ESG and sovereign ratings: Distinct risks, overlap exists, but challenges ahead

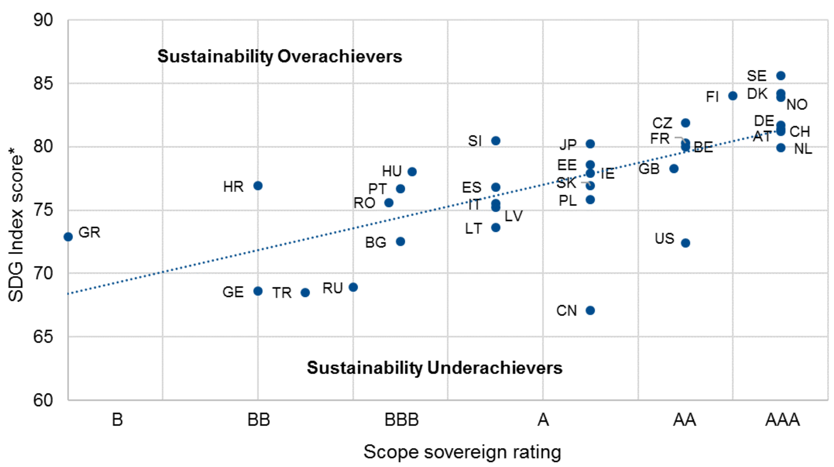
Environmental, social and governance (ESG) risks play an increasing role in financial markets. This analytical contribution outlines Scope Public Finance's views on the distinct nature of ESG factors and sovereign credit risks, their areas of overlap and inter-dependence as well as some of the challenges the financial community faces when integrating both concepts into decision-making processes.

To reorient capital flows towards a more sustainable economy and help achieve energy and climate policy targets, the European Commission has developed a comprehensive European Union (EU) roadmap on sustainable finance, to be presented at today's high-level conference, bringing together European leaders to foster transparency and long-termism in financial activities.

This initiative also targets a unified classification system for sustainable activities, standards and labelling in the context of financial products, and support for green assets via integration within the European Fund for Strategic Investments (the "Juncker Plan"). It is Scope's view that it has the potential to direct capital flows towards sustainable investing, ultimately enhancing the importance of ESG in risk management.

Sovereign credit risk analysis concentrates on core financial and macroeconomic variables that materially affect a country's ability and willingness to repay privately-held government debt. Here, ESG factors have varying degrees of materiality in sovereign risk and, in many cases, become more material in the long term. An ESG factor may have a negligible impact on a sovereign rating, or it can have an effect in the very near term.

Figure 1: SDG Index versus Scope sovereign ratings



*SDG Index, Bertelsmann Stiftung & UN Sustainable Development Solutions Network
Scope sovereign ratings as of 22 March 2018
Source: Bertelsmann Stiftung & UN Sustainable Development Solutions Network, Scope Ratings GmbH

While there is meaningful overlap between ESG and sovereign credit risk, as reflected in **Figure 1** in a comparison of the Sustainable Development Goals (SDG) Index with Scope's sovereign ratings, it is Scope's view that credit ratings and ESG factors ultimately measure two alternative risk categories.

An ongoing integration of ESG in sovereign investment decisions necessitates, nonetheless, steps to innovate the ratings industry, including research on how ESG factors are captured. In this paper, we review Scope's sovereign ratings approach, enhancing transparency on areas of overlap with ESG, and discuss potential next steps.

Analysts

Jakob Suwalski
+49 69 6677389 45
j.suwalski@scoperatings.com

Dennis Shen
+49 69 6677389 68
d.shen@scoperatings.com

Team Leader

Dr Giacomo Barisone
+49 69 6677389 22
g.barisone@scoperatings.com

Investor Outreach

Martin Kretschmer
+49 696677389-86
m.kretschmer@scoperatings.com

Scope Ratings GmbH

Neue Mainzer Straße 66-68
60311 Frankfurt am Main

Phone + 49 69 6677389 0

Headquarters

Lennéstraße 5
10785 Berlin

Phone +49 30 27891 0
Fax +49 30 27891 100

info@scoperatings.com
www.scoperatings.com

Bloomberg: SCOP

Growth in sustainable investing

Institutional investors are seeking avenues to integrate ESG

Sustainable investing is gaining importance in the global investment community. According to the 2016 Global Sustainable Investment Review[1], there were USD 22.9tn of assets managed under responsible investment strategies at the beginning of 2016, compared with USD 18.3tn in 2014, an increase of 25%. Institutional bond investors are seeking avenues to integrate environmental, social and governance considerations and increase the return-for-risk of portfolios by "internalising" critical externalities into the investment process, improving in the process investment outcomes. One way for fixed income investors to tap into ESG is via the growing sovereign green bond market (in addition to social and SDG bonds). Tied to ESG, the outstanding green bond market reached USD 155.5bn in 2017, and is forecasted to surpass USD 200bn in 2018, with increasing diversification of issuers.

The rise in sustainable investment has followed growth in large institutional investors such as sovereign wealth funds. ESG criteria are, for example, integrated in the investment approaches of some development bank portfolios, which regularly hold a high share of sovereign risk exposure. Frequently, ESG criteria are considered alongside credit risk considerations for portfolio liquidity steering purposes. In most cases, the sustainability assessments are instituted via sustainability specialised agencies, including MSCI and Sustainalytics, taking into consideration various requirements, resulting in a stylised weighting of the individual environment, social and governance factors.

Evolving ESG-specialised products

Several initiatives have contributed to making ESG an intrinsic part of institutional investment, with various index providers developing benchmark indices with ESG. However, Scope observes that the rules, regulation and taxonomy surrounding ESG remain in motion while ESG-specialised investment products are still at an early and evolving stage. ESG is, for example, used as a negative exclusion and/or positive selection criterion in the choice of assets and construction of "sustainable portfolios". But, this exclusion/selection is frequently *normatively* decided. Here, normative conceptualisations on sustainability can frequently be inaccurate: for example, investments in wind power are not always sustainable while investments in companies in the diesel industry can be.

Policymaking focus on sustainable finance

Moreover, on a global level, there is an increasing policymaking focus on greener, more socially-responsible economic development. For example, agreement on the United Nations' Sustainable Development Goals – to end poverty, combat inequality and address climate change – in September 2015 was followed by the drafting of the Paris climate accord in December 2015. The UN Global Compact has organised businesses around causes in human rights, labour, environment and anti-corruption. With the United States' withdrawal process from the Paris Agreement, the EU – supported by the efforts of its High-Level Expert Group on Sustainable Finance – may establish itself increasingly as a hub for leadership on sustainable development.

A key priority is to better classify sustainable investments

On the part of many investors, a key priority regarding ESG is to have set metrics to properly classify *green* and *socially sustainable* investments, as a first step. However, an accepted or even standard definition of the term "sustainability" has not yet emerged. Various EU legislation (including MiFID II) require institutional investors and asset managers to act in the best interest of their investors and beneficiaries. However, asset managers and institutional investors do not currently *systematically* consider sustainability in a clear and consistent manner. In this area, the European Commission's

[1] http://www.gsi-alliance.org/wp-content/uploads/2017/03/GSIR_Review2016.F.pdf

Action Plan foresees a clarification of institutional investors' and asset managers' duties on sustainability, and an increase in the transparency of end-investors with regards to strategy and climate-related exposures by Q2 2018.

Next, the role of a new EU taxonomy will encompass climate, environment-related and social investments. In addition, the Plan refers to EU eco-labelling and sustainability benchmarks for financial products, in addition to prudential rules. For example, a report is scheduled by the European Commission on a standard for green bonds by Q2 2019. Regarding prudential rules, the Commission intends to explore the feasibility of the inclusion of risks associated with climate and other environmental factors in institutions' risk management policies and the potential calibration of capital requirements of banks as part of the Capital Requirements Regulation and Directive.

ESG and sovereign risk

Sovereign ratings and ESG

Sovereign credit ratings are an established component in the construction of global fixed income portfolios, with over USD 50tn in government debt outstanding. For sovereign ESG risk, the weighting of governance factors normally dominates (50% in some ESG scores[2]), followed by social factors (35% in some ESG scores). However, Scope notes that ESG investing has disparate implications for asset owners and asset managers. For asset owners, environmental aspects are usually the most important, followed by social factors. For asset managers, typically governance aspects tend to be the most critical.

Governance ("G") assessments of sovereign issuers are normally based on indices related to factors including voice and accountability, the rule of law and government effectiveness, evaluating an administration's ability to formulate and implement sound policies and the prospect of political stability. Social ("S") assessments for sovereign issuers include evaluations of human capital performance, the level of educational attainment, income equality, health standards and the meeting of basic needs. Environmental ("E") assessments are connected to carbon emissions and pollution, including evaluations on vulnerabilities to natural disasters, standards of energy and water resource management, coal use and the percentage of energy from renewable sources.

Alternate degrees of materiality of ESG in credit risk, and time horizon disparity

While there is overlap between ESG and sovereign credit risk, individual ESG factors impact the likelihood of sovereign bond repayment to varying degrees. Even for the same issuer, the risks and opportunities tied to ESG vary not only according to an individual security's maturity, but also the investment horizon of the investing entity. Here, Scope notes, however, that the systematic recognition of unaccounted for, *longer-term* ESG risks could support the redressing of short-term dynamics in financial markets, helping correct a mismatch between the relevant window for markets and that for issues of long-term economic sustainability and financial stability.

However, ESG variables are today increasingly internalised in markets and economies

Scope believes that ESG variables overlap in areas with sovereign credit risk, and impact sovereign credit-risk-relevant factors, ranging from affecting potential growth to long-run healthcare costs (when evaluating public debt sustainability) to political stability and governance effectiveness, to financing rates and financing availability (evidenced in the inception of ESG investment benchmarks).

ESG externalities are more accounted for today than in the past in market behaviour and macroeconomic performance. For example, climate change has raised the costs due to natural catastrophes: the 2017 hurricane season alone resulted in more than USD 200bn in damages in the United States. In addition, improving market signalling mechanisms to

[2] https://www.kfw.de/nachhaltigkeit/KfW-Group/Sustainability/Sustainable-Banking-Operations/Sustainable-Investment/KfWs-Sustainable-Investment-Approach/Integration-of-ESG-Criteria/

promote investment in renewable energy can reward a nation's future economic prospects, raising export growth potential and investment growth. Similarly, in an increasingly globalised and competitive labour market, human capital and skills accumulation (incorporated in "S") are now more important to the capacity of an economy to compete than ever before.

In this context, Scope believes that the European Commission's Plan may contribute to the internalisation of sustainability into the EU financial system, clarifying sustainability to be an objective alongside classical outcome variables. Given the ongoing reorientations in the environment defining the "rules of the game" of markets and economies, Scope seeks deeper research on the relevant ESG factors in sovereign analytics.

Correlation between ESG factors and sovereign risk

In **Figure 1** (on the front page), comparing the Sustainable Development Goals (SDG) Index, which approximates country alignment with Agenda 2030 and the UN Sustainable Development Goals (compiled by the Bertelsmann Stiftung and the UN Sustainable Development Solutions Network), with Scope's current 33 sovereign ratings assigned publicly since June 2017, points to some overlap between the two measures.

Scope's methodology accounts for *some* ESG risks…

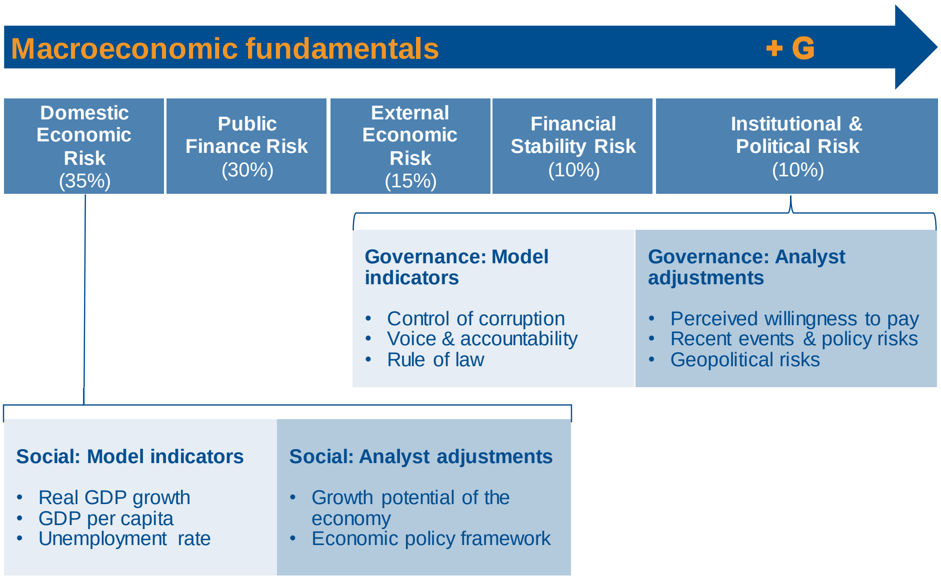
The positive-sloping relationship shown in **Figure 1** indicates that there is a prevailing *correlation* between Scope's sovereign ratings and sustainability (the latter proxied by the SDG Index). This positive correlation reflects we believe two broad influences: i) an area of overlap in Scope's methodology with *some* ESG risks, alongside ii) a correlation between some factors in Scope's sovereign methodology and some ESG factors, without direct inclusion in Scope's framework. One example might be the inclusion of GDP per capita as a rating variable in Scope's Sovereign Core Variable Scorecard (quantitative framework), which is correlated with multiple "S" (social) factors, like human capital and education, poverty, well-being and health. Scope concludes from this that, since the release of the team's ratings in the last year, Scope's sovereign ratings reflect *some* ESG risks.

… but there are also sustainability over- and under-achievers.

But, **Figure 1** also shows that there is material dispersion, indicating that sovereign credit ratings do not perfectly account for ESG factors and risks. For example, there are some countries that overachieve on sustainability compared with their sovereign ratings, such as the Nordics (all of whom, excluding Finland, are already rated "AAA" by Scope), Greece, Ireland, Japan and Portugal. This indicates some disparity between credit risk and ESG factors. Alternatively, there are also underachievers on sustainability compared with their credit ratings, including the United States, China, Russia, Turkey and Georgia. In these cases, some latent ESG risks might be exogenous to prevailing credit ratings, and potentially, in sovereign debt markets, partially reflecting time horizon mismatches between ESG and credit risk.

Scope's sovereign methodology

Figure 2: Scope's consideration of ESG in the sovereign framework



Source: Scope Ratings GmbH

Scope's sovereign methodology concentrates on sustainability

Scope's sovereign methodology, inaugurated in May 2017, includes five-year quantitative forecasts, allowing a longer forward-looking assessment window, along with complementary qualitative/analytical evaluations, emphasising structural change in the economy and political system.

Scope's methodology embeds a set of social and governance factors (**Figure 2** above):

- Variables related to governance have been found to be effective indicators of sovereign credit risk. Therefore, governance is included in the framework as the fifth pillar in Scope's sovereign methodology: "Institutional & Political Risk", with a 10% weight. This includes considerations of the rule of law, control of corruption and voice & accountability under the quantitative evaluation, predicated on the World Bank's Worldwide Governance Indicators, in addition to analyst assessments of policy and geopolitical risks.
- Under the "Domestic Economic Risk" dimension of the methodology (a 35% weight), quantitative factors including real GDP growth, GDP per capita and the unemployment rate are evaluated, in addition to the growth potential of the economy and the economic policy framework in the analyst assessment. These factors are related to the social dimension of ESG.

Challenges to ESG assessment should not preclude deeper research

Challenges…

There are many ESG variables to explore, but many may only have an impact on credit risk over the very long-run. As such, it's key to distinguish between those variables that are highly significant from those that have a negligible impact on repayment risk. In addition, ESG factors – including the risks of political instability or civil conflict, the openness to civic participation and the costs of pollution, for example – can be hard to explicitly measure and assess the effect.

… but such complexities should not preclude deeper ESG research.

Acknowledging the inherent challenges, Scope views the further exploration of sustainability in sovereign risk as, nonetheless, an important area of research in developing a more holistic view on where there's overlap, from the perspective of a

European rating agency. While ESG risk and sovereign credit risk are distinct concepts, a broader framework for analysing sovereign risk can improve portfolio construction, and help correct “market failures” in anchoring credit risk pricing.

Past sovereign defaults have been linked to governance weaknesses, for example, including due to the political *unwillingness* to pay in periods of leadership transition, such as of so-called “odious debt” – that which was incurred by earlier regimes for illegitimate reasons not in the best interests of a nation.

Measures of social factors have been cited as important in sovereign risk. And, while environmental variables may be the least immediately critical of the three ESG pillars to default risk, it is Scope’s view that they may become increasingly important in the future as both the global environment and market conditions evolve, recognising future global risks, like those posed by climate change.

New research has, moreover, shown that changes in market indicators of sovereign default risk (like sovereign CDS) have been explained by ESG metrics, with this relationship the strongest in European markets.[3]

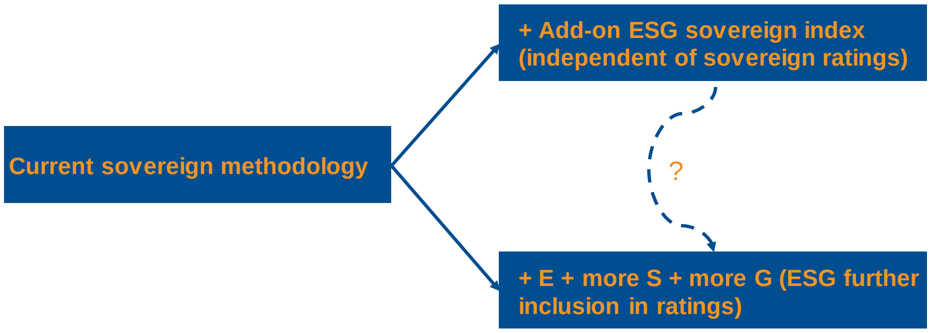
Scope’s exploration on ESG

ESG supports a more complete picture on sovereign risk

It is Scope’s view that there are two avenues on how sustainability risks can be further considered in our sovereign approach: i) an “add-on” approach or ii) a further partial integration approach (**Figure 3**).

In the first approach, a stand-alone, add-on sovereign sustainability index could be developed. This index could be used by investors and policymakers as an additional, complementary tool in combination with Scope’s sovereign ratings output to assess risks and opportunities in sovereign bond markets. The weighting scheme for such an ESG index could be predicated on the results of the relevance of individual “E”, “S” and “G” factors to sovereign default risk, weighting the near-term risks the highest.

Figure 3: Two approaches: A stand-alone index versus further partial integration



Source: Scope Ratings GmbH

Is ESG best encapsulated in an “add-on” or integrated approach?

Over the longer run, an important avenue is to explore if an approach in which relevant ESG factors, which are presently exogenous in the sovereign approach, can be more structurally integrated in credit ratings? In other words, can greater accountability of relevant ESG factors be further embedded in sovereign credit ratings, reflecting a further *partial* integration?

This question is a key inquiry Scope will seek to answer, as we move to next stages of assessment on sustainability risks.

[3] Tang, Mervyn (MSCI ESG Ratings). “Did ESG ratings help to explain changes in sovereign CDS spreads?” Issue Brief, October 2017.

Scope Ratings GmbH

Headquarters Berlin

Lennéstraße 5
D-10785 Berlin

Phone +49 30 27891 0

Frankfurt am Main

Neue Mainzer Straße 66-68
D-60311 Frankfurt am Main

Phone +49 69 66 77 389-0

Paris

33 rue La Fayette
F-75009 Paris

Phone +33 1 82 88 55 57

London

Suite 301
2 Angel Square
London EC1V 1NY

Phone +44 203-457 0 4444

Madrid

Paseo de la Castellana 95
Edificio Torre Europa
E-28046 Madrid

Phone +34 914 186 973

Milan

Via Paleocapa 7
IT-20121 Milan

Phone +39 02 30315 814

Oslo

Haakon VII's gate 6
N-0161 Oslo

Phone +47 21 62 31 42

info@scoperatings.com
www.scoperatings.com

Disclaimer