, and S&P over the past few months. Another example is Greece whose credit rating assessment still appears to be too conservative in spite of an upgrade from B+ to BB- in October 2019. This move was to be expected as the country's ESG score has been moderately improving since 2015.

China, on the other hand, enjoys strong sovereign ratings despite weak ESG scores. The same is true for Saudi Arabia, even after the latest downgrade from A+ to A by Fitch at the end of September 2019. Similarly, South Africa's deteriorating ESG performance suggests there should be an adjustment in its sovereign credit rating. In fact, all three major rating agencies have revised their rating outlook for South Africa to negative over the past few months.

Figure 9: Country ESG scores relative to sovereign credit ratings



Mapping ESG scores and sovereign credit ratings demonstrates a strong positive correlation. However, the correlation is not perfect—Portugal’s sovereign credit is undervalued whereas China appears overvalued relative to their sustainability scores.

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

Country ESG Scores—a valid measure for progress on SDG achievements

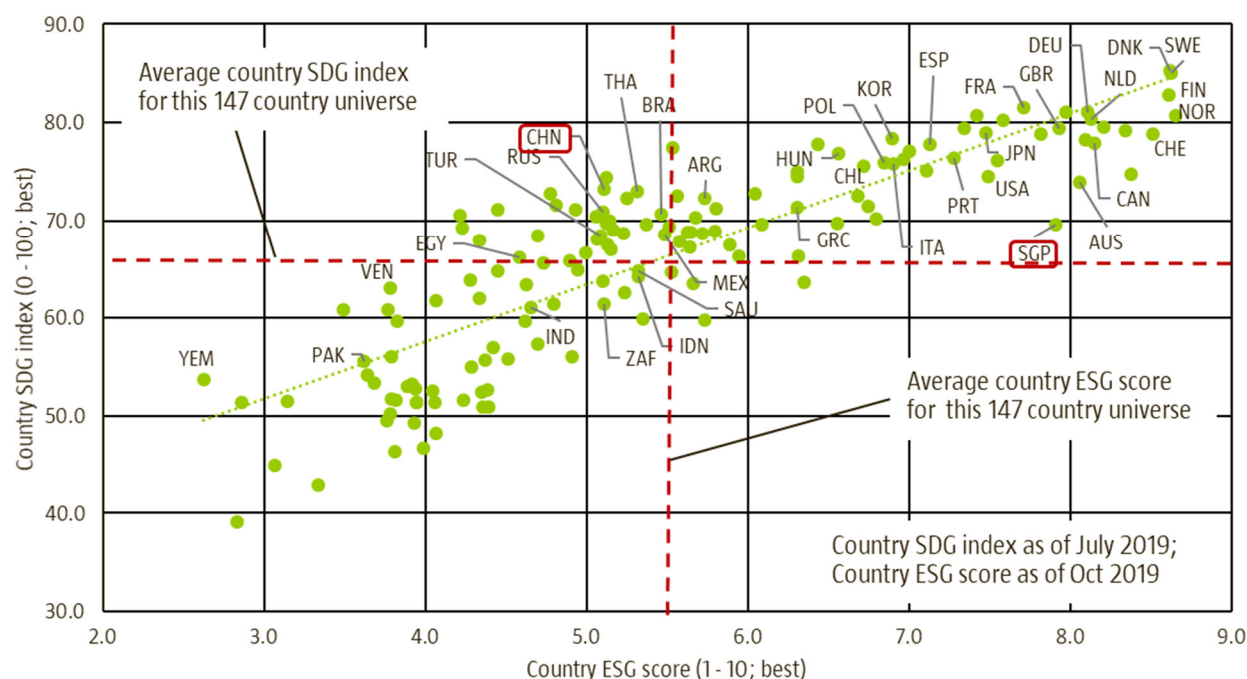
RobecoSAM’s latest country ESG ranking (see **Figure 1**) is again closely correlated with the 2019 Sustainable Development Goals (SDG) index (see **Figure 10**). The SDG index, created by the Bertelsmann Stiftung and the United Nations Sustainable Development Solutions Network, tracks countries’ progress on the 17 SDGs that were developed and ratified by the international community in 2015. The 2019 SDG index ranking includes 162 countries, and is also led by Denmark, Sweden and Finland, while African countries including the Democratic Republic of Congo, Chad and Central African Republic bring up the rear.⁵

Comparing SDG assessments and RobecoSAM’s country ESG scores suggest a strong positive correlation between a country’s commitment to the SDGs and the pursuit of sustainability.

Comparing SDG assessments and RobecoSAM’s country ESG scores suggest a strong positive correlation between a country’s commitment to the SDGs and the pursuit of sustainability. Here again, there are some exceptions to the generally positive correlation (see **Figure 10**); however, overall, we can see that sustainable development in broader terms and economic growth are fundamentally intertwined. This explains why lower-income countries tend to have lower SDG index scores and weaker country ESG scores, as they usually lack the adequate institutions, infrastructure, policy mechanisms, and financial resources to address environmental threats or social needs.

⁵ Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G. (2019): Sustainable Development Report 2019. New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN), July 2019

Figure 10: Country ESG score a good indicator for SDG progress



Source: Bertelsmann Stiftung, UN Sustainable Development Solutions Network, RobecoSAM

The graphic above shows the strong positive correlation between RobecoSAM countries' ESG score and its commitment to the SDGs and sustainability. Notable exceptions are China and Singapore; the former has a higher SDG index score relative to its ESG score, whereas the latter displays a lower SDG index score than expected given its position in the country ESG ranking.

Public debt position influenced by ESG profile and governance quality

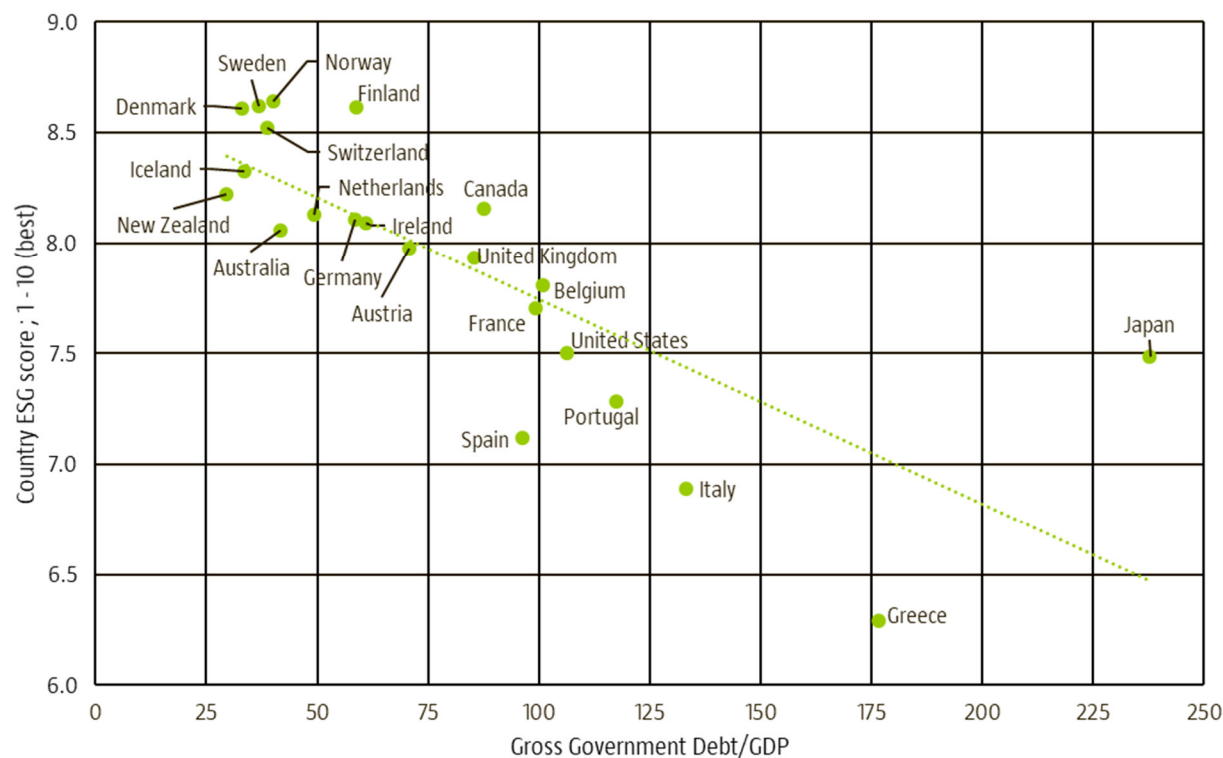
Figures 11–12 display a close relationship between a country's ESG profile, governance quality, and fiscal situation. Countries with strong ESG profiles and more robust governance structures tend to adopt solid fiscal stances and have lower public debt. On the other hand, countries with weaker state institutions and weaker overall ESG profiles usually suffer from heavier public debt loads and show a much faster debt accumulation rate. This is clearly visible in the case of the Southern European peripheral countries of the eurozone after the outbreak of the financial crisis in 2007. During this period, these countries also experienced a deterioration in their governance scores as their institutional frameworks came under increasing pressure during the years of crisis.

Countries with strong ESG profiles and more robust governance structures tend to adopt solid fiscal stances and have lower public debt.

As with overall economic performance, public debt levels are also influenced by a country's overall ESG conditions. In a politically and socially stable country with robust state institutions, it is much easier for a government to pursue a sustainable economic policy and fiscal stance. In countries that are more fragile in socio-political terms and have weaker institutions, room for policy maneuvering is much smaller and the ability of a government to resist calls for higher public spending more limited. This phenomenon is certainly more perceptible in times of crisis, as evident from the experience of the peripheral eurozone countries during the European debt crisis; but it is also more prevalent in countries with deficiencies in relevant areas of governance such as corruption, government effectiveness, efficiency of the bureaucracy, or rule of law. The existence of a positive association between government debt and quality of governance has also been found in a recent research paper by João Imaginário and Maria João Guedes.⁶

⁶ João Imaginário & Maria João Guedes: "Governance and Government Debt", Lisbon, 2019

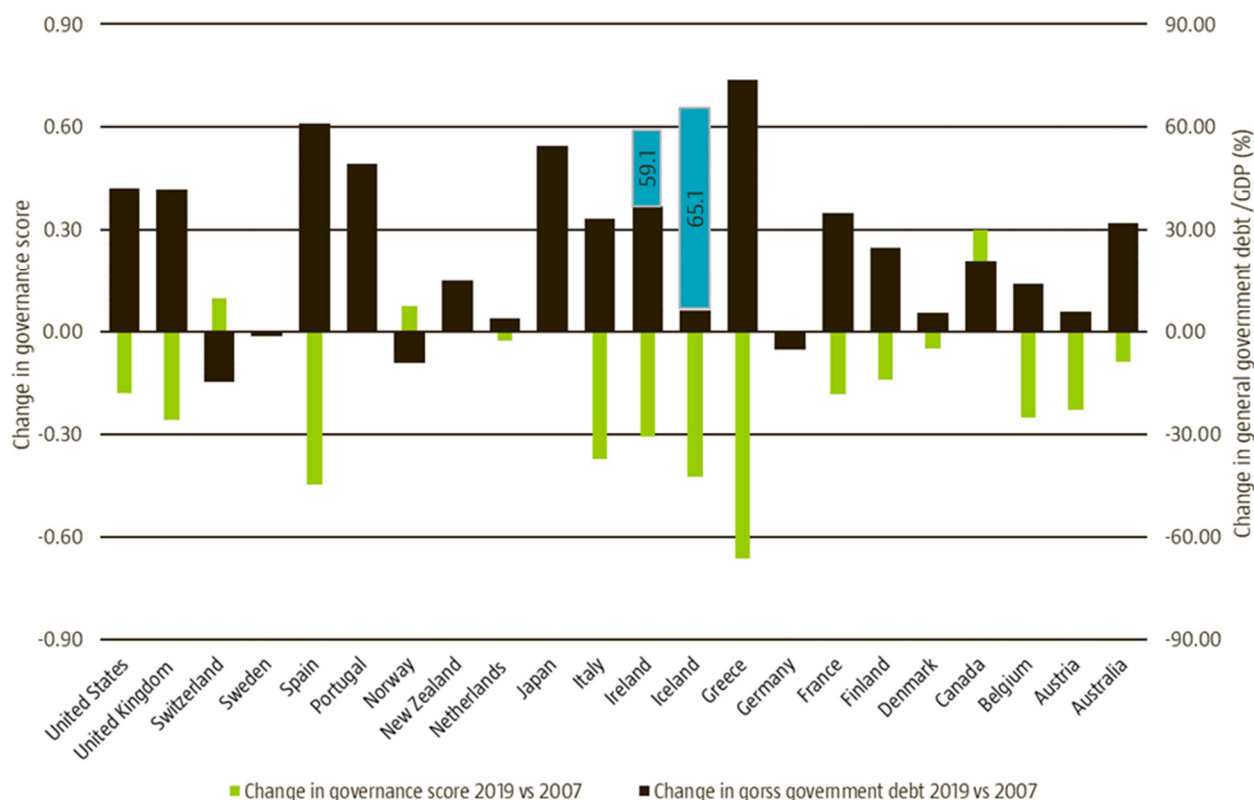
Figure 11: Strong ESG profiles correspond with solid public debt positions



Source: IMF Fiscal Monitor, RobecoSAM

The graph shows the best and worst performers in terms of public debt burden relative to GDP in 2019. The Scandinavian countries, Switzerland and New Zealand are the countries with the strongest fiscal position, whereas Japan, the Southern European peripheral countries as well as the United States show the weakest outcome.

Figure 12: Deterioration in governance accompanied by increases in government debt



Source: IMF Fiscal Monitor, RobecoSAM

The graph above shows changes in countries' governance scores and public debt since the outbreak of the financial crisis in 2007. Countries with the biggest declines in governance also experienced the largest increases in government debt. The end-2019 debt figures for Iceland and Ireland are slightly misleading as their peak debt during the period between 2007 and 2019 was much higher, as indicated in the blue bars (65.1% for Iceland and 59.1% for Ireland).



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 criteria weights within this update. This has been carried out in accordance with our methodology governance policy and to incorporate newly available data and evidence with regard to the importance of ESG factors. A major change to the last ranking update is the extension of the country universe from 65 to 150 countries. This introduced never before assessed countries into the country universe, many of which with very poor ESG profiles. Since Country ESG scores are normalized, newly calculated ESG scores for the countries in the upper and middle segment of the ranking are higher compared to the past. Another consequence is that the differences in scores across countries tend to be smaller than in the past. Comparisons with past scores and rankings must thus be made in recognition of this methodology change. Past scores have been recalculated to allow for a full historical comparison of the new country universe. Past scores will also be recalculated in future updates so they may 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 at <http://www.robecosam.com/en/sustainability-insights/about-sustainability/country-sustainability-ranking.jsp>. An updated version outlining the revised methodology will become available in spring next year.

Appendix 1

Ongoing reviews of the underlying data and data providers and maintenance of the methodologies used to construct models are integral to ensuring its completeness and continued predictive power. The methodological framework for calculating country ESG scores is shown in Figure 13 below. Source data can be found later in Appendix 2.

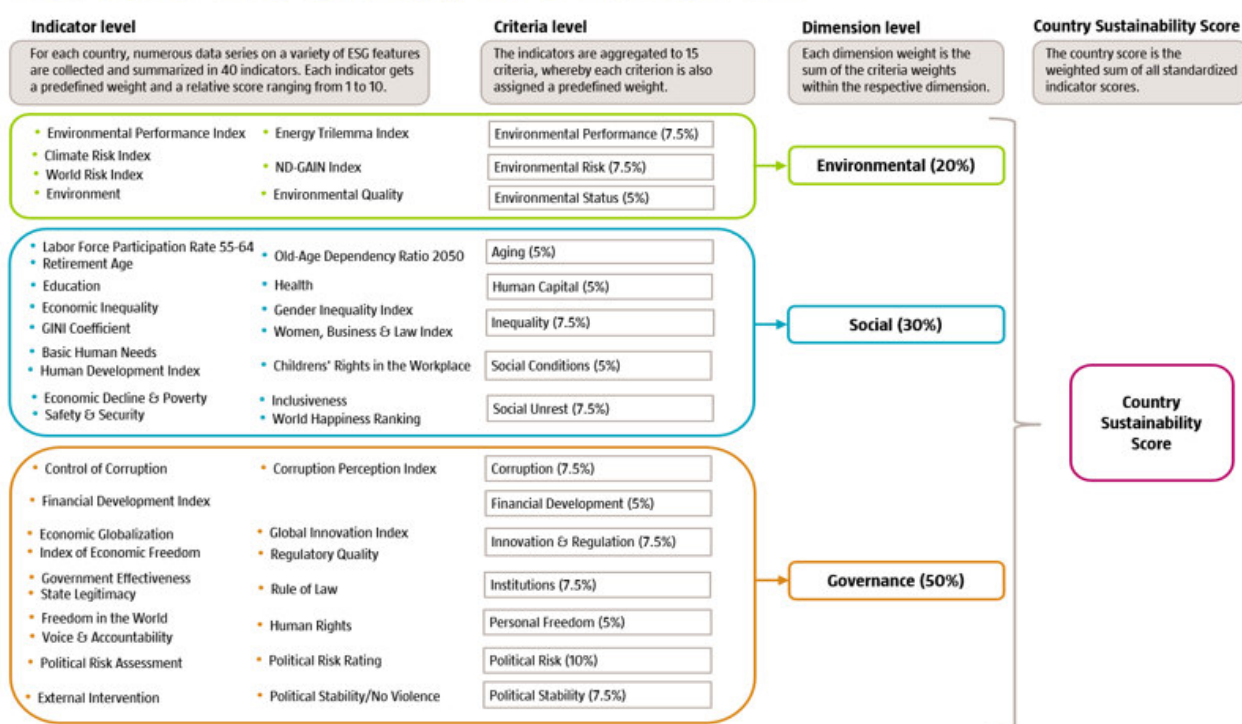
Since the last country ESG ranking update in April 2019, there have been additional changes in the set indicators, data sources and criteria weights included as part of this update. The new methodological framework comprises 40 indicators, which are combined into 15 criteria covering the three main ESG dimensions (environmental, social and 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. They take into account new evidence and industry trends and enable 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 2020.

In addition to the adjustments to the country ESG assessment framework explained above, there has also been a major change in the country universe, which now includes 150 countries (up from 65). This has also resulted in a shift in the scores for the 65 countries covered in the past, as numerous countries with very poor ESG profiles have been added. This has also led to shifts in the ranks of many countries, even though they may not have experienced any real change in their underlying ESG profile.

Figure 13: RobecoSAM's country ESG framework

RobecoSAM's country ESG framework



As of October 2019

Source: RobecoSAM

Appendix 2

Environmental Performance	Yale University; <i>Environmental Performance Index</i> https://epi.envirocenter.yale.edu/ World Energy Council/Oliver Wyman; <i>Energy Trilemma Index</i> https://trilemma.worldenergy.org/
Environmental Risk	Bündnis Entwicklung Hilft; <i>World Risk Index</i> https://entwicklung-hilft.de/ University of Notre Dame; <i>ND-GAIN Index</i> https://www.nd.edu/ Germanwatch; <i>Global Climate Risk Index</i> https://germanwatch.org/en/cr
Environmental Status	Social Progress Imperative; <i>Environment</i> (Component of SPI) https://www.socialprogressindex.com/ Legatum Institute; <i>Environmental Quality</i> (Pillar of Prosperity Index) https://www.prosperity.com/
Aging	ILOSTAT; <i>Labor Force Participation Rate 55-64</i> https://ilostat.ilo.org/ UN – Population Division; <i>Old-Age Dependency Ratio</i> https://population.un.org/ WB – Women, Business & the Law; <i>Retirement Age</i> https://wbl.worldbank.org/
Human Capital	Legatum Institute; <i>Education</i> (Pillar of Prosperity Index) https://www.prosperity.com/ Legatum Institute; <i>Health</i> (Pillar of Prosperity Index) https://www.prosperity.com/
Inequality	Fund for Peace; <i>Economic Inequality</i> (Indicator of FSI) http://fsi.fundforpeace.org/ UNDP – Human Development Reports; <i>Gender Inequality Index</i> http://hdr.undp.org/ World Bank; World Development Indicators; <i>GINI Coefficient</i> http://databank.worldbank.org/data/ OECD; Income Distribution Database; <i>GINI Coefficient</i> http://www.oecd.org/ WB – Women, Business & the Law; <i>Women, Business & the Law Index</i> https://wbl.worldbank.org/
Social Conditions	Social Progress Imperative; <i>Basic Human Needs</i> (Component of SPI) https://www.socialprogressindex.com/ Global Child Forum/UNICEF; <i>Children’s Rights in the Workplace Index</i> https://www.globalchildforum.org/ UNDP – Human Development Reports; <i>Human Development Index</i> http://hdr.undp.org/
Social Unrest	Fund for Peace; <i>Economic Decline & Poverty</i> (Indicator of FSI) http://fsi.fundforpeace.org/ Social Progress Imperative; <i>Inclusiveness</i> (Component of SPI) https://www.socialprogressindex.com/ Legatum Institute; <i>Safety & Security</i> (Pillar of Prosperity Index) https://www.prosperity.com/ Columbia University/SDSN; <i>World Happiness Ranking</i> https://worldhappiness.report/ed/2019/
Corruption	Transparency International; <i>Corruption Perception Index</i> https://www.transparency.org/ World Bank; <i>Control of Corruption</i> (Worldwide Governance Indicator)

<https://info.worldbank.org/governance/wgi/#home>

Financial Development	IMF; <i>Financial Development Index</i> https://data.imf.org/
Innovation & Regulation	KOF/ETHZ; <i>Economic Globalization</i> (Dimension of Globalization Index) https://kof.ethz.ch/ WIPO; <i>Global Innovation Index</i> https://www.wipo.int/ Heritage Foundation; <i>Index of Economic Freedom</i> https://www.heritage.org World Bank; <i>Regulatory Quality</i> (Worldwide Governance Indicator) https://info.worldbank.org/governance/wgi/#home
Institutions	World Bank; <i>Government Effectiveness</i> (Worldwide Governance Indicator) https://info.worldbank.org/governance/wgi/#home World Bank; <i>Rule of Law</i> (Worldwide Governance Indicator) https://info.worldbank.org/governance/wgi/#home Fund for Peace; <i>State Legitimacy</i> (Indicator of Fragile States Index) http://fsi.fundforpeace.org/
Personal Freedom	Freedom House; <i>Freedom in the World Index</i> https://freedomhouse.org/ Fund for Peace; <i>Human Rights</i> (Indicator of FSI) http://fsi.fundforpeace.org/ World Bank; <i>Voice and Accountability</i> (Worldwide Governance Indicator) https://info.worldbank.org/governance/wgi/#home
Political Risk	Euromoney Country Risk; <i>Political Risk Assessment</i> http://www.euromoney.com/ PRS Group; <i>Political Risk Rating</i> http://www.prsgroup.com/
Political Stability	Fund for Peace; <i>External Intervention</i> (Indicator of Fragile States Index) http://fsi.fundforpeace.org/ World Bank; <i>Political Stability and Absence of Violence</i> (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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