Sustainable Issuer versus Sustainable Issuance:

Providing Public Issuers of Sustainable Bonds in Latin America and the Caribbean with Insight into the Nascent Universe of ESG Ratings

Authors

Rodolphe Bocquet, Isabelle Braly-Cartillier, Mariana Pombo, and Antoine de Salins

IDB

Cataloging-in-Publication data provided by the
Inter-American Development Bank
Felipe Herrera Library

Sustainable issuer versus sustainable issuance: providing public issuers of sustainable bonds in Latin America and the Caribbean with insight into the nascent universe of ESG ratings / Rodolphe Bocquet, Isabelle Braly-Cartillier, Mariana Pombo, Antoine de Salins.
p. cm. — (IDB Monograph ; 938)
Includes bibliographic references
1. Investments-Social aspects-Latin America. 2. Investments-Environmental aspects-Latin America. 3. Investments-Moral and ethical aspects-Latin America. 4. Bonds-Social aspects-Latin America. 5. Bonds-Environmental aspects-Latin America. 6. Sustainable development-Latin America. I. Bocquet, Rodolphe. II. Braly-Cartillier, Isabelle. III. Pombo, Mariana. IV. Salins, Antoine de. V. Inter-American Development Bank. Connectivity, Markets and Finance Division. VI. Series.
IDB-MG-938

JEL Codes: G11, G15, G18, G32, Q56

Keywords: ESG investing, sovereign debt, emerging markets, green bonds, social bonds

Inter-American Development Bank
1300 New York Avenue, N.W.
Washington, D.C. 20577
www.iadb.org

The Institutions for Development Sector was responsible for the production of this publication.

External vendors:

Production Editor: Sarah Schineller (A&S Information Partners, LLC)
Editor: Leslie Hunter and Sheila Mahoney
Design: Gabriel Ramírez

Table of Contents

List of Figures

List of Tables

List of Boxes

Acknowledgements

This publication was coordinated by the Connectivity, Markets, and Finance Division (CMF) of the Institutions for Development Sector (IFD) of the Inter-American Development Bank (IDB), and written by Isabelle Braly-Cartillier from the IDB, and Rodolphe Bocquet, Mariana Pombo, and Antoine de Salins from the consultancy firm I-Care Consult. This work would not have been possible without the support of and invaluable input from: Claudia Gollmeier (Colchester Global Investors), Alberto Lara (FIRA), Patricio Sepulveda and his team (Ministry of Finance – Chile), Alexandre Farias (Eletrobras), and Bridget Hoffman, Rodrigo Porto, and Alexander Vasa (IDB). We would also like to express our gratitude to the following people for sharing their insight in extremely useful interviews: My-Linh Ngo and Graham Stock (Blue Bay Asset Management), Réjean Nguyen (Caisse de Dépôt et Placement du Québec), Jeroen Verleun (PGGM), Lupin Rahman (PIMCO), and Ole Jorgensen (Global Evolution). The views expressed in this document are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank or its Board of Executive Directors.

Glossary and Introductory Concepts

The integration of environmental, social, and governance (ESG) factors into financial markets is an emerging area. However, there are no universal definitions of these concepts because different stakeholders with a variety of aims ascribe different meanings to them.

ESG performance can be defined as the global commitment to sustainability of a corporation or of a debt issuer. This report discusses current methodologies used to assess the ESG performance of a public debt issuer, whether sovereign or corporate. There are a variety of methodologies, which come from a vast array of providers, each using its own terminology. Some of these terms are ESG performance assessments, ESG evaluations, ESG ratings, ESG rankings, and ESG scores. All of them refer to the result of an evaluation of the ESG performance of an issuer.

The following are some of the terms used and their definitions:

- **ESG investing:** an investing strategy focusing on companies or debt issuers that are actively attempting to either limit their negative societal impact or deliver benefits to society (or both).

- **ESG factors or criteria:** "a set of standards for a company's operations that socially conscious investors use to screen potential investments" (Chen, 2021).

- **ESG assessment:** a traditional extra-financial analysis exercise of a company or issuer, based on a set of ESG criteria defined and chosen a priori by the appraiser and according to a specific methodology also designed by the appraiser.

Historically, it has been developed to add (thus, the "extra") to the traditional credit analysis conducted by financial analysts. In recent years, ESG assessments are increasingly integrated into the investment process. However, different stakeholders can use them in different ways and for different purposes.

- **Sustainability profile or ESG profile:** the conclusions of an ESG assessment, presented in a report.

- **ESG score, rating, or ranking:** the result of an ESG assessment presented as a metric and used to rank different companies, issuers, or countries to compare their ESG performance. Historically, ESG firms and some internal research teams of investors have come up with those ratings. An ESG rating is not the same as a credit rating. The provision of credit ratings is a highly regulated activity, whereas the provision of ESG ratings is not.

- **Materiality and materiality framework:** An ESG factor may be deemed material by an investor if it could have a significant impact—either positive or negative—on a company's results and risks. ESG material factors differ from one sector to another and from one investor to another. For this reason, investors are increasingly designing their own materiality frameworks.

- **Public issuer:** For the purposes of this document, public issuers include sovereign issuers and any other issuer benefiting from the sovereign guarantee, such as public financial institutions and public utilities.

- **Thematic bond:** This document uses the term thematic bonds for any bond issued with a commitment from the issuer to a sustainable impact, such as green, social, or sustainable bonds; SDG-aligned bonds; and sustainability-linked bonds.

Executive Summary and Key Takeaways

Increasingly, investors are integrating ESG factors into their decision-making processes for a variety of reasons, including risk-return considerations, their clients' mandate, disclosure commitments, and regulatory requirements. ESG and sustainable finance are currently at the heart of major policy debates involving a range of stakeholders within the financial community, including credit rating agencies (CRAs), investors and ESG specialists, index providers, regulatory and supervisory bodies, governments, the scientific community, and academia.[1]

Although an increasing number of investors have ESG investing strategies and responsible investment policies in place, ESG factors have primarily been integrated into decision making in equity rather than fixed income portfolios. ESG data and ESG evaluations first emerged in the equity markets, specifically, the listed equity markets, which saw sustainability metrics and sustainability reporting frameworks multiplied (GRI, IIRC, etc.) to support increasing claims of corporates around their sustainability management and performance. They are now beginning to appear in debt markets as well. Few investors have a systemic approach to ESG integration in debt portfolios, especially in sovereign debt. Nonetheless, investors are demanding ESG ratings of bond issuers, especially thematic bond issuers, whether corporate or sovereign. ESG ratings for bond issuers began around 2010, with several ESG data providers developing services to conduct ESG ratings for bond issuances and some investors and asset managers developing their own tools to systematically integrate ESG data into debt analysis.

[1] See also Norton Rose (2020).

A variety of ESG data sets, products, and services are being developed to address investors' needs and assess investments' ESG performance. These products and services are numerous for equities, rapidly developing for debt issuers, and nascent but gaining momentum for sovereign debt issuers. ESG firms, credit rating agencies, index providers, universities, nongovernmental organizations (NGOs), and international organizations are now participating in the offer. There seems to be a trend toward open-sourcing: in the last two years, prominent ESG data providers such as the World Bank and ESG firms have made their databases public.[2] Investors use these products and also increasingly develop their in-house materiality frameworks and methodologies to fit their ESG strategies. These in-house tools may combine external products and internal methodologies.

Given the increasing importance of public entities such as national development banks (NDBs) and state-owned enterprises (SOEs) in the thematic bonds market, investors are increasingly scrutinizing their ESG practices and profile, often through second-party opinion (SPOs) providers or investors' own in-house materiality frameworks and ESG methodologies. NDBs and SOEs are "ESG assessed" like their private peers: their public 'nature' is not taken into account in the ESG assessment methodologies so far. The approach of SPO providers and ESG research providers more generally is the same for private and public financial institutions and private and public utilities. It is sector based, with a strong focus on governance and social pillars for financial institutions and an even stronger focus on environmental issues for utility companies. While those ESG firms tend to use a sectoral approach (regardless of the type of ownership), the CRAs' views might entail ownership considerations. CRAs differentiate between public and private financial institutions. As they move toward integrating ESG factors into their credit-rating methodologies or developing parallel ESG rating methodologies, some might expect the sovereign ESG rating to impact a public financial institution or a public utility company's ESG assessment, the same way their credit rating does.

[2] In October 2019, the World Bank launched the Sovereign ESG Data Portal, which provides users with sovereign-level ESG data. https://datatopics.worldbank.org/esg/. In December 2019, the IDB announced the launch of the Green Bond Transparency platform with the aim of supporting efforts to harmonize and standardize LAC green bond reporting. Both initiatives are free, open, and easy to use online platforms.

While NDBs and SOEs enter the relatively developed market of corporate ESG performance assessment, ESG assessments of sovereign bond issuers are a new phenomenon and pose additional challenges (Berg, Kölbel, and Rigobon, 2020). This situation is, however, rapidly evolving as (i) investors implementing consistent ESG integration throughout their portfolio start to include sovereign bonds; (ii) CRAs are increasingly integrating ESG factors into their credit rating methodologies; and (iii) ESG profiles are increasingly assessed in green and social bond markets, where sovereign and sub-sovereign bond issuances represent more than half of the outstanding issued volume.

The discussion around ESG integration in public debt began in 2014 with the UN Principles for Responsible Investment (UN PRI) Initiative. It was the focus of many discussions in 2020, with the release of publications from institutions such as the International Monetary Fund, the Organisation for Economic Co-operation and Development, the UN PRI, the United Nations, and the World Bank, which set the basis for real development in the area (see Annex 1). Integrating ESG factors into sovereign debt investing is likely to increase over time. Specific tools and ESG datasets are becoming available to support investors in their decision making, as evidenced by the growing number of ESG products and services currently available to assess the sustainability profile of countries. However, these tools must overcome limitations related to data availability and materiality. Over time, improvements have been made to increase transparency as ESG data become available free of charge and ESG research providers and CRAs publish their methodologies and data sources. Both investors and sovereign issuers can now have access to the data and methodologies used for the provision of ESG profiles.

For sovereign debt, ESG data and assessment methodologies may be the new frontier, but it is an opportune time for countries to become involved as well, given the opportunity to access funding to support their strategy to meet the UN Sustainable Development Goals (SDGs) and their climate change Paris Agreements, and also as investors are likely to award a premium to first movers in the ESG space in terms of effort, performance and transparency. Diversification of their investor base as well as a greater alignment between common goals and objectives between investors and countries (which could result in more stable and construction relations) are other benefits.

The first **Sovereign green bond** issued by Chile in 2019

The first **green bond** on protected agriculture issued by FIRA in Mexico in 2019

The first **Sovereign social bond** issued by Ecuador in 2020

The first **Sovereign sustainable bond** issued by Mexico in 2020

The first **gender bond** issued by FIRA in Mexico in October 2020

All those issuers have confirmed that the issuance conferred additional benefits in their relationships with the global investment community, beyond the specific thematic bond issuance.

Proposal for a Roadmap toward the Integration of ESG Factors into a Public Entity Debt Issuance Strategy

Build internal capacity and learn the common ESG language to seize opportunities.

Emerging economies have a natural interest in understanding the methodologies used by investors and third-party ESG providers to assess their sustainability, especially in the absence of a global standard. Treasury departments or debt management offices should develop specific in-house expertise to interact with the main ESG data and product providers and to play an active role in developing industry standards. Sovereigns are the main primary data providers, while ESG firms compile data from several sources. Understanding the raw ESG data available for one country (e.g., in the World Bank Sovereign ESG Data Portal) is a good first step. NDBs and SOEs should communicate with ESG data providers and CRAs to understand their assessments.

ESG performance is a combination of risk exposure and risk management. It is important to understand risks and demonstrate effective performance in terms of mitigation.

Investors characterize climate change and biodiversity losses as the main future risks (WEF, 2020). Countries with the capacity and willingness to preserve biodiversity can benefit from a better ESG profile. With regard to the physical risks of climate change, while risk exposure may be beyond the scope of government action, governments can implement efficient risk mitigation and adaptation policies to lessen the impact if the risk materializes. For example, investors will look favorably on those who take the lead in reporting on the task force on climate-related financial disclosures (TCFD) at the national level. There are many ways to demonstrate commitment. International finance institutions have developed many approaches to support mitigation policies, including climate change market risk transfer schemes.

Recently, for example, the IDB and the Agence Française de Développement (AFD) jointly launched the Natural Capital Lab to catalyze innovative ways to efficiently and sustainably put LAC's natural capital ecosystem services at the service of the region. Reporting is crucial to demonstrate commitment: any initiative to facilitate access to the country's data, such as by simply providing English versions of the strategy documents or reports, can make a big difference.

Dare to communicate differently: engage with investors on ESG-related matters.

As is the case with economic and financial metrics, investors are reassured if they know that issuers properly identify ESG-related risks and that they have a strategy to effectively manage them in terms of mitigation but also with regards to adaptation and building resilience. Public issuers that develop a proactive stance in this area will have a competitive edge. This increased transparency should involve public officials in addition to financial experts. For sovereign issuers, investors welcome the ability to engage with representative from the agriculture, environment, transport, or energy ministries during roadshows or at international finance events.

Develop and communicate on a clear, coherent, and holistic sustainability strategy

For sovereign issuers, developing and communicating a national sustainability strategy aligned with the Sustainable Development Goal (SDG) framework and Nationally Determined Contributions (NDCs) is essential to channel climate and sustainable investments. By showcasing a clear sustainability strategy, countries can demonstrate how they intend to reach sustainable development and climate goals over time. This process requires constant dialogue with key stakeholders in the country. Crosscutting initiatives among ministries to build sustainability capacities (planning, designing, investing, monitoring, and reporting) can facilitate this process. Investors benefit from clear, standardized, harmonized, and consistent data on the ESG aspects of national economies.

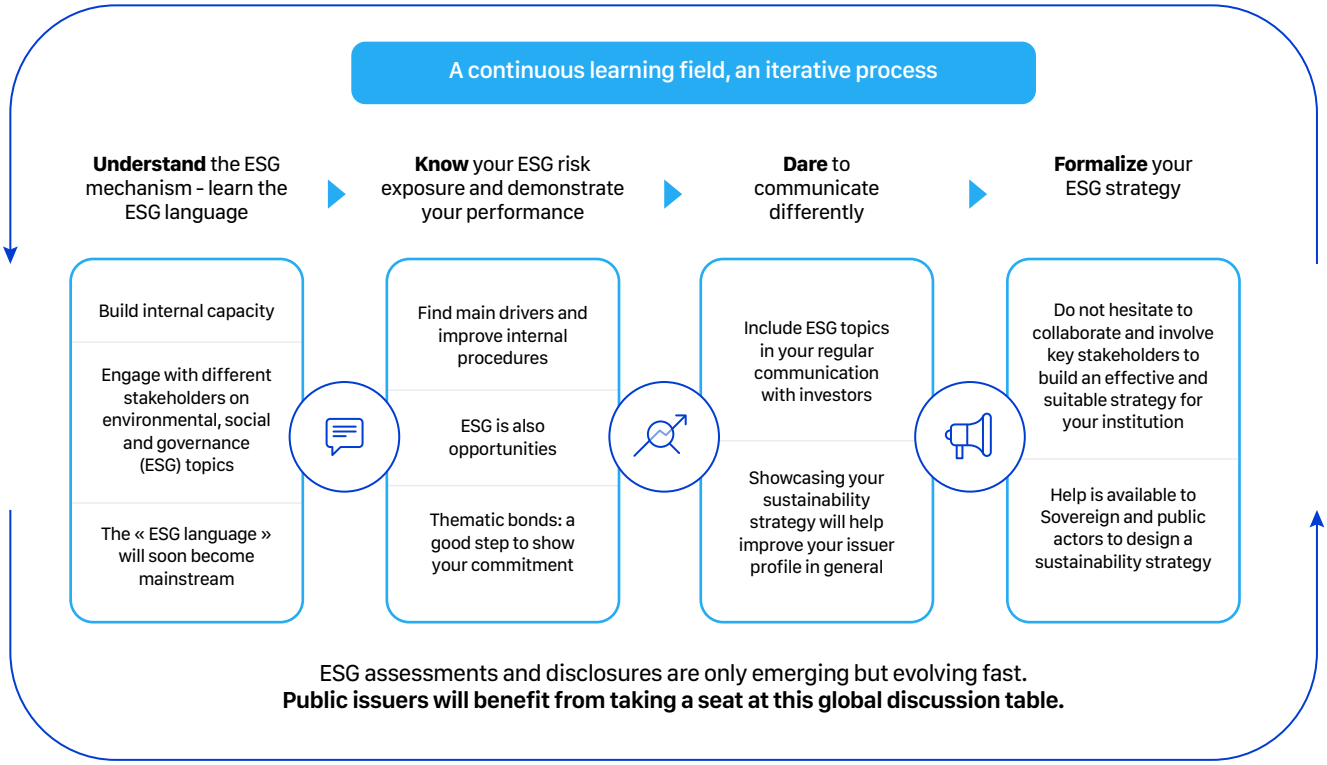
International financial institutions and other relevant actors have tools to support the development of a holistic sustainability agenda and related monitoring, reporting, and verification processes. For public entities, communicating clearly on their sustainability commitments and regularly on their progress in achieving sustainability targets is key. Support for such communication can vary, from an annual sustainability report to a sustainability portal.

International financial institutions can support public issuers and countries' sustainability-related disclosures and performance efforts.

Outcome-based finance is expected to grow and become increasingly sophisticated in the coming years. Sovereign and public entities have a key role to play in improving their sustainability performance and reducing their borrowing costs and those of their national economic stakeholders. Standards in this domain are still being developed, and issuers actively involved in shaping them will gain expertise and the ability to positively differentiate their strategies. International financial institutions such as the IDB can support this progress through financial sector dialogues on sustainable finance. Examples of such dialogues are occurring in Brazil, Chile, Mexico, and other countries.

Assessing ESG performance for public debt issuers is nascent. Some investors are already calling for global standards, but the principles are set, and a wait and see strategy may not be effective. Investors care about ESG performance but are also closely observing its momentum. The incentive to explore these aspects and to be among the first movers has never been as strong for public debt issuers as it is now.

Figure 1. Proposal for a Roadmap to Integrating ESG Factors into a Public Entity Debt Issuance Strategy



Source: Authors' elaboration.

Introduction

In the past 10 years, social and sustainable bond markets have been among the most innovative success stories of the financial sector in its efforts to participate in the transition to sustainable economies. In Latin American and the Caribbean (LAC), national development banks (NDBs), state-owned enterprises (SOEs), and sovereign issuers have stood at the forefront of those markets: they were pioneers in 2015 (NAFIN, in Mexico) and 2016 (Banco Nacional, in Costa Rica). In 2019, Chile issued the region's first sovereign green bond. In 2020, Ecuador issued the first sovereign social bond globally, and Mexico issued the first sovereign bond aligned with the Sustainable Development Goals (SDGs). The funding requirements in the aftermath of the COVID-19 pandemic, coupled with increasing regulatory requirements promoting the integration of sustainability in the financial sector[3] are likely to accelerate the focus on ESG factors in investment decision making.

Since 2015, the Inter-American Development Bank (IDB) has been supporting public issuers (any issuer benefiting from the sovereign guarantee: sovereign and sub-sovereign, and publicly owned corporations such as public financial institutions or public utilities) in LAC to issue thematic bonds.

To date, 11 issuers benefited or are benefiting from the support, for a total of US$7 billion issued. Among the lessons learned over those years is the necessary alignment or consistency between the issuance and the issuer's global commitment to sustainability. Investors are increasingly looking at how—beyond the issuance of a thematic bond—a debt issuer is managing sustainability in the present and planning for the future. Indeed, for thematic bond investors, like the global investment community more generally, the issuer's commitment to sustainability has increasingly become a factor in their investment decision-making process. Asset owners and asset managers want to see the issuer's commitment to their sustainability pledges. Their evaluation of the issuer's environmental, social, and governance (ESG) profile is becoming as important as their evaluation of the environmental and/or social benefits of the issuance itself.

[3] See, for example, Krukowska and Millan Lombrana (2020). the EU stimulus package https://www.bloomberg.com/news/articles/2020-07-21/eu-approves-biggest-green-stimulus-in-history-with-572-billion-plan

Based on recent works and on experiences from LAC issuers, complemented by interviews of experts, this study aims to provide public issuers with insight into the nascent world of ESG evaluations and assessments, ratings, scoring, and profiles, so that they can begin to think about how to engage. It provides a pragmatic roadmap to LAC public issuers and addresses the following questions:

- What is an ESG profile or an ESG performance assessment for a public issuer?
- What are investors focusing on when assessing a public issuer sustainability profile? Are public entities such as NDBs and SOEs assessed the same way as sovereigns or their private peers in the sector?
- Which tools and services are available, and what are their limitations in terms of methodology, incentives, data, and materiality?
- What are some key considerations for public issuers who decide to participate, understand, and potentially improve their ESG profile?

PART 1

The Case for ESG Integration

1.1. ESG Investing: From a Niche within the Investment Community to the Mainstream

ESG investing is the intentional, systematic incorporation of environmental, social, and governance (ESG) factors into one or more elements of the investment process.[4] It has been attracting attention since the 1990s and has historically been values-based, that is, driven by ethical or moral commitments, and strongly associated with socially responsible investing (SRI), the practice of investing money in companies and funds that have positive social impacts.

ESG investing has quickly gathered momentum. In 2017, more than a quarter of the US$88 trillion assets under management (AuM) globally were invested according to ESG criteria, representing the fastest-growing major market segment (+17 percent per year) (Institutional Investor, 2017). From its origins in the equity markets, the movement progressed with the launch of the UN Principles of Responsible Investment (UN PRI) in 2006. The UN PRI is the world's leading proponent of responsible investing. It works to understand the investment implications of ESG factors. It is composed of an investor network of around 3,000 signatories and represents almost US$120 trillion in AuM. In Latin America, PRI has 100 signatories, with Brazil in the lead, followed by Mexico and Chile.

ESG figures most prominently in listed equities. According to the CFA Institute (2017), 45 percent of fixed income investors incorporate ESG analysis, compared to 76 percent for listed equities. However, many investors plan to enhance ESG in the future in fixed income, private assets, and alternative asset classes.

Among the main reasons why ESG has been historically linked to listed equities are the increasing sustainability reporting obligations and the explosion of sustainability metrics that have pushed listed companies to report on ESG issues. Much of the ESG-related data on corporates relies on information published by these corporates in their sustainability and corporate social responsibility reports.

[4] This is the understanding of ESG investing for the purpose of this report. However, there is no universally agreed definition among the investment community.

The development of thematic bond markets,[5] which began in 2007 with the issuance by multilateral organizations[6] and took off in 2013, accelerated the move of ESG integration into fixed income markets. That move is now reaching sovereign debt, although that step presents specific challenges. However, the integration of ESG factors into sovereign debt dates back to the beginning of the 21st century, when a growing number of stakeholders and economists started to question the potential flaws in standard economic indicators such as gross domestic product (GDP). This led to the development of a number of new statistical systems and databases that attempted to assess countries on ESG-type indicators.

The adoption of the Sustainable Development Goals (SDGs) by the United Nations in 2015 made a new holistic approach to investing even more necessary. For the LAC region alone, Castellani et al. (2019) suggest that the total public investment gap is expected to surpass US$1.4 trillion (12.4 percent of the region's GDP) by 2030 if the SDGs are to be reached. It is a major challenge for each country to boost its ability to channel funds and attract investments to support these significant investment needs. The SDGs could also be an opportunity for the adoption of a common framework in which countries as well as public and private corporate issuers could present and demonstrate their participation in one country's commitments.

Crises seems to underscore the need to integrate ESG factors into investing strategies. This was true of the 2008 financial crisis, and the COVID-19 crisis is no different. It has again shone the spotlight on ESG issues. The ESG community has been closely following the impact of the coronavirus crisis on financial markets. For example, Sustainalytics published a new series of articles focusing on the ESG implications of COVID-19, looking at supply chain and food security issues and the effectiveness of government responses. An article published by FTSE Russel entitled "Assessing the Impact of COVID-19 on Sovereign Yields through Healthcare Services," which analyzes the resiliency of healthcare services and the ability of governments to put control measures in place, is of particular importance to market participants. ISS ESG, the investment arm of the U.S. proxy advisor firm Institutional Shareholder Services Inc., has developed a Pandemic Country Custom Rating, which looks at the level of preparedness of governments/countries to deal with a pandemic, based on a selection of indicators such as health care infrastructure, social systems, and income inequality. Corporates have also been scrutinized for the sustainability aspects of their response to the pandemic, with the Financial Times publishing its "saints and sinners" list.

[5] Thematic bonds are debt securities issued by both the public and private sectors on the condition that the funds obtained are used to finance projects with a social and/or environmental impact. Green bonds aim to provide a positive environmental impact, social bonds a social impact, and sustainable bonds both an environmental and a social impact. These bonds are also referred to as labeled bonds.

[6] The European Investment Bank issued the first green bond.

1.2. ESG Investing: An Evolving Field Encompassing a Range of Approaches

ESG material factors vary depending upon asset class, sector, or geography. Figure 2 contains some examples, consistently referred to in different reports, which highlight some conceptual global harmonization.

Figure 2. Examples of ESG Material Factors that May Be Relevant for a Particular Investment

Environmental Factors	Social Factors	Governance Factors
MAY INCLUDE	MAY INCLUDE	MAY INCLUDE
Regulatory breaches/fines Natural resources management	Labor practices (e.g., diversity, non-discrimination and wage policies)	Board structure and oversight
Waste and chemical emissions and management	Occupational health & safety track record and policies	Executive remuneration and compensation policies
GHG emissions and reporting	Product safety	Shareholders rights
Climate change risks and opportunities		Bribery and corruption

Source: Authors' elaboration.

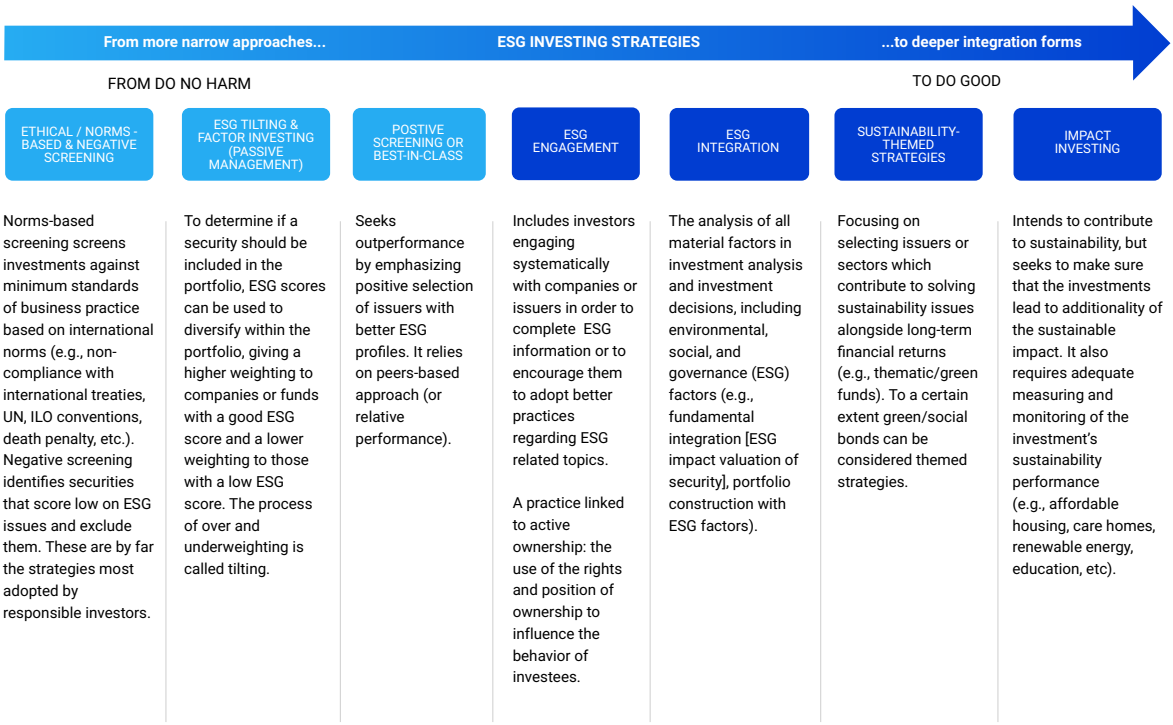
Investors' motivations with respect to the adoption of ESG practices also vary. They may include fiduciary duty; pressure from the investor's board, clients, or other stakeholders emanating from an increased awareness of climate change risks or social or political concerns, legal and regulatory changes, voluntary codes, technological change and disruption, reputational risk, and public and peer pressure. The following are the two main rationales driving ESG investing:

- The historical values-based approach, driven by ethical or moral commitments, first implemented by religious institutions and expanded to investors eager to adhere to ethical principles and minimize reputational risk.
- The value-based approach: In recent years, value (financial value) considerations have also become important: investors began to recognize that ESG factors may add to investment returns.

The most traditional approaches to ESG are based on negative screening or best-in-class methodologies. Low-risk institutional investors such as insurance companies and pension funds have been mostly implementing ESG in the context of risk management processes, many adopting a traditional sustainable responsible investing (SRI) approach (investment universe screening with ESG factors and then optimizing from a purely financial standpoint). However, the impact investing ambition has challenged the traditional SRI approach. Here, besides risk and return considerations, the investor tries to demonstrate a measurable, real-world impact of their investment. Measuring externalities is not an easy task, but it is a worthwhile ambition.

ESG investing strategies have evolved in recent years, ranging from a basic level (starting at negative screening techniques)—or the so-called "do no harm" approach—to more sophisticated and innovative approaches (i.e., thematic, impact investing), or the "do good" philosophy. A "do good" approach focuses on creating positive environmental or social impact, while a "do no harm" approach focuses on attenuating potential negative impacts. Figure 3 illustrates the main ESG investment strategies.

Figure 3. ESG Investing Strategies: From "Do No Harm" to "Do Good"



Source: Douma (2019) and I-Care & Consult Rodolophe Bocquet.

ESG Integration: Between "Do No Harm" and "Do Good" Approaches

ESG integration is the incorporation of investment-material ESG factors into fundamental research and credit assessments to inform several investment processes. It can be considered to lie somewhere between a traditional "do no harm" SRI approach and the newer investment mindset of "do good" approaches. Investors have been developing ESG integration frameworks mostly focused on listed equities, because they require ESG-related data, which until recently have been made available mostly through corporate disclosure obligations.

On the spectrum of ESG investing, ESG integration represents a deeper way to consider ESG factors, particularly when compared to ESG tilting or other techniques based on exclusion rules. To integrate ESG factors more holistically, professionals are currently attempting to answer the following questions:

- Materiality: Which ESG factors are most likely to affect the overall economic and financial performance of issuers, their ability to repay the debt, and therefore their market valuations? Which ESG factors are most material for a certain sector?
- Trajectory/trends: Which ESG factors are changing, how fast, and how does this impact valuations?

It took several years and a significant amount of industrial, academic, and empirical research (see Annex 1) to convince financial analysts and portfolio managers that ESG does not hurt financial returns and that it can even raise company valuation. An increasing number of investors are developing ESG frameworks to capture investing opportunities and new markets that are addressing the most pressing challenges of our times.

From ESG to Credit Rating Considerations

The precipitous growth of sustainable investments over the years has triggered the rapid development of specialized ESG data and ESG research, providing investors with numerous ESG evaluation products and services applicable to companies, industry sectors, and countries. Firms such as Morgan Stanley Capital International (MSCI), ISS ESG, Sustainalytics, Vigeo Eiris, and Inrate collect and analyze a wide array of metrics to capture the sustainability performance of thousands of businesses and many sectors and countries. Behind those for-pay products and services are several open and free data platforms that issuers must take into account.

An instrumental initiative in this regard is the UN PRI initiative known as ESG in Credit Risk and Ratings, launched in May 2016.[7] The recent acquisition of ESG providers by two of the three leading global credit rating agencies (CRAs) has also sent a strong signal from the financial industry in terms of willingness to invest resources and capital in the responsible investment and ESG space. S&P Global bought Trucost, (a carbon and environmental data specialist) in 2016, and SAM ESG data provider and subsidiary firm of RobecoSAM in 2019. Moody's acquired a majority stake in Vigeo Eiris and in Four Twenty Seven (a climate risk data firm) in 2019. In 2020, the three major CRAs published papers on the link between ESG factors and credit risk assessment.

Given the importance of ESG products developed by these actors, a growing number of issuers (especially corporates) are pushing for ESG firms to be regulated. The European Securities and Markets Authority (ESMA) recently supported this call.[8] The investment community has begun looking at how ESG factors affect creditworthiness. Industry and academic research is also analyzing this issue.

1.3. Regulation and Market-Driven Initiatives: ESG and Sustainable Finance for Everyone

2015 marked two milestones for the investment and financial world: the Paris Agreement and the UN SDGs, or Agenda 2030.[9] In addition, the speech entitled "Breaking the Tragedy of the Horizon" delivered by Mark Carney, governor of the Bank of England,[10] brought climate risk and resilience into the heart of the financial sector. Those events spurred further ESG regulatory and reporting frameworks, such as the TCFD—a market-driven initiative, set up at the end of 2015 by the G20 finance ministers to develop recommendations for voluntary and consistent climate-related financial risk disclosures in mainstream filings (TCFD, 2017).[11]

[7] Launched in 2016 and supported by more than 160 investors with nearly US$30 trillion of AuM, and 21 CRAs. Available at: https://www.unpri.org/credit-risk-and-ratings/the-esg-in-credit-ratings-initiative/3251.article

[8] "ESG rating agencies should be regulated: ESMA chief weighs in on data debate." ResponsibleInvestor.com, February 2020.

[9] The SDGs are a collection of 17 global goals designed to be a "blueprint to achieve a better and more sustainable future for all." Set in 2015 by the United Nations General Assembly and intended to be achieved by the year 2030, the SDGs are part of UN Resolution 70/1, the 2030 Agenda. More information is available at: https://www.un.org/sustainabledevelopment/development-agenda/

[10] Mark Carney started by explaining that "climate change is the tragedy of the horizon" and that "once climate change becomes a defining issue for financial stability, it may already be too late."

[11] The first TCFD Recommendation Report was published in 2017 (TCFD, 2017). Every year, a status report of the market adoption of its recommendations is published, together with regular updates. UNEP FI works with different countries to help implementing TCFD recommendations. More information is available at: https://www.fsb-tcfd.org/

The Paris Agreement Call

Although this report focuses on the broader dimension of ESG risks and performance, the global climate call has been a strong driver for the development of regulatory and policy actions toward sustainable finance and ESG investing practices. Regulatory frameworks for investment governance rarely make explicit reference to ESG issues, although this is changing in several jurisdictions.

For example, in 2015, Article 173 of France's Law on Energy Transition for Green Growth introduced mandatory climate change reporting for financial institutions. More recently, regulatory pressures have been building in Europe, with the EU High-Level Expert Group on Sustainable Finance and the EU Commission Action Plan, published in March 2018. The leadership of the European Union has exerted strong influence on global markets and international practices. The TCFD, which started as a volunteer initiative, has become law in New Zealand and the United Kingdom last year.

The Sustainable Development Goals Agenda Call

For public issuers, the SDGs agenda call is the new North Star that can support further development around ESG matters.

Box 1. The Role of Central Banks and Financial Supervisors

Financial supervisors recognize that climate risk impacts financial stability. It is increasingly accepted that fiduciary duties are not incompatible with ESG investing. Central banks and financial supervisors worldwide are becoming mindful of the opportunities of responsible investment for market stability and effective management of government reserves. A good example is the Network for Greening the Financial System (NGFS) launched in 2017 at the One Planet Summit. NGFS aim to strengthen the global response required to meet the goals of the Paris Agreement and to help mobilize capital for green and low-carbon investments in the broader context of environmentally sustainable development. The Bank of Mexico and the Central Bank of Colombia are two of its eight founding members. Since 2017, the NGFS has grown to 42 Members and 8 Observers.[a]

[a]. The first TCFD Recommendation Report was published in 2017 (TCFD, 2017). Every year, a status report of the market adoption of its recommendations is published, together with regular updates. UNEP FI works with different countries to help implementing TCFD recommendations. More information is available at: https://www.fsb-tcfd.org/

Box 1. The Role of Central Banks and Financial Supervisors (continued)

The European Insurance and Occupational Pensions Authority (EIOPA) has also recognized the need to monitor and assess climate-related financial risks. In 2019, EIOPA published the first climate risk assessment of the sovereign bond portfolio of European insurers (Battiston et al., 2019). This assessment may set the tone for further developments around climate in sovereign risk assessment.

In 2019, the Financial Superintendence of Colombia published the results of a survey of climate risk perceptions in the financial services industry (Bugler, 2019). In 2020, the Mexican Central Bank, together with the UNDP, assessed the financial sector's readiness to incorporate climate risk (UNDP, 2020).

Frisari et al. (2019) present information on climate risk and the current regulatory and supervisory landscape of Latin American countries. The study provides a regional mapping and four in-depth case studies on Brazil, Colombia, Mexico, and Peru, supported by interviews and discussion with local regulators and supervisors.

Box 2. Convergence of ESG and Sustainable Finance

ESG and sustainable finance go hand in hand. Both reflect the underlying understanding that the whole financial sector—from investors (who coined the term ESG) to banks (which are mostly associated with sustainable finance)—needs to play a role in closing the financing and investment gap to achieve the SDG agenda, the climate change crisis, and more recently to respond to the global COVID-19 pandemic crisis.

ESG Momentum in Latin America and the Caribbean

In recent years, several stakeholders have been spurring the ESG and sustainable finance momentum across the LAC region. As evidence of the region's potential in this area, in 2018 the UN PRI organized three of their Emerging Markets forums on ESG in Credit Risk and Ratings in Brazil, Chile, and Mexico. [12]

[12] In 2018, PRI organized EM forums across the world. For more information, see: https://www.unpri.org/credit-ratings/takeaways-from-the-em-forums/5149.article

Box 3. Key National Initiatives Supporting the Development of the ESG Ecosystem

Mexico

Mexico launched a Consultative Committee on Green Finance (CCGF) in November 2016 under the auspices of Grupo Bolsa Mexicana de Valores (BMV) and the Climate Bonds Initiative (CBI). The Climate Bonds Initiative is an international, investor-focused nonprofit organization committed to mobilizing a US$100 trillion bond market for climate change solutions. It provides standards and guidance on green bonds and publishes studies on the evolution of the green bonds market since 2012. The CCGF has representatives from the entire financial sector and its respective associations: banks, insurers, asset managers, development banks, and others.

On May 31, 2017, BMV gathered 57 institutional investors representing around US$214 billion in assets to sign a statement in favor of financing green bonds in Mexico (CBI, 2019). In 2019, CCGF launched a statement signed by 51 institutional investors who committed to incorporating ESG factors into their investment decisions.

The Mexican government is developing an agenda to create a national roadmap on sustainable finance, which was expected to be launched by the end of 2020. This roadmap is designed to foster effort coordination in the national financial sector to incorporate sustainability issues into their operations and decision-making process, with the aim of directing more financial flows toward sustainable economic activities. The roadmap will add to the current environment by providing a coordinated public and private dialogue encompassing policy signals analysis, capacity building, and knowledge sharing. The Central Bank, financial supervisors, national development banks, and private banking associations are joining the Ministry of Finance in this agenda.

Chile

In 2015, the Santiago Exchange created the Dow Jones Sustainability Chile Index (DJSI Chile). Composed of 21 Chilean sustainability leaders, the index is based on the RobecoSam sustainability assessment. The green bond is central to the financing of the 2017–2022 National Action Plan for Climate Change.

The government of Chile initiated a public–private national dialogue in 2019, encompassing the entire financial services industry: banking, investments, insurers, and pension funds. The dialogue was established to discuss and approve the terms and conditions of a Green Agreement by the financial sector and to draft as a joint statement by financial sector regulators and supervisors based on the roadmap recommended by the Task Force on Climate-related Financial Disclosure (TCFD), a component of the Financial Stability Board.

In early 2020, 10 of the largest investors in Chile and the Santiago Stock Exchange signed a declaration of commitment to pursue sustainable investments and integration of environmental and climate factors in their investments (IDB Blog). In accordance with these agreements, the government of Chile is developing a national roadmap. The Ministry of Finance is coordinating all voluntary commitments by the signatories to promote green finance and climate risk management.

In June 2020, IDB's counterfactual exercises with Chile's sovereign wealth funds and the Pension Reserve Fund demonstrated that there had been no significant financial gain or loss from using ESG benchmarks and investing with sustainable principles. Moreover, "the ESG-constructed portfolios show even greater out-performance during the turbulent market during the Covid-19 pandemic" (IDB, 2020).

Brazil

Built upon strong policy signals stemming from the Central Bank regulation, the Brazilian Development Association (ABDE), the IDB, and the Securities and their green finance agenda, and Exchange Commission (CVM) created the Financial Innovation Laboratory (LAB) in 2017. The LAB is a multisectoral interaction forum which, in partnership with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), brings together representatives of government and society to promote sustainable finance in the country. The Brazilian LAB has created innovative financing solutions to leverage private resources for projects with social and/or environmental additionality. Its aim is to contribute to the fulfillment of Brazil's goals associated with the SDG (Agenda 2030) and its commitment to confront the risks of climate change (Paris Agreement). Topics such as insurance and guarantees, green bonds, SDGs bonds, social impact assessment, investment crowdfunding, venture philanthropy, fintechs, ESG risk management, and others are on the LAB's agenda.

1.4. Thematic Bond Markets and ESG-Themed Passive Investment Strategies: Drivers of Issuers to the ESG World

In the LAC region, sustainable bond markets are expanding at a much faster rate than in other international markets. Considering all types of thematic bonds together, new issuances have increased to US$6.13 billion in 2019, compared with US$2 billion in 2018 (an increase of 200 percent). Cumulatively, this represents US$15 billion from 68 individual issues by the end of 2019. Brazil accounted for 38 percent of total issuance by end of 2019, followed by Chile (21 percent) and Mexico (almost 13 percent) (Environmental Finance, 2020). In LAC, sovereigns and some NDBs dominate the thematic/green bonds market. The pioneers were NDBs (BNCR and NAFIN). Chile, Ecuador, and Mexico have shown their commitment to sustainability with their flagship issuances of social, green, and sustainable bonds, respectively. Colombia, Peru, and Uruguay, which were named during most of the investor interviews, are also working to improve their national markets and attractiveness to the ESG investing world.

When entering this market, thematic bonds issuers face not only scrutiny of the degree of sustainability of their issuance (mainly related to the use of proceeds of their thematic bond), but also increasing pressure regarding their general commitment to sustainability.

These demands go hand in hand with the wider development of ESG integration in investing practices. Therefore, it is in the interest of all potential thematic bond issuers to understand what their ESG profile contains and to begin improving ESG disclosures.

Passive investing with an emphasis on ESG is another strong driver that is pushing debt issuers to look at the ESG world. In its 2020 survey, the Index Industry Association found unprecedented growth in ESG indices—a more than 40 percent increase in the number of indices measuring ESG criteria in the past year. This was a new record for the survey. The other emphasis was fixed income, which saw steady growth in the number of indices measuring global bond markets over the past two years, with notable growth in the ESG sector within fixed income investments, as product issuers look to build more diversified and ESG-compliant products.[13] The same trend is also appearing in sovereign debt markets.

[13] For more information, see:
http://www.indexindustry.org/2020/10/28/fourth-annual-iia-benchmark-survey-reveals-significant-growth-in-esg-amid-continued-multi-asset-innovation-heightened-competition/

1.5. Key Findings

The following are the key findings of this section:

- In LAC, as in all other parts of the globe, investors are increasingly integrating ESG factors into their investment strategies.
- ESG integration is much more mature in equity markets but is fast reaching fixed-income markets, including sovereign debt which, due to the challenges it presents, may be seen as the final frontier.
- Thematic bond markets and passive investment strategies are strong drivers for ESG integration into fixed income markets.
- Regulators have started to take action, which points to the need for universal definitions, standards, and market practices.
- Despite the absence of universal standards and definitions, methodologies, and stakeholders, the adoption of ESG practices by fixed income investors is quickly becoming mainstream. It is in the public issuers' interest to search for ways to expand their understanding of the ESG world.

PART 2

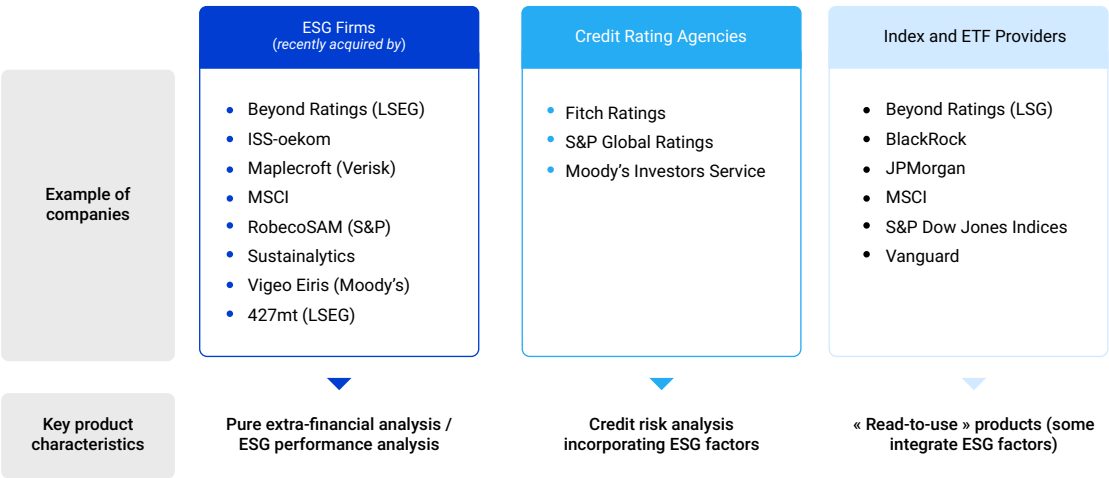
ESG Practices: Understanding a Nascent Field

2.1. Understanding the Stakeholders

Investors drive the market. For a variety of reasons, they need to start assessing their investments against ESG criteria. Therefore, a variety of ESG products and services were developed to address investors' needs and assess investments' ESG performance, in addition to their financial performance. These products and services are numerous for equities, rapidly developing for debt issuers, and nascent but gaining momentum for sovereign debt issuers.

Figure 4 illustrates the types of service providers offering ESG performance assessments to investors. They can be grouped into three main families depending on the provider's business activity and the key characteristics of their products. Because of the recent concentration trend in the ESG market, some groups might be active in all three categories: Standard & Poor's, for example, is a CRA that acquired ESG firms (Trucost and RobecoSAM) and owns a subsidiary that develops indices (S&P, Dow Jones Indices).

Figure 4. Non-exhaustive List of Main ESG Product Providers and their Products



Source: I-Care & Consult/ Rodolphe Bocquet

The first family consists of firms known as extra-financial rating companies, from ESG data providers to ESG specialists, which may embrace the full ESG spectrum or specialize in a specific pillar or issue (e.g., environment or climate change). The products developed by these actors can be classified as ESG performance-based products. Their main feature is a component of pure extra-financial analysis (usually completed with financial analysis).

Given the lack of ESG standards and taxonomy, the market has a wide variety of approaches to sustainability, leading to subjective assessments and sometimes strong differences in performance scores among providers. Some players take a purely quantitative approach, while most others combine both quantitative and qualitative approaches.

ESG firms mainly work for investors. The investors request and pay for the ESG assessment of a specific bond, or the global ESG assessment of a bond issuer. This is the second party opinion, or specific bond assessment, which has become standard when issuing a thematic bond. ESG firms also conduct unsolicited assessments based on public information and questionnaires sent to the assessed firm on a voluntary basis. Unsolicited assessments are not made public, and the assessed firm is only provided with a short version to provide feedback. In some cases, the issuer itself may require an ESG assessment from an ESG firm to get a better grasp of what is being assessed, have more input, and be able to use and promote the results (see Eletrobras and FIRA cases in Sections 6.1 and 6.2). Larger investors usually do not rely on a single ESG provider. They may combine findings from two or more or even develop their own methodology and materiality framework.

The second group includes the credit rating agencies, whose main areas of expertise are the credit analysis of securities and the creditworthiness of issuers. CRAs have recently taken actions to augment their ratings by incorporating relevant ESG factors in a more transparent and systematic manner. Because investors complained about the opacity of the rating processes with respect to ESG integration, the European regulator ESMA recently encouraged CRAs to disclose how ESG factors enter into the final rating.

Credit rating is highly regulated, whereas ESG performance assessment is not. The term "rating" should therefore only be applied to credit rating (which might integrate ESG components), whereas ESG assessment should be referred to as ESG scores. Given the rising importance of ESG scores, a growing number of issuers (especially corporates) are pushing for ESG firms to be regulated as well.

The third group consists of indices and exchange-traded fund (ETF) providers. Indexing is a form of passive fund management that consists of selecting a benchmark index and ensuring that the fund replicates it.

Passive investing ensures that an investor will not underperform (or outperform) the chosen underlying index. Exchange-traded funds are low-cost index funds that trade like stocks. They tend to be ready-to-use products, targeting a particular part of the market—passive management.

All three groups of providers can assess the ESG performance of corporates (both private and public), and most of them are starting to look at the country level as well. However, the way they treat these two types of issuers with respect to ESG assessment is drastically different.

PART 3

ESG Assessment for National Development Banks and State-Owned Enterprises

National development banks (NDBs) and state-owned enterprises (SOEs) ESG performance is assessed the same way that private banks do when the ESG assessment of a sovereign is a completely different and new exercise. From a credit standpoint, CRAs take into account the nature of their link to the sovereign (i.e., whether or not it is an explicit guarantee), but from an ESG standpoint, the assessment is based on the methodology developed by the ESG provider for the private sector, with some differences.

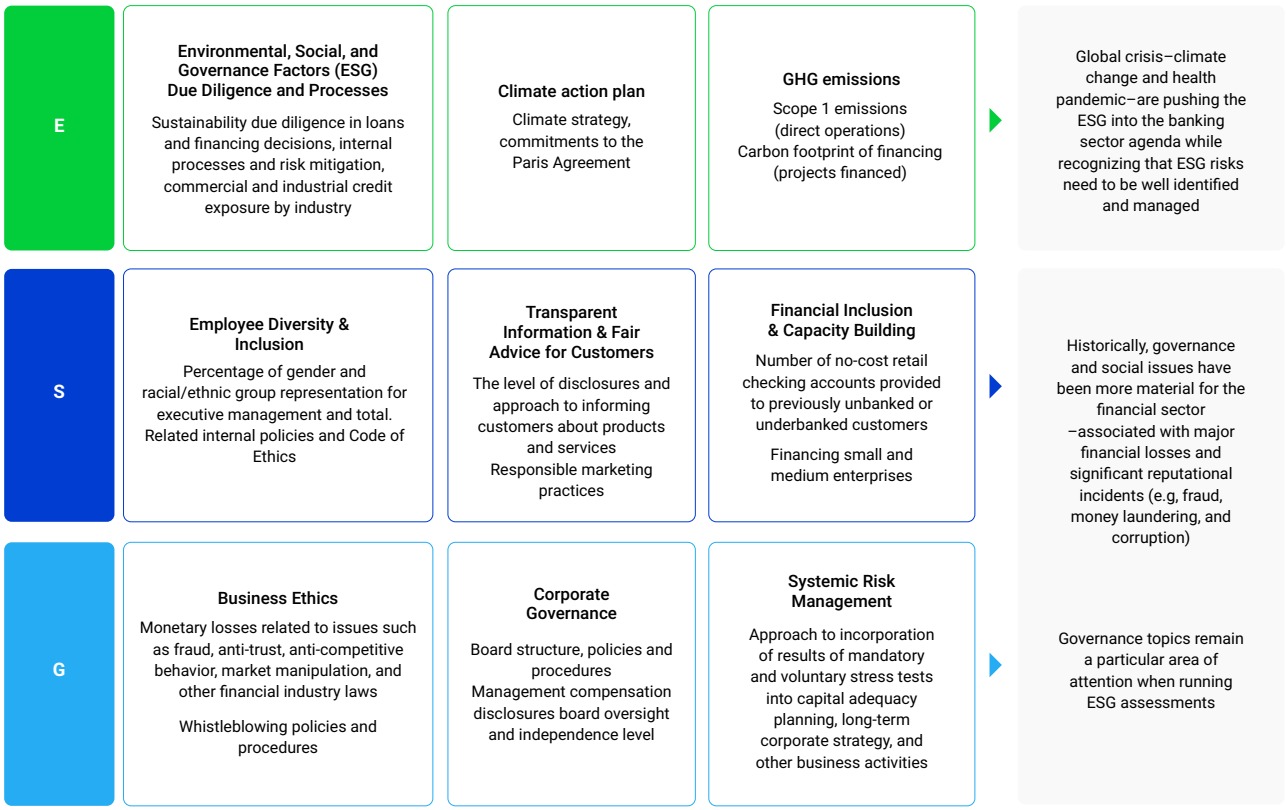
The ESG scores, ESG profiles, and/or ESG ratings historically developed for corporates are realized using data gathered through questionnaires sent to the institution and an analysis of publicly available information (e.g., annual reports, sustainability reports, website). They are based on the ESG issues intrinsic to the sector, that is, industry-specific areas of exposure that impact sustainability or business, and therefore should be the key management areas for a company.

The materiality map developed by the Sustainability Accounting Standards Board (SASB) is a helpful starting point in understanding the key ESG material issues per sector (https://materiality.sasb.org/). It identifies sustainability issues that are likely to affect the financial condition or operating performance of companies within an industry. ESG firms and investors themselves will have their own perception of materiality for different ESG factors within an industry and may weight some factors differently than others. Unfortunately, the SASB framework and materiality map are not available for sovereigns.

3.1. Key ESG Issues for National Development Banks

NDBs share several similarities with the financial sector overall with respect to ESG. The two pillars deemed to be the most material for financial institutions are the governance and social ones, as these have been associated with most material reputational issues and financial losses in the financial sector. Over the last decade, NDBs have given increasing importance to transparency toward clients (products disclosures) and sustainability due diligence practices (environmental and social risks management and overall sustainability strategy). Climate risks exposure is the latest focus from the ESG community for the financial sector.

Figure 5. vKey ESG Issues for the Financial Sector



Source: Authors' analysis, based on large ESG firms' sectoral approaches and SASB materiality standards proposed for the banking sector.

Major ESG firms have different levels of granularity when assessing the financial sector. For example, several of them separate banking from asset management and insurance. In the absence of a dedicated ESG approach to NDBs, they are usually assessed based on the key issues in the banking[14] or investment banking sector.[15] Although this is the current state of the market, it may evolve, and the public nature of NDBs may be increasingly taken into account. Its public nature and mandate will strongly impact an NDB risk profile or sustainability strategy. To date, ESG assessment methodologies developed by investors or third-party providers do not capture this aspect.

[14] An example is the case of Sustainalytics.

[15] The most suitable as per the SASB Materiality Map.

Box 4. ISS ESG on National Development Banks: A Flexible Approach Is Needed

ISS ESG recognizes the following specificities of NDBs versus their private peers that need to be taken into account:

- **Governance aspects, such as board independence:** For private corporates, including banks, a good practice is that at least 30 to 40 percent of board members should be independent. However, this cannot be applied to most of them. For those, ISS does not apply an ESG downgrade for noncompliance with the usual standard.
- **Social elements, such as working conditions:** These may differ as contracts in this type of institution tend to be project-based. The frequent use of temporary contracts or any consequent high turnover rate might not be seen as negatively as it would be for a private commercial bank.

3.2. Key ESG Issues for SOEs in the Utility Sector

Historically, ESG risks that utilities must manage are governance issues, occupational health and safety, and community relations (Figure 6). However, recently, utilities have been under increasing pressure to reduce emissions and to contribute to the energy transition and nationally determined contribution commitments of their countries. Utilities are responsible for approximately 25 percent of the world's greenhouse gas (GHG) emissions, making them the single largest source by industry. It is therefore not surprising that the Environmental pillar is considered increasingly material among the investment community. Factors such as their climate strategies and plans are highly scrutinized, as are many other environmental impact indicators of their operations, including GHG emissions, waste, water and effluent emissions, and resource efficiency.

Figure 6. Key Material ESG Issues for the Utilities Sector

Source: Author's analysis based on large ESG firms' sectoral approaches and SASB materiality standards proposed for the utilities sector.

A recent study shows that SOEs may be more open to engage and play their part on environmental issues than their private peers, even if for the moment the level of information they disclose may not be as comprehensive as that of their private peers. According to the study, "SOEs engage more in environmental issues, such as emission mitigation, innovation in eco-efficient products or services, reduction in natural resources usage, and produce less CO2 emissions as measured by actual firm-level emission data, than non-SOEs. (PRI blog, undated)" The study looks at data collected by the Thomson Reuters ASSET4 ESG database for firms in 45 countries between 2004 and 2014 and shows that SOEs score high on environmental performance (Hsu, Liang, and Matos, 2017).

3.3. The Credit Rating Agencies' Approach: A Work in Progress

The three main CRAs—Fitch Ratings, Standards & Poor's, and Moody's—have all developed ESG assessment products, either in-house or through the acquisition of ESG firms. Recently, all three have started to publish papers and disclose their current work on the integration of ESG criteria into credit ratings. The UN PRI initiative is also working on the topic in close collaboration with 25 CRAs.

Fitch Ratings

In 2019, Fitch published a white paper called ESG in Credit, in which they present their concept of ESG Relevance Scores (ESG.RS). This product is intended to augment market transparency and satisfy investor demand for more thorough and robust reporting on how ESG affects credit risk. The paper includes what Fitch considers sector-specific factors for financial institutions. But even if Fitch assigns credit ratings to a large number of development banks globally, not all of them have been assigned ESG.RS because often such banks' credit ratings are driven by Fitch's assessment of a sovereign's ability and willingness to provide support to these banks. "ESG.RS are observations on ratings and are most meaningful when linked to an issuer's standalone credit rating and not when making an observation on a supported rating."

In October 2020, following the release of the ESG.RS, Fitch Ratings launched a preliminary ESG risk framework for the utilities sector. This is an attempt to understand how ESG factors impact entities' creditworthiness, incorporating realistic stress scenarios for ESG-related market developments through 2050. These include likely policy actions required (with resulting market and credit consequences) if governments are to meet their 2050 decarbonization targets.

S&P Global Ratings: ESG Industry Report Cards

S&P discloses on its website how ESG factors are captured in its credit rating methodology. In February 2020, it also published 32 ESG Industry report cards. These include the following:

ESG Industry Report Card: Latin American Banks

ESG Industry Report Card: Regulated Utilities Networks

ESG Industry Report Card: Power Generation

Moody's – First Steps toward an ESG Risk Assessment Methodology

In December 2020, Moody's published a revised preliminary version of its ESG risk assessment methodology, based on ESG credit impact scores (CIS). This is the result of ongoing research efforts following the acquisition of Vigeo Eiris and 427mt.

The following elements may be of particular interest for public issuers:

- Moody's governance and social risk categories are slightly different for public and private issuers.

- For the environmental component, the categories are the same for public and private sector issuers; they are determined by the economic activity/sector.

The document is only a preliminary version and the CIS have no impact on credit ratings. As part of ongoing work to examine how ESG considerations factor into debt issuers' credit quality, they are looking at how often rating actions cite ESG issues as a material credit consideration.

Two reports issued in November 2020 indicate that ESG factors were cited as material credit issues in 50 percent of public-sector rating actions during the first quarter of 2020 (68 percent if only emerging markets are considered). The reports conclude that ESG considerations are becoming "even more material to debt issuers' credit quality globally—and particularly in emerging markets—given the range and rise of ESG risks such as climate change and public health."

3.4. Key Findings

The following are the key findings of this section.

- Despite their public nature and mandate that can have an impact on their risk profile and overall sustainability strategy, NDBs and SOEs are treated like their private sector peers when it comes to ESG assessment: the analysis is focused on the material ESG factors identified for the relevant industry.

- At this stage, the ESG assessment of an NDB or SOE seems to be independent from its country ESG performance. However, there is room for flexibility, and the dialogue with ESG product providers is key to ensuring that NDB and SOEs' specificities are taken into account.

- The definition of material ESG factors for the banking and utility sectors may differ from one investor to another or from one ESG product provider to another. The difference will be mostly with respect to the weight given to a factor rather than the factor itself. The SASB materiality map is a good starting point for an institution to familiarize itself with those factors. ESG materiality analysis is based on a sectoral approach, and further considerations about state ownership may usually be addressed under governance-related matters.

- CRAs have just begun formalizing their ESG risk assessments and the way they factor ESG into their credit ratings. It might be interesting to closely follow the development of their work in the coming months.

- NDBs and SOEs have an opportunity to lead by example and participate in the development of ESG frameworks.

- For corporate and therefore NDBs and SOEs, most of the ESG assessment is based on data and information provided publicly by the institution itself. There is a lot of room for improvement in what NDBs and SOEs currently disclose in the ESG field.

PART 4

ESG Assessment of Countries: A Complex Exercise Garnering Increasing Interest from the Investment Community

The ESG assessment of countries is different from the ESG assessment of corporates, public or private. The main drivers for the development of sovereign ESG assessment are similar: investors' growing need to integrate ESG considerations into their investment strategies and the development of specific markets such as thematic bonds or ESG-themed passive investing. However, assessing a country on its ESG performance presents new challenges to the ESG community.

The main challenges for investors are the identification of ESG factors and the decision about their materiality. The impact of ESG factors on a sovereign's ability to repay its debt is quite different than for a corporate, and is still a subject of discussion by the academic world and the investment community. Another challenge is that available ESG data are still not completely aligned with investors' needs.

The ESG community is investing considerable resources in this area. Since 2019, key players such as the UN PRI, the Organisation for Economic Co-operation and Development (OECD), and the International Monetary Fund (IMF) have been contributing to the discussion with publications and proposals (Annex 1). Although there are still no common standards and practices, the momentum is clear, and investors increasingly are seeking to integrate ESG factors into their investment decisions on sovereign debt.

4.1. The Question of ESG Sovereign Data

There is currently no standard ESG materiality framework for sovereigns. One reason for the difficulty in identifying material ESG factors is that such factors are often interrelated. A country's governance profile can exacerbate, prevent, or mitigate social and environmental shocks. There is also overlap between environmental and social factors. It is, however, possible to identify some common indicators being used within the sovereign ESG integration framework. The UN PRI initiative listed some ESG indicators for sovereigns.

Table 1. Indicative List of ESG Indicators for Sovereigns

ENVIRONMENT	**NATURAL SOURCES:** the availability and quality of biodiversity, water, air and soil; and land use (urban, agricultural and forests).	**PHYSICAL RISKS:** the physical effects of climate change (such as weather volatility, sea-level rise) and natural disaster risks (volcanic eruptions and earthquakes).
	ENERGY TRANSITION RISKS: regulatory factors and technological developments associated with the global energy transition to a less carbon-intensive global economy.	**ENERGY SECURITY:** the availability and management of (non)-renewable energy resources, and resource depletion.
SOCIAL	**LIVING STANDARDS AND INCOME INEQUALITY:** respect for human rights (including the right to life, the right to freedom of association and the right to health); measures of poverty and income inequality; gender inequality; unemployment rates; public sector wages; availability of and access to healthcare, personal safety and housing; food security and obesity.	**SOCIAL COHESION:** political freedom and presentation; levels of trust in institutions and politicians; social inclusion and mobility; prevalence of civic organizations; degree of social order; and capacity of political institutions to respond to societal priorities.
	EDUCATION AND HUMAN CAPITAL: availability of and access to education; quality of educational attainment; and employment rights.	**DEMOGRAPHIC CHANGE:** population trends; age distribution; and rates of immigration.
GOVERNANCE	**INSTITUTIONAL STRENGTH:** strength of institutional and regulatory frameworks; independence of institutions; quality and availability of public data; prevalence of corruption; rule of law; ease of doing business; and business climate.	**GOVERNMENT EFFECTIVENESS:** quality of bureaucracy and administration; policy planning and implementation capabilities; and independence of the civil service from political interference.
	RULE OF LAW: property rights; institutional and regulatory framework; and independence of the judiciary.	**POLITICAL STABILITY:** political rights and civil liberties; political upheaval and violence in society; freedom of expression; press freedom; and freedom of information and speech.
	REGULATORY EFFECTIVENESS: efficiency of regulatory systems and policy implementation; predictability of policy making; ease of doing business; and business climate.	**CORRUPTION:** accountability and transparency of institutions; money laundering/illicit financial flows.

Source: Georgieva and Slogget (2019).
Note: This is not an exhaustive list.

While there is no defined materiality framework, the introduction of the SDGs provides an engagement framework around which to structure the analysis of performance.

Figure 7. Overview of Public and Private Sources of Sovereign ESG-Related Data

	Public Data (A)	Public Data (B)	Private Data (C)
Main source of data	Governments and international / national authorities / statistical economic bodies	Independent and academic research (e.g., NGOs, think tanks, universities)	ESG firms & ESG data providers internal research and proprietary models
Actors behind these data	FAO, IMF, OECD, UN, World Bank, etc.	Cato Institute, Germanwatch, Reporters Without Borders, Yale University, etc.	Beyond Ratings, ISS-oekom, MSCI, Sustainalytics, Verisk Maplecroft, Vigeo Eiris, etc.
Example of data	PovcalNet, WB Sovereign ESG Data Portal, World Governance Indicators, UN Human Development Index (HDI), UN Inclusive Wealth Index (IWI)	Climate Change Performance Index (CCPI), Corruption Perceptions Index, Environmental Performance Index (EPI), Human Freedom Index, SDG Index, Social Progress Index, etc.	BR ESG factor-in, ISS ESG Country Ratings, MSCI ESG Government Ratings, RobecoSAM, Country Sustainability Ranking, Sustainalytics Country Risk etc.

Source: Authors' elaboration.
Note: Data from A and B sources also used by C sources.

Type A sources consist of primary data providers, which are on the front lines of data collection. They focus on collecting and making data publicly available in various formats, mostly as historic databases. They are usually accessible on an open-source basis and online. They may be presented in an unstructured way (i.e., simple databases) or a more structured way (i.e., indices, reports). Type A data are mostly neutral, and their only flaws are that they are usually backward- looking and sometimes out of date.

The most prominent example is the work undertaken by the World Bank for many years. It launched a new ESG data portal (World Bank, undated) in late 2019, gathering and structuring different databases to better meet investors' demand. This is the first step in a collaboration between the World Bank and institutional investors. For example, the Japan Government Pension Fund (GPIF), the world's largest pension fund, started a collaboration to integrate ESG data from the portal into its sovereign investment strategies.

Many of the datasets and indices produced by international organizations are used for statistical and research purposes. The main users are governments and public policymakers, researchers, and NGOs (B). They also serve the needs of ESG firms. They are accessible free of charge.

Types B and C are secondary data providers, as they usually use the data collected by type A sources as an input to a proprietary assessment process for a variety of purposes (academic research, NGO research, etc.). This adds layers of subjectivity with respect to the qualitative approaches used to treat the data and build indices, rankings, or specific reports around those indicators. Type B data providers are free and open sources, with high levels of transparency regarding the methodology used in their data models. For example, the SDG Index[16] developed by the Sustainable Development Solutions Network (SDSN)[17] and the Bertelsmann Stiftung,[18] developed in 2016, is the first worldwide index that assesses countries on their progress toward achieving the SDGs. The detailed methodology, including the assumptions, selection of indicators, methodological choices, and data sources, is available on their website.

Figure 8. LAC Positions in the Sustainable Development Goal Index (2019)

COUNTRY	RANK	SDG SCORE
Chile	31	75.6
Costa Rica	33	75.0
Uruguay	43	72.6
Argentina	45	72.4
Ecuador	46	72.3

Source: Bertelsmann Stiftung and Sustainable Development Solutions Network (2019).

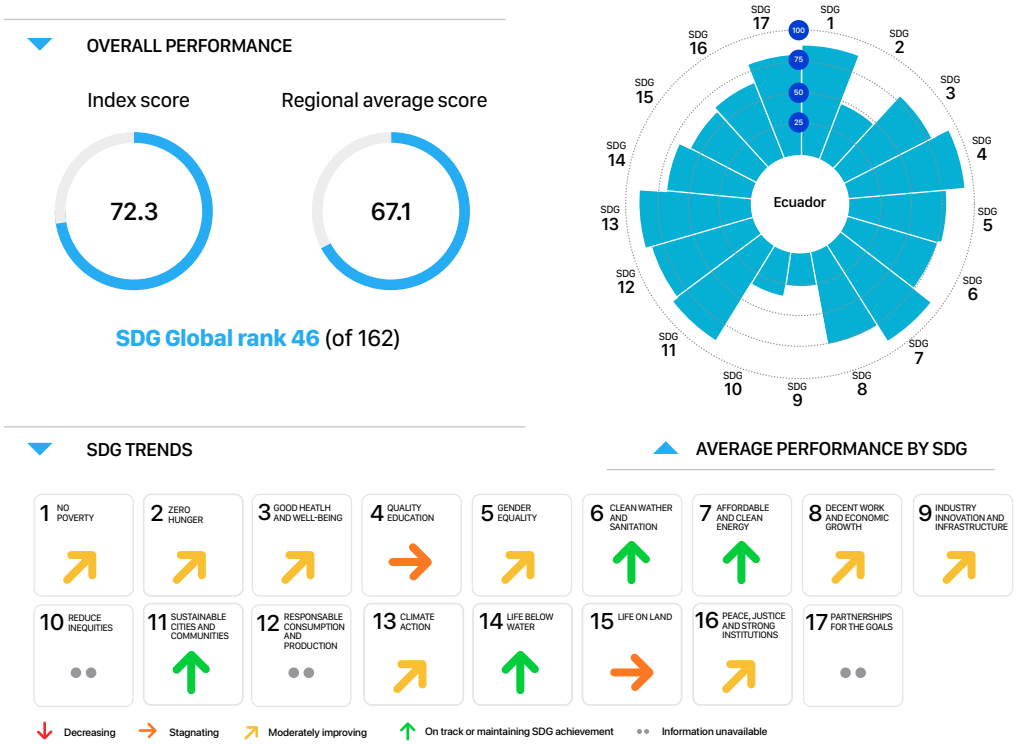
Chile ranked 31st on the list, with an overall index score of 75.6, suggesting that it is 75.6 percent of the way to the best possible outcome across the 17 SDGs. The SDG Index score indicates a country's position between the worst (0) and the best, or target (100) outcomes. The SDSN also presents individual country profiles, including average performance toward each goal and each indicator's respective trends and rating. An illustration of Ecuador's latest SDG score shows that it has not yet achieved any SDG: it is close to achieving SDG 4 (quality of education) and SDG 7 (affordable and clean energy), and it has made significant strides toward the achievement of SDG 9 (innovation and infrastructure).

[16] The Sustainable Development Report (formerly the SDG Index & Dashboards) is the first worldwide study to assess where 162 countries stand with regard to achieving the Sustainable Development Goals. Methodology paper of 56 pages available at: https://www.sdgindex.org/. The last country ranking available at: https://sdsna.github.io/2019GlobalIndex/2019GlobalIndexRankings.pdf

[17] SDSN website: https://www.unsdsn.org/

[18] The Bertelsmann Stiftung is an independent foundation and think tank, based in Gütersloh, Germany. It was founded in 1977 by Reinhard Mohn. The foundation promotes innovative approaches and effective solutions to sociopolitical problems. https://www.bertelsmann-stiftung.de/en/home

Figure 9. Ecuador Sustainable Development Goal Scores (2019)



SDG4 - Quality Education	Value	Rating	Trend
Net primary enrolment rate (%)	91.3		
Lower secondary completion rate (%)	104.1		
Literacy rate of 15-74 year olds, both sexes (%)	99.1		

SDG7 - Affordable and Clean Energy			
Access to electricity (% population)	99.9		
Access to clean fuels & technology for cooking (% population)	95.6		
CO_2 emissions from fuel combustion / electricity output (MtCO2/TWh)	1.5		

SDG9 - Industry, Innovation and Infrastructure			
Population using the internet (%)	57.3		
Mobile broadband subscriptions (per 100 inhabitants)	53.0		
Logistics performance index: Quality of trade and transport-related infrastructure (1-low to 5-high)	2.7		
The Times Higher Education Universities Ranking, average score of top 3 universities (0-100)	0.0		
Number of scientific and technical journal articles (per 1,000 population)	0.1		
Research and development expenditures (% GDP)	0.4		

Source: Global SDG Index Ranking (SDSN, 2020).

Some advisory firms may also provide country rankings free of charge. For example, Dragon Fly uses its niche product, the Country Governance Effectiveness Index for Responsible Sourcing,[19] as a way to showcase its expertise.

The most comprehensive global environmental index currently available is the Environmental Performance Index (EPI)[20] developed by Yale University. On the EPI 2020, Chile is ranked first in the LAC region (44th globally), followed by Colombia (50th globally).

These rankings and reports are mostly policy oriented, supporting NGO actions and campaigns or aimed at raising public awareness. However, in recent years, the investment community has used them directly in investment and internal ESG research processes, or through the products (notably country scores and rankings) developed by the ESG data providers (type C).

Type C sources include commercial data providers for sovereign analysis. These ESG data and ESG specialists' firms implement proprietary methodologies and models to provide investors with added value (data are structured in a plug and play manner: they correct data gaps and lags, focus on financially material indicators, and correct certain biases linked to the level of development for better performance comparison). Type C data might be difficult to compare and assess to the extent that they are not fully transparent for non-clients. However, with respect to the pressure and higher regulatory initiatives on ESG disclosures, they have become more transparent in recent years. Most of the time, however, they require a direct contact to obtain further details. All type C providers rely largely on public and free sources from types A and B, combined in different ways. They are very attentive to new sources made available in the market, such as spatial data, that allow them to be more reactive.

Some investors will develop their own materiality frameworks. That is, they will build their own methodology to assess the ESG performance of countries based on a combination of type A, B, and C data sources.

[19] TDI Country Governance Effectiveness Index for Responsible Sourcing is a composite of indices to indicate the effectiveness of a country's governance environment in supporting responsible sourcing. It is refined and updated at least bi-annually. More information is available at https://tdi-sustainability.com/resources/country-governance-effectiveness-index/

[20] Using 32 performance indicators across 11 issue categories, the EPI ranks 180 countries on environmental health and ecosystem vitality. Most of the datasets were collected in 2018 or before. A Technical Appendix provides precise details of temporal coverage and methodology. More information is available at https://epi.yale.edu/.

Specific Challenges that Countries Must Overcome

Service providers and investors face three types of challenges when dealing with sovereign ESG data: availability, quality, and relevance. Availability of sovereign ESG data breaks down into frequency and consistency problems. Most macroeconomic data are updated monthly or at least quarterly, while sovereign ESG data are updated yearly or lag two to three year behind due to statistical processes. For certain indicators illustrating emerging ESG issues, historic time series availability might be limited, generating constraints to implement back testing modeling of their impact. While GDP data are available for 2019, the most recent data available on CO_2 emissions per capita or number of hospitals beds per 1,000 inhabitants lags by four years (2015) in some LAC countries. Investors and service providers attempt to overcome this structural limitation in the following ways:

- Bridging data gaps (missing values) using statistical methodologies (such as bootstrapping[21]) and proxies.[22]
- Relying on qualitative assessments of the ESG situation provided by ESG/country/sovereign analysts that can provide real-time analysis.
- Exploring how new technologies such as artificial intelligence and geospatial[23] data can provide more reactive alternatives to official data sources.

The second issue relates to consistency. The availability of ESG data varies greatly: across indicators, E, S, and G pillars (e.g., the same country might have very good reporting data on environmental factors, but not on social factors), but also across countries (e.g., a limited number of countries publish SDG-consistent performance metrics). Thus, investors face a consistency issue to analyze the performance of their investment portfolio on a given perimeter or time horizon.

The lack of global reporting standards affects the quality of ESG sovereign data. Although standards are being developed, statistical methodologies and available resources might vary across countries to produce a similar indicator.

[21] In statistics and econometrics, bootstrapping uses the variability within a sample to estimate that sampling distribution empirically.

[22] In statistics, a proxy is a variable that is not in itself directly relevant, but that serves in place of an unobservable or immeasurable variable. In order for a variable to be a good proxy, it must have a close correlation, not necessarily linear, with the variable of interest.

[23] Cf. Group on Earth Observation or Spatial Finance Initiative.

This situation is not limited to ESG data; GDP figures are regularly revised a few quarters after their publication. Most advanced investors require commercial ESG data providers to give guarantees about the data quality and consistency-check process that they implement to overcome this issue.[24]

Aggregating multidimensional factors and indicators triggers statistical relevance issues. When building ESG-aggregated scores for countries, ESG service providers will consider a large array of ESG indicators: as many as 300 in some cases (approximately 100 per pillar). This raises an issue of statistical relevance as soon as these indicators are scored and aggregated. How should the scores be weighted? inter- and intra-ESG pillar? The most basic approach is to weight them equally. This might, however, prove misleading as many indicators might be strongly correlated.

Another key issue is comparability: to what extent is it relevant to compare countries on ESG performance if they are at quite different stages of development (high-income vs. low-income countries, for example)? Some indicators such as energy consumption per capita prove to be correlated with per capita income.

Lastly, the statistical relevance of sovereign ESG data differs depending on the approach preferred by the investors when looking at ESG performance. Value-based investors might want to consider indicators such as the existence of the death penalty, the political regime, or the breach of international treaties as exclusionary factors, while investors favoring a value-based approach will overlook these indicators because they cannot be associated with financial materiality. These differences in methodological choices will be reflected in the diverse array of ESG scores.

The financial materiality of sovereign ESG data becomes key with respect to their integration into credit rating processes. The financial materiality of each ESG factor for sovereigns is becoming increasingly relevant: G factors have traditionally had a predominant position, but the materiality of S and E are increasingly being looked at as more data sources have become available.

Investors and CRAs have traditionally regarded governance as the most material ESG factor. Sound governance, which consists of government stability, effective policies, and regulations, is associated with a solid economy. Good governance is associated with both higher per capita GDP and higher GDP growth over time (Han, Khan, and Zhuang, 2014).

[24] Data providers screen for statistical discrepancies and inconsistencies in a given time series vs. peers or proxies and over time.

Social factors are also recognized as material to sovereign risk analysis due to the importance of human capital as a key determinant of economic growth. Research such as that undertaken by the OECD supports the relevance of this category. Specifically, it finds a correlation between falling income inequality and faster economic growth (Cingano, 2014).

Environmental factors have been the least integrated by investors, mostly because environmental data tend to be collected less than other types, and because the financial impact of environmental risks is much more difficult to evaluate. However, this trend is changing in light of the international response to reduce GHG emissions to meet the commitment of the Paris Agreement and to achieve the SDGs. Also, for the first time in the World Economic Forum Global Risks survey's 10-year outlook, the top five global risks in terms of likelihood are all environmental (WEF, 2020), namely: extreme weather events, failure of climate-change mitigation and adaptation (by governments and businesses), human-made environmental damage and major natural disasters (e.g., earthquakes, tsunamis, volcanic eruptions, and geomagnetic storms), major biodiversity loss, and ecosystem collapse.

Both physical and transition risks of climate change are material for sovereigns in multiple ways and over multiple horizons. Although less developed, climate-related data collection is expected to increase, mostly driven by risk considerations, regulatory requirements, asset owner initiatives (such as the United-Nations-convened Net-zero Asset Owner Alliance) and international frameworks (TCFD, UNPRI reporting, etc.), as well as growing demand for climate solutions and related financial products.

Natural capital and biodiversity protection have garnered increasing attention in recent years, due to their role in adapting and preventing further negative impacts from climate change and the essential service they provide to many businesses on which society depends. Moreover, impact investors have been looking for nature-based solutions, and the number of thematic funds dedicated to nature and biodiversity issues has increased (e.g., funds pursuing environmental impacts land degradation neutrality, sustainable oceans, conservation, etc.). The development of indicators and methodologies to integrate conservation and biodiversity factors into business and investment practices has become a major concern of international organizations and G20 economies.

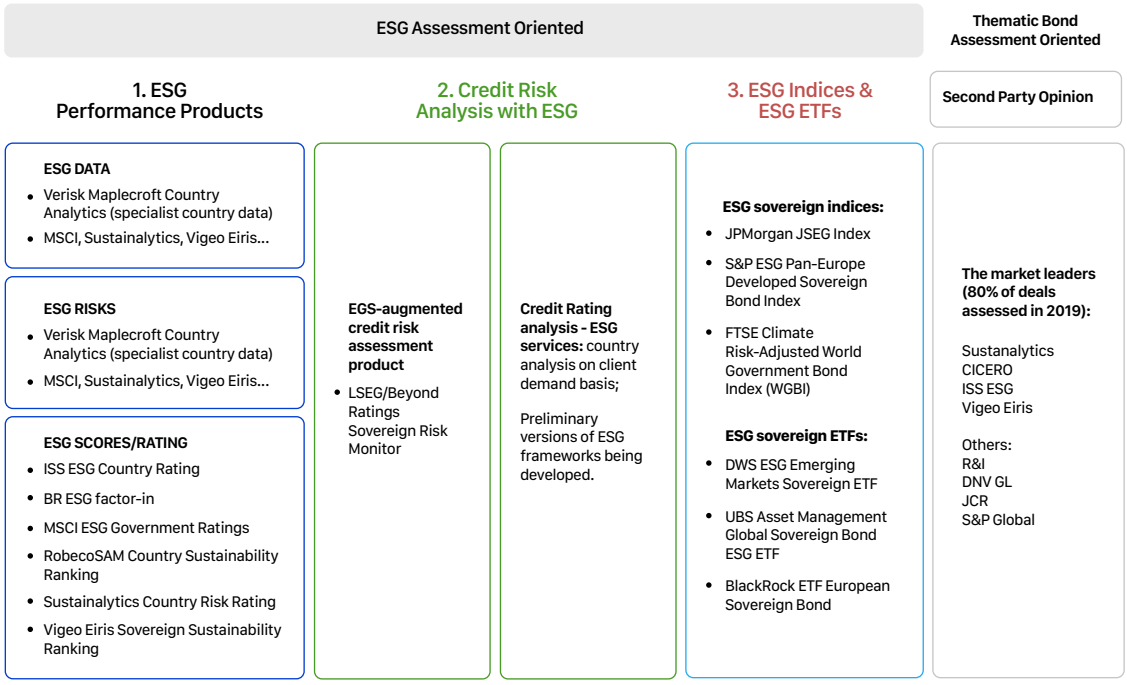
Environmental governance, NDCs, and natural capital protection policies have a direct impact on institutional assessment of sovereigns. Countries are at risk of losing markets and seeing exchange rates and debt increase if they do not develop appropriate policies to protect natural capital at risk of degradation or to mitigate climate change impacts. Political risk may rise following natural disasters, via a loss of economic output and increasing vulnerability of the population.

As the investment community increasingly considers ESG performance criteria, there is a strong incentive for countries to upgrade their ESG national statistical reporting processes. Even without a common framework or standard, some countries have taken steps to provide stakeholders with a better idea of how to meet the SDGs. For example, the French National Statistics body (INSEE), following a consultation carried out under the aegis of the National Council for Statistical Information in 2018, proposed a scorecard of 98 indicators, constituting the national framework for monitoring France's progress in achieving the 17 SDGs. International financial institutions such as the IDB can support these efforts in many ways.

4.2. ESG Products to Assess Countries' Performance

The same stakeholders that provide ESG products for corporate, private, and public entities are present in the ESG sovereign products space: ESG firms, CRAs, and index providers. Figure 10 provides a classification of ESG sovereign-related products available at this stage in the market.

Figure 10. Overview of Products and Sub-products Addressing ESG Sovereign Analysis



Source: Authors' elaboration.
Note: Non-exhaustive list but covering almost 90 percent of all sovereign analysis products at the date of the report.

ESG Performance-Based Products

These products are based on ESG analysis of countries, considered individually or against a peer group, encompassing both ESG-related risks and opportunities. There is a wide variety of products of this type, ranging from raw data products to more sophisticated ones with distinct features and serving different needs of the investment and financial community. The following subtypes can be identified:

- ESG data products consisting of offsets of ESG data, compiling several sets of ESG-related data and metrics that can be used for investment decisions. Investors usually use this data as they wish, paying to have access to parts or all of the dataset, depending on their objectives). Most of these data serve to enrich their ESG integration procedures and ESG investing practices.

- ESG risk assessment products focus on ESG risk analysis (sometimes multi-risk) and their relationship to economic and financial risks. These products use several sets of public and private data to build risk indicators linked to financial and macroeconomic aspects of countries' performance. An example is Verisk Maplecroft, a risk analytics firm focus on global risks to business and investors. Some of these products are highly specialized, such as RepRisk[25] (specialized in governance issues), or 427mt (specialized in the impact of physical climate risks).

- ESG scores are a form of more sophisticated treatment of ESG data, by aggregation of ESG data, criteria, and metrics. These products are mostly developed by ESG specialists, who may use both quantitative and qualitative analysis to build aggregated ESG score and who rely on proprietary models developed in-house. Countries may reach out to the data providers to get a better understanding of how ESG scores are computed.

Table 2 provides an overview of the main characteristics of seven ESG scoring methodologies available from the main ESG service providers.

[25] RepRisk AG is an ESG data science company based in Zurich, Switzerland, specializing in ESG risks. RepRisk was formed in 1998 as ECOFACT, an environmental and social risk consultancy focused on the financial sector. In 2006, its ESG risk database was created at the request of UBS. In 2010, RepRisk split from the consultancy and became an independent company. The company runs a comprehensive online database of ESG and business conduct risk, combining AI and machine learning with human analysis. https: //www.reprisk.com/

Table 2. Scoring Methodologies of ESG Service Providers

	Quantitative and/or Qualitative	Specifics	Number of Indicators	E,S,G Weights
BR/FTSE ESG Factor-in	Quantitative	Specific model depending on level of development (5 country groups). Indicators weighted depending on explanatory power of GDP per capita growth.	220	E: 33% S: 33% G: 33%
ISS ESG Country Rating	Quantitative and Qualitative	Environment dimension contributes highly to the final score, with Climate Change (15%) ponderation equal to the Governance and stability one; Includes controversy analysis.	98	E: 50% S: 15% G: 35%
MSCI ESG Government Ratings	Quantitative	Financial governance is a key component of the framework, as in MSC's view ESG Sovereign Risk cannot be isolated from a country's basic fiscal conditions when assigning ESG Ratings.	99	E: 25% S: 25% G: 50%
RobecoSAM Country Sustainability Ranking	Quantitative and Qualitative	Political risk represents 10% of the global score as RobecoSAM views that geo-political risks (autocratic regimes, repression, civil wars, etc.) and socioeconomic risks (lack of trust in elites, income inequality, popular discontent, etc.) can lead to political instability (refugee crisis, terrorism), economic policy impediments and macro-financial impacts.	40	E: 20% S: 30% G: 50%
Sustainalytics Country Risk Rating	Quantitative and Qualitative	Based on two pillars: (i) Wealth score based on World Bank data for natural, human and produced capital and (ii) ESG risk factor score: based on exposures to risks that can impact wealth generation and preservation as well as the management of these risks. Combines also "negative events" (controversy analysis) and "trend" scores.	30	E: 15% S: 35% G: 50%
Vigeo Eiris Sovereign Sustainability Ranking	Quantitative and Qualitative	Combines indicators measuring ESG risks and actions to mitigate these risks. Group of countries are established with regards to Human Development Index. Countries are scored against their group peers.	172	E: 33% S: 33% G: 33%
Inrate Country Rating	Qualitative	Combines an exclusion module and an ESG module. The exclusion module covers topics related to the institutional framework of a state (e.g.,human rights, democracy, governance and rule of law, and peace keeping, as well as the signatory status of major international conventions concerning labor, human rights and the environment, etc.). ESG score reflects the performance of ESG module.	54	E: 25% S: 25% G: 50%

Source: Authors' elaboration.

The cross-analysis of these methodologies yields the following key findings:

→ Data sources: variety and combination for a wide coverage of indicators

- All providers use a significant number of datapoints, ranging from 30 to 220, indicating the myriad aspects of ESG performance for countries.
- Providers rely on a wide array of data sources: from publicly available sources such as the World Bank or the World Economic Forum (type A) to NGOs and academic research (type B) and some private data providers that cover specific topics (e.g., Enerdata, etc.). This combination of various sources broadens the scope of topics covered.
- Several sources use these data in combination with internal research data. That is, country analysts complete insights or eventual gaps on data.

→ Materiality choices are determinant and can lead to diverse results.

- In the absence of ESG materiality standards, many providers use qualitative assessments in addition to quantitative data and have developed in-house ESG materiality frameworks.
- To quantify ESG risks, most providers aggregate the raw data into several sub-indicators, capturing specific aspects of E, S, and G factors. Materiality influences the choice of what to capture and the weight assigned to each indicator and pillar. Those choices depend on the ESG approach: values-based organizations tend to consider a wide range of stakeholders and therefore define materiality as externality, while value-based investing defines materiality as focusing on shareholders and in terms of long-term financial returns (Eccles and Strohele, 2018). Vigeo Eiris, ISS-oekom are examples of a values-based model, with a more holistic view of sustainability. Value-based models include MSCI (financial governance is a key component of the model: "ESG sovereign risk cannot be isolated from a country's basic fiscal conditions"), or Beyond Ratings ("ESG factors chosen as per their capacity of impacting GDP"). Some models, such as Sustainalytics or RobecoSAM, display hybrid forms.

→ Exposure to risks matters, as does the ability to manage them.

- Some providers choose to distinguish between ESG risk exposure and the government's ability to manage these risks (sometimes captured in economic financial and fiscal indicators).

- The use of a complementary qualitative assessment (for 4 out of 7) and the integration of controversies (for 2) differentiates some providers from others that rely on pure quantitative models (3 out of 7).

→ ESG factors are always completed by macroeconomic data essential in sovereign ESG assessments.

- All seven methodologies include financial and economic data.

→ Providers do not usually engage with sovereigns.[26]

- For most ESG data/research providers, engagement with sovereigns is not a regular activity. However, it occurs occasionally, and for five of them, engagement with sovereigns appears likely to increase in the coming years. The ESG firms pointed to the pivotal role of CRAs, which already engage on credit rating processes, and which may be extended in the future to include sustainability issues.

Verisk Maplecroft differs slightly from its peers. Given the focus of their research—country and political risk—they engage with the sovereign (economy, energy, production, presidency, members of congress), around four times per year. In the LAC region, they focus on social issues (e.g., engagement with communities on extractive industries) and on some environmental issues (e.g., water management and resource policies). "The need to engage with governments increases the understanding of [their] intentions, ambitions, aims, which may not always succeed in becoming policy, but which point to the direction in which a state actor and social sentiment would like to head."[27]

ESG firms engage with the sovereign when assessing sovereign thematic bonds. Vigeo Eiris, for example, offers both consulting/advisory services (including second-party opinions (SPO) on thematic bonds) and ESG rating services. Both activities are separated by Chinese walls to avoid conflicts of interest and ensure independent reviews. Nevertheless, while they would not engage with a country when performing the country's ESG rating, they would do so when providing their SPO on a sovereign green or social bond.

[26] The analysis is based on responses from six providers obtaining during the exchanges. The views reflect feedback from ISS-oekom, MSCI, RepRisk, RobecoSAM, Verisk Maplecroft, and Vigeo Eiris.

[27] Jimena Blanco, Research Director and Head of Risk Insights Americas - Verisk Maplecroft

Credit Risk Analysis Integrating ESG Factors: The CRA ESG Approach toward Sovereigns

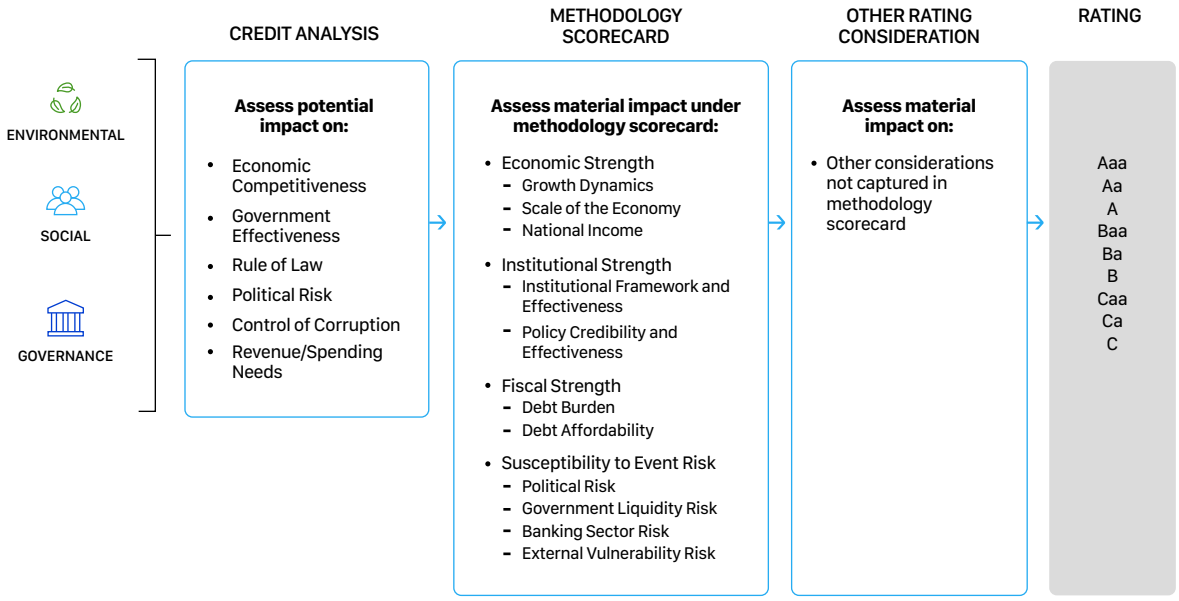
ESG factors are increasingly integrated into credit risk analysis. Certain ESG factors are being perceived as financially material, and ESG integration is becoming mainstream. The ESG analysis currently conducted by CRAs does not directly impact sovereign credit ratings. Saying that "ESG factors are captured directly or indirectly in sovereign credit analysis" (Moody's) is not the same as being effectively integrated. Since 2016, a certain number of CRAs committed to look at ESG considerations in a systematic and transparent way (refer to the PRI Statement on ESG in Credit Ratings[28]). CRAs recognize that ESG risks relate to rating factors, but it is normally as a complement to understanding their impact on the creditworthiness of the sovereign. This is why ESG integration into credit assessment is still in its infancy. ESG factors are observed within the formal credit rating process, but are not yet a variable in the rating development a priori. The following are examples of the three largest CRAs' approach to ESG in sovereign ratings.

Moody's: Governance Factors Have the Most Direct Impact

> Moody's primary focus is to assess the incremental credit risk associated with ESG on a government's willingness and ability to repay its debt. Our global sovereign rating methodology is based on four key factors: a country's economic strength, institutional strength, government fiscal strength, and susceptibility to event risk. While it is rarely possible to identify the precise impact of E, S and G risks on a particular sovereign's rating, those risks are embedded in our assessment (Moody's, 2018).

[28] Moody's was a founding signatory of the PRI statement in May 2016: https://www.unpri.org/credit-ratings/statement-on-esg-in-credit-ratings/77.article.

Figure 11. Illustration of ESG Considerations Captured in Sovereign Credit Ratings



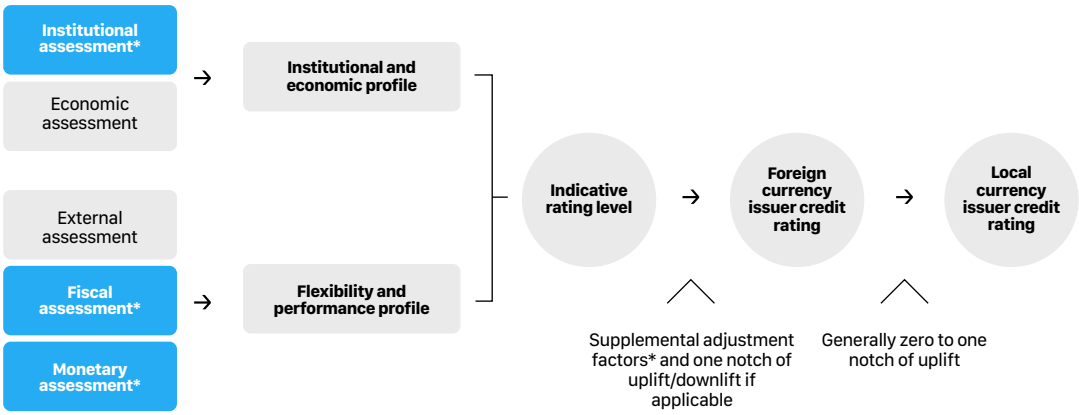
Source: Moody's (2019).
Note: The information in this exhibit is not exhaustive.

Governance factors are recognized as "directly and very closed linked to institutional strength." Nevertheless, Moody's stresses the importance of understanding the interrelationships of these three dimensions and recognizes that there are numerous examples of sovereigns whose credit profiles were indirectly influenced by (i) environmental considerations. "The economic and fiscal impact of droughts resulting from weather phenomena such as El Niño and La Niña can be seen all over the globe, from South Africa (Baa3 stable) to Peru (A3 stable). (…) Hurricanes regularly result in lost economic output in many Caribbean islands. In each case, the impact on medium-term growth influences to some extent our assessment of economic strength;" or (ii) social issues." [In Chile] the emergence of an affluent middle class with higher expectations for public services has imposed strains on public finances."

S&P: Potential Risks from Natural Disasters Have Started Being Reflected in Emerging Market Sovereign Ratings

S&P reviews sovereign ratings against certain ESG factors able to have an impact on their traditional sovereign criteria framework. It most visibly considers ESG factors in the context of the institutional assessment (S&P's Methodology note, 2018).

Figure 12. S&P Sovereign Criteria Framework



*Categories most likely to include consideration of environmental, social and governance credit factors.
Source: S&P website.

The institutional assessment is informed by indicators such as the transparency and accountability of institutions and social factors, mainly as they relate to the cohesiveness of civil society (e.g., social mobility, social inclusion, the prevalence of civic organizations, degree of social order, and the capacity of political institutions to respond to societal priorities). Furthermore, S&P analysis says that while environmental factors pose a limited direct risk to the sovereign ratings of advanced economies, many emerging market sovereign ratings already reflect potential risks arising from future natural disasters (especially those in the Caribbean, Southeast Asia, and Sub-Saharan Africa). Therefore, "our economic assessment includes a potential adjustment for volatility in economic output, which is often caused by constant exposure to natural disasters or adverse weather conditions.

The cost of natural disasters can also affect our fiscal assessment (through the impact on tax revenues and spending pressures), and our external assessment (through a sudden loss of exports). "S&P's assessment looks at environmental opportunities such as "the potential for environmentally friendly policies to favorably affect sovereign creditworthiness by reducing risks."

Fitch Ratings: ESG Elements Have Greater Impact in Emerging Markets than Developed Markets

In April 2019, Fitch Ratings issued a special report describing its latest approach to ESG in sovereign credit risk analysis entitled What Investors Want to Know: ESG Relevance Scores for Sovereigns. According to the report:

> The ESG Relevance Scores do not make value judgments on whether a sovereign engages in good or bad ESG practices. So, they are not an assessment of it as a ranking of the quality of its standards of governance. Instead, they draw out which E, S, and G risk elements are influencing the credit rating decision (Fitch Ratings, XXXX: XX)

Fitch's Sovereign Group and its newly formed Global Sustainable Finance Group jointly created 15 General Issue ESG categories for consideration by their sovereign analysts (Figure 13).

Figure 13. Fitch Sovereign Group General Issue ESG Categories

ENVIRONMENTAL (E)	SOCIAL (S)	GOVERNANCE (G)
GHG Emissions and Air Quality	Human Rights and Political Freedoms	Political Stability and Rights
Energy Management	Human Development, Health and Education	Rule of Law, Institutional & Regulatory Quality, Control of Corruption
Water Resources and Management	Employment and Income Equality	International Relations and Trade
Natural Disasters and Climate Change	Public Safety and Security	Creditors Rights
	Demographic Trends	Data Quality and Transparency

Source: Fitch Ratings (2019).

Each of the 15 ESG indicators is scored on a credit relevance scale of 1–5 by the credit analysts, with 5 the most relevant to the rating. Scores 1 and 2 signify no current influence of the ESG issue on the sovereign's current rating. This attribution reflects the different materiality level of each indicator to the ESG "final rating," used for purposes of fundamental credit analysis only.[29]

Based on the analysis of 118 Fitch-rated sovereigns, they were able to make the following observations:

- E, S, or G factors are affecting the ratings of every single sovereign at least one of the highest levels of 5 (with predominance of G factors).
- For emerging markets, a somewhat greater number of individual ESG elements are relevant to the ratings: 12.1 percent of ESG elements are assigned a score of 3 or more (3 means that ESG issues are relevant to the sovereign but only affect it indirectly or in combination with other factors), while for developed markets, only 6.5 percent of ESG elements are assigned a score of 3 or more.

With this, Fitch Ratings aims at increasing transparency in how ESG factors intersect sovereign risk factors with improved granularity.

Box 5. An Alternative Analysis: Beyond Ratings: ESG-Augmented Credit Risk Score for Countries

Beyond Ratings Sovereign Risk Monitor,[30] or Country ESG-augmented credit risk score, is a pure quantitative scoring model built to provide a comprehensive credit risk analysis including traditional economic and financial indicators as well as ESG indicators. It is available for 146 developed and emerging market sovereign issuers.

The aggregate quantitative country score consists of two equally weighted profiles—an Economic and Financial profile and a Sustainability profile. The Sustainability profile scoring applies the following weights: Environment (30 percent), Social (30 percent), and Governance (40 percent). A total of 68 indicators are currently employed in the model. The sustainability profile component is meant to be part of the final credit rating, providing a first attempt at an effective ESG incorporation into credit rating.

However, this is not a credit rating, but rather an ESG-augmented credit risk score, as Beyond Ratings is not a regulated credit rating agency.[31] Beyond Ratings received ESMA certification to operate as a CRA. However, following its acquisition by LSEG, it never operated as one, and thus the model does not comply with the CRAs' strict rules (i.e., to have qualitative assessment, or regulatory supervision). Still, the initiative was a first attempt at formally integrating ESG factors into a credit rating.

[29] Fitch Ratings claims to be the only CRA to provide and opinion of how ESG are relevant and material to actual credit rating decisions. One of the latest effort to improve market transparency while satisfying investors' demand for more thorough and robust reporting on how ESG affects credit risk.

[30] https://beyond-ratings.com/analytics/sovereign-credit-risk-scores/.

[31] Beyond Rating received ESMA certification to operate as a credit rating agency but following integration in LSEG never operated as one.

ESG Indices (benchmarks)

ESG indices are a combination of ESG scores computed with indexing rules. Following the ESG investing trend, passive managers[32] and ETF experts have been developing new and innovative ESG indices, mostly on the equities side. An example is the S&P ESG Pan-Europe Developed Sovereign Bond Index,[33] a benchmark assessing the carbon emissions of sovereign bonds. However, for the emerging market space, only one has been identified to date.

J.P. Morgan ESG EMBI Global Diversified Index: The First of its Kind in the Emerging Market Sovereign Space

In 2018, J.P. Morgan collaborated with BlackRock to launch a new suite of indices: the J.P. Morgan ESG Index (JESG), including the emerging market series (JESG EMBI). The indices integrate countries' scoring on ESG factors, as well as their commitment to the 10 principles identified under the UN Global Compact. They are based on the emerging markets bond suite of indices (EMBI)[34] such as the EMBI Global Diversified,[35] but reset the underlying investment universe by reweighting country exposures according to their ESG score. The ESG scoring methodology developed with BlackRock is a collaboration with Sustainalytics and RepRisk. Instruments identified as "green/climate bonds" certified by the Climate Bonds Initiative (CBI) receive an upgrade.

There are very few examples of ESG ETFs for sovereigns. The only three sovereign ESG ETFs found at the time of drafting this report are from DWS, UBS, and BlackRock funds—all using the J.P. Morgan ESG EMBI Global Diversified Index.[36] ESG benchmarks are helping to attract passive managers to some form of ESG investing.

[32] Passive management is opposite of active management. It consists of the process of hand-selecting securities in an attempt to outperform a benchmark index. Active portfolio managers use economic data, investment research, market forecasts, and other indicators to help make investment decisions.

[33] Launched in 2015, it was the first in the family of S&Ps sustainability sovereign bond indices (it only covers DM countries). More information available at:
https://eu.spindices.com/indices/fixed-income/sp-esg-pan-europe-developed-sovereign-bond-index#overview

[34] Among the most popular EM bond indexes, The J.P. Morgan EMBI was formed in the early 1990s after the issuance of the first Brady bond and has become the most widely published and referenced index of its kind.

[35] The EMBI Global Diversified limits the weights of countries with larger debt stocks by only including a specified portion of these countries' eligible current face amounts of debt outstanding. The large markets are weighted lower, and the small markets are weighted higher than in the EMBI Global Index.

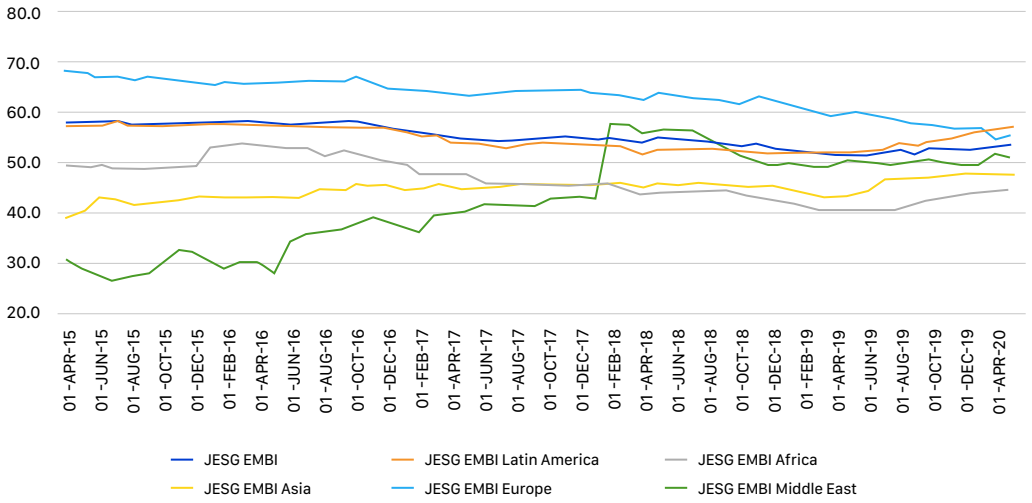
[36] More details about the J.P. Morgan ESG EMBI Global Diversified Index can be found at:
https://www.jpmorgan.com/country/FR/en/detail/1320566638713

For countries, as ESG-themed passive investing will keep growing, their weight in such indices is important to monitor. These types of products are based on best-in-class approaches which are quite restrictive, do not necessarily take into account a country's momentum, and may penalize countries facing challenges but going in the right direction. This particular flaw was mentioned in almost all interviews conducted for this report. Regardless, all investors interviewed agree that the benefits outweighed the challenges and that these products will definitely contribute to the growth of ESG investing.

JESG Benchmark in the LAC Region: A Positive Communication Tool for Countries to Communicate with International Investors

As shown in Figure 14, the JSEG Index LATAM, consisting of 22 countries,[37] follows overall the JSEG EMBI and outperforms other emerging markets such as Asia.

Figure 14. J.P. Morgan ESG Index



Source: J.P. Morgan (2020).

[37] Argentina, Belize, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay, and Venezuela.

Good ESG Performance Can Be an Attractive Way to Engage with Investors

Uruguay made the following statement in its quarterly Sovereign Debt Report in July 2019 (Ministry of Finance of Uruguay, 2019):

> Uruguay has the third-highest weight in the JESG EMBI Index, a sovereign dollar bond benchmark that factors in countries' performance on ESG indicators. Investors are actively integrating Environmental, Social and Governance (ESG) factors and responsible investing in their overall fixed income investment strategies. Environmental factors can include, for example, greenhouse gas emissions, fossil fuel usage and renewable energy development. Social factors may include gender equality, wealth distribution and perception of corruption, while Governance factors cover indicators such as political stability, rule of law and judiciary independence. Factoring in ESG into sovereign risk analysis thus adds a holistic and long-term perspective on sustainable and responsible investment.
>
> Reflecting the increasingly important role of ESG metrics as drivers of capital allocation decisions, in mid-2018 J.P. Morgan launched its ESG Index suite of indices (JESG). The JESG EMBI integrates in a composite benchmark each countries' scoring on environmental, social, and governance factors, as well as their commitment to the ten principles identified under the UN Global Compact. The indices are baselined to the EMBI suite of indices (such as the EMBI Global Diversified) but reset the underlying investment universe by reweighting country exposures according to their ESG score (as calculated by external scoring providers). As of July 30, 2019, Uruguay has the third-largest country weighting (4.1 percent) in the JESG EMBI, which is approximately 62 percent higher than its weight in the baseline EMBI Global Diversified Index. This reflects Uruguay's leading ESG practices and sustainability commitments. For instance, wind energy production in Uruguay reached its historical maximum in 2018, with 97 percent of electricity generation coming from renewable sources. For further information, see the "Recent Developments" section in the Uruguay in Focus report.

Other Products

Other products related to ESG sovereign performance are available and have been developed recently. For example, SPOs on Green, Social and other Sustainable Bonds are available both for corporate and sovereign issuers. These services are mostly provided by ESG data specialists such as Vigeo Eiris, Sustainalytics, CICERO and ISS ESG and many others.[38]

[38] Although the top four deal reviewers are Sustainalytics, Cicero, Vigeo Eiris, and ISS EGS, many other players offer external reviews of thematic bonds. Providers range from CRAs (S&P, Moody's, KBRA, etc.), to large consulting companies (Deloitte, EY, KMPG, PwC), to smaller actors. (Environmental Finance, 2020)

SPOs provide external assessments of the sustainability of the issuance and the issuer. These external assessments are independent and publicly available on the websites of both the SPO provider and the issuer.

Lastly, almost all ESG firms and the three largest CRAs (Fitch Ratings, Moody's, and S&P) are producing ESG country reports on demand. These reports can be focused on an individual country or group of countries, for a given period of time, against several or a single E, S, or G-related factors or events. "Social Issues in Chile (Moody's)," "ESG relevance scores in LAC region (Fitch Ratings)," and "Climate Physical Risks in Five Countries of LAC (427mt)" are examples.

4.3. Key Findings

The following are the key findings of this section:

- ESG data for sovereigns come from diverse sources and present specific challenges. But the same datasets are the basis for most ESG products externally developed by ESG firms or index providers or internally developed by investors. ESG data are increasingly being made available to the public. Countries should start building capacity to understand the data because governments could play a key role in the improvement of the availability, quality, and comparability of ESG data at the national level. The World Bank ESG data portal may be a good place to start.

- ESG products for sovereigns are based on a variety of approaches and materiality considerations, leading to quite different results. Such diversity should not deter public issuers from starting to understand these products. For this, engaging whenever possible with the providers is a good strategy: ESG firms during an SPO, index providers, and others.

- Credit rating agencies are entering the debate on ESG integration for sovereign debt. As the communication framework with those CRAs is well established, it should be easy to start engaging with CRAs on ESG matters. Countries will benefit from starting the dialogue as soon as possible so that they can participate in the debate.

- Countries will always benefit from engaging with ESG data and product providers to provide them with forward-looking analysis.

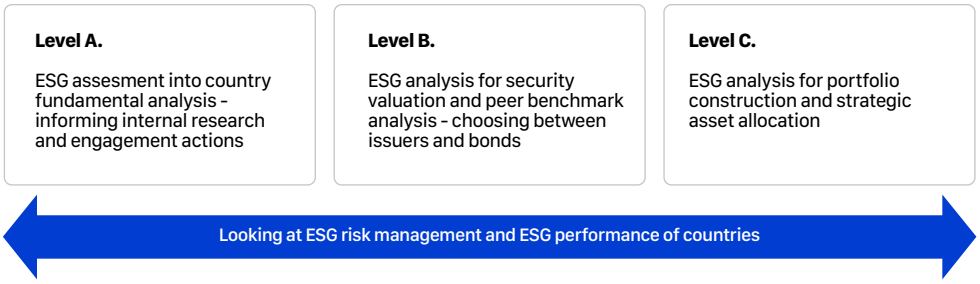
PART 5

Investor Cases

A growing number of investors have been developing internal ESG expertise by setting up new teams dedicated to responsible investment, adhering to the UN PRI, implementing responsible investment policies, and engaging Board members and committees to oversee ESG issues. ESG integration in equities portfolios is now mature and is growing for fixed income portfolios. However, it is only beginning for sovereign debt portfolios, which present specific challenges to investors. The question of data, the fundamental questions on materiality for ESG factors on sovereign debt, and the challenges faced by ESG product providers also impact investors.

This section presents the results of desk review and interviews with five investors: BlueBay Asset Management, PIMCO, Global Evolution, CDPQ, and PGGM. For more case studies on how investors integrate ESG factors in their investment strategies, see UN PRI's "A Practical Guide to ESG Integration into Sovereign Debt." Investors can integrate ESG factors into their analysis of sovereign debt at three levels, from basic to sophisticated.

Figure 15. Levels of Analysis of Sovereign Debt where ESG Factors Can Be Incorporated



Source: Adapted by the authors from PRI (2019).

5.1. (Level A) The Research Level: Integrating ESG Assessment into Country Credit Analysis

Some investors are integrating ESG analysis into fundamental country credit analysis and developing their own proprietary ESG materiality frameworks. They begin with internal ESG research—in-depth and bottom-up country analysis based on macroeconomic and ESG data considered likely to affect security valuations.

In its elementary form, a materiality framework can be a list of ESG factors identified by the investor as potentially material, and thus needing to be reviewed, monitored, sometimes formally scored, and compared with the analysis of the financial strength of the issuer. Examples of tools and techniques supporting this framework include red-flag indicators, watch lists, and centralized research dashboards accessible across teams.

To address trajectory issues, it is essential to include forward-looking information. To do so, investors may either partially outsource macroeconomics and ESG data to external providers (e.g., CRAs, specialized ESG research providers, sell-side analysts, and political risk consultants). This group often bases its analysis on freely available issuer-reported data. Investors also build their own sovereigns' ESG data, via the insights and expertise of dedicated sovereign analysts (some teams have country specialists who analyze every issuer and security). Such research may also inform engagement.

5.2. (Level B) Choosing between Issuers and Bonds: Internal Credit Assessment and Relative Value/Spread Analysis

At the bond-picking level, material ESG factors are most often used to capture risk mispricing through adjustments of internal credit assessments. Even when a sovereign issuer has a solid balance sheet and attractive bond yields, investors may choose to downgrade its valuation if the ESG performance of the country is found unsatisfactory. Although ESG assessment of countries can be developed internally (e.g., the largest institutional investors with teams dedicated to socially responsible investing), they often use ESG data providers and their ESG scores, which can be easily integrated into their quantitative model.

ESG analysis can also be used in peer-benchmark analysis of yields, volatility, and risk. An investor may upgrade the security valuation of a country with better ESG profiles. Each country can be compared to peers, by taking each ESG score and analyzing it against respective sovereign credit spreads. This informs relative valuation but may also enable analysts to understand whether all of the risk factors are priced in (e.g., if there are deviations of actual credit spreads versus those implied by a regression model based on an ESG score or another kind of ESG performance assessment).

For example, a report from Hermès Investment Management in July 2019 concludes that "based on the strong relationship between ESG scores and sovereign CDS spreads, a sovereign pricing model for ESG risk has been derived. This model could be used by investors to identify countries with wide spreads and high ESG scores (outperformers), and those with tight spreads but poor ESG performance (underperformers), which might be exposed to more risk than traditional credit ratings imply."

5.3. (Level C) Building a Portfolio

In more robust ESG integration processes, the granular understanding of ESG risks at the security level directly influences portfolio construction. Investors can assign lower position limits to sovereigns based on a combination of credit quality, volatility, and vulnerability to certain risks, including those related to ESG factors. Risk management is a main driver for incorporating ESG issues into investment processes. ESG best-in-class methodologies are often used in portfolio construction. Some investors are looking at carbon risk exposure (accounting for the GHG emissions of a portfolio) as a proxy to adjust portfolio weightings to manage exposure to climate risks. As academic evidence has grown over time about the relationship between ESG performance and countries' funding cost, investors are increasingly incentivized to integrate ESG criteria into their portfolio allocation strategy (Blackrock Investment Institute, 2019).

5.4. Key Takeaways from the Interviews

Integration of geopolitical factors is essential in the credit risk assessment of sovereigns. The interviews revealed consensus about the importance of geopolitical factors when assessing sovereign risks. Country geopolitical features are also part of the equity investment process: even when there is no systematic ESG analysis of a country, country ESG features are being integrated into the equity and corporate credit investment process. This is the case of the institutional investor CDPQ, which captures some ESG sovereign risks through the assessment of underlying macro factors and geopolitical risks during the equities and corporate credit assessment. The largest investors combine ESG assessments/ESG data from external providers with their internal expertise. Investors integrating ESG factors into sovereign debt investment strategies recognize the need to use both public data sources (type A) and ESG product providers (types B and C).

Private sources of data are complementary to public sources, and their main advantage is the granularity of information provided, which is "only possible by passing through the quantitative data experts." Although widely used, investors also recognize the limitation of ESG scores. To do this in a robust way, they need to combine several types of providers (PIMCO). ESG scores are not always aligned with an investor's bespoke view on ESG.

Almost all institutional investors interviewed tend to have their bespoke views on ESG/sustainability and formal approaches to sovereign debt ESG analysis. They have been developing their own ESG materiality frameworks, while improving their overall ESG approach over the years. Some investors may prefer not to use ESG scores from external providers, but they usually use some sort of third-party provider of ESG data/ESG data analytics experts (e.g., Verisk Maplecroft,[39] a global risk analytics company specializing in ESG, climate, and political risk, which provides data and a risk index but not aggregate ESG scores).

In addition to a negative screening, a positive screening can also be put in place. For example, some investors choose to focus on indicators able to capture the ESG dynamics of countries to uplift their valuations. Global Evolution conducted extensive research and has discovered econometric evidence that there is a clear correlation between improving ESG dynamics and returns in emerging and frontier market sovereign bonds, with governance and human capital (education and health outcomes) being the most prevalent factors. Carmignac also emphasizes in their methodology the importance of a country's momentum on a specific ESG topic. On a country energy mix, a developed country having already a high percentage of renewable energy in its mix may score the same as an emerging country in the process of implementing an ambitious transition strategy. These findings highlight the importance of both looking at trends and evaluating the potential for improvement when it comes to ESG performance in emerging markets. For Global Evolution, the greatest gains are to be made there (driven by impact investing values, Global Evolution is seeking financial returns as well as impact in these markets).

While G has been the dominant factor to be integrated into sovereign debt analysis, E and S factor integration is expected to follow in the coming years. The ongoing COVID-19 crisis is calling attention to the materiality of social factors. Almost all ESG specialists have been closely following the impact of the coronavirus crisis on the market.

[39] Verisk Maplecroft is a global risk analytics company specializing in ESG, climate, and political risk data for leading institutional investors and corporations. They combine proprietary risk indices and datasets with expert research on countries. https://www.maplecroft.com/

Environmental integration is also receiving a lot of attention, along with the development of climate change strategies. Many asset owners have started to re-assess their investment policies in light of climate change risks and policies post-Paris COP21. The level of climate integration varies across regions, with Europe leading the way thanks to the strong policy support and directives from the European Commission.[40] This movement can be expected to develop further as standards develop. For several EU investors and asset managers, measuring the carbon footprint of portfolios is a common practice, while other forward-looking tools are starting to emerge. The development of climate assessments of sovereigns by asset managers has yet to take off, but some providers are already addressing this gap.

Box 6. The Case of Climate-Related Risks

There are three main types of climate-related risks, defined as follows:

Physical risks	Direct losses in bank/investment assets and insurances due to extreme weather events
Transition risks	Losses arising from abrupt transitions due to technological and/or regulatory changes
Liability risks	Potential risks associated with responsibilities due to compensation for financed activities

Source: Authors' elaboration/TCFD.

Climate is particularly relevant for sovereign investors who tend to have long-term horizons. They are the same horizons of materialization for many climate risks, such as sea level rise.

PGGM assesses the physical impacts of their investments in their real estate and equities portfolios, but not yet their sovereign portfolios. Blue Bay AM integrates both physical climate risks and transition risks in their country assessment using the Verisk Maplecroft climate risk index, which they complement with their own internal assessment. PIMCO's ESG integration process combines climate (physical and transitional vulnerability), biodiversity and natural capital issues. PIMCO launched its first climate bond strategy in 2019 and is committed to launching sustainability-themed and ESG-focused strategies to meet client demand (PIMCO, 2020).

[40] Examples are the EU Sustainable Action plan and recent progress on the EU Sustainability Taxonomy.

Asset managers with a strong focus on fixed-income and sovereign debt investing have active engagement policies with sovereigns as part of their traditional sovereign risk assessment. For these actors (e.g., PIMCO, Global Evolution, BlueBay), the relationship between sovereign analysts and government officials has been nurtured over the years. It takes several forms, directly through meetings and conferences with policymakers in the countries, and indirectly by interacting with the IMF and the World Bank, which are typically key advisors to the governments. Investors may also participate in road shows and presentations by governments. "Often, there is no quantifiable impact of such discussions, but there are clear signs that governments are interested in interacting with investors both at the conferences/road shows mentioned above, as well as during Spring Meetings and Annual Meetings in Washington, DC." (Global Evolution).

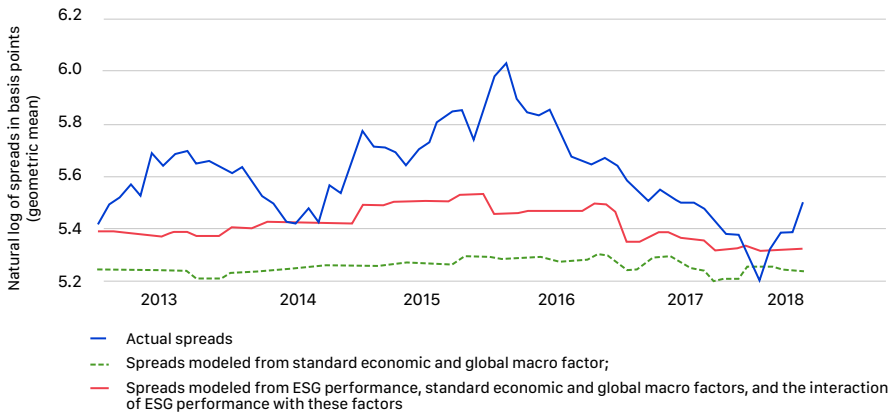
This engagement is considered to be extremely valuable for transparency purposes, such as when data are insufficient and unclear (BlueBay, PGGM, PIMCO). It can even open avenues to encourage governments to adopt better practices on a specific point (BlueBay, PIMCO). BlueBay and PIMCO place ESG engagement at the core of their ESG integration. They have developed internal expertise and are accustomed to interacting regularly with government officials. However, this is not a representative practice in the market. The vast majority of investors are still looking for a framework for engagement with States. Furthermore, as sovereigns show increasing interest in positioning themselves in the green bonds market, further engagement between investors and sovereign issuers can be expected moving forward. For more details, please see the development of the PRI Sovereign Working Group.[41]

Case Study 1. BlueBay AM: A Holistic ESG Approach

BlueBay believes that ESG factors can potentially have a material impact on an issuer's long-term financial performance. Their efforts to date have centered on working with their credit analysts to share ESG risk insights on an ongoing basis. In 2018, they implemented an issuer evaluation process to incorporate ESG risks more systematically into their fundamental credit analysis across investment teams. Research undertaken (in collaboration with Verisk Maplecroft), looking into ESG in sovereign debt investing found evidence that, all else being equal, better ESG performance is associated with lower spreads (Figure 16).

[41] PRI Sovereign Risk Group dedicated website

Figure 16. Relationship between ESG Performance and Spreads (in basis points)



*Sampled from countries in the JP Morgan EMBI Global Index, with index composition as of the period under study.
Source: Verisk Maplecroft (2019); J.P. Morgan (2019); Bloomberg (2018); macroeconomic data from various sources.

BlueBay's Sovereign ESG Evaluation Process

The issuer ESG evaluation framework generates two proprietary ESG metrics[42] (Figure 17):

- A Fundamental ESG (Risk) Rating indicates our view on the quality of management of material ESG risks/opportunities faced by the issuer. There can only be one Fundamental ESG Rating per issuer, that is, at the ticker level, across BlueBay. This Fundamental ESG Rating is co-owned by the credit analyst(s) and ESG team and is based on a mix of internal and external insights.

- An Investment ESG Score reflects an investment view on the extent to which the ESG factors are considered relevant/material to valuations. As this is assigned at the security/instrument level, there may be multiple Investment ESG Scores for a single issuer. This allows for different ESG investment materiality over varying time frames and risk-reward profiles. The Investment ESG Score is more dynamic than the Fundamental ESG (Risk) Rating and is expected to be updated more frequently.

[42] The two ESG metrics are integrated into our internal investment holdings and trade monitoring platforms, which enable investment teams to access this data along with conventional issuer credit metrics.

Figure 17. Summary of Issuer's ESG Evaluation Outputs

Fundamental ESG (Risk) Rating	(Indicative) Investment ESG Score	Description
Very high ESG risks	-3	Very high ESG investment related risks
	-2	High ESG investment related risks
High ESG risks	-1	Some ESG investment related risks
Medium ESG risks	0	ESG considerations are unlikely to have an impact
Low ESG risks	+1	Some investment opportunities as a result of ESG considerations
	+2	High investment opportunities as a result of ESG considerations
Very low ESG risks	+3	Very high investment opportunities as a result of ESG considerations

The issuer evaluation framework varies for corporate and sovereigns. However, both result in the same two proprietary ESG metrics:
- A Fundamental ESG (Risk) Rating (ESG Rating), which indicates our view on the quality of management of material ESG risk/opportunities faced by the issuer.
- And (Indicative) Investment ESG Score (ESG Score), which reflects our investment view on the extent to which ESG factors are considered relevant to valuations, as well as the nature of that materiality (i.e., positive, negative, neutral). It is decision based and security/instrument specific.

Source: BlueBay Asset Management.

The sovereign ESG evaluation template has five components:

- **Part 1** captures insights from external ESG assessments. This provides a starting point from which to build an in-house view but does not dictate what that view should be.
- **Part 2** is a systematic evaluation of the sovereign, based on set topics within each environmental, social, and governance/political pillar. This seeks to assess the risk exposure and quality of the sovereign's mitigation/adaptation response.
- **Part 3** aims to provide a perspective on how well the sovereign is managing environmental, social, and governance/political factors relative to its economic peer group.
- **Part 4** documents the conclusions reached by both credit and ESG analysts in terms of the Fundamental ESG (Risk) Rating and the Investment ESG Score.
- **Part 5** notes potential engagement points with sovereigns and enables documentation of any that have occurred.

Ultimately, the issuer ESG evaluation process enables BlueBay's credit and ESG analysts to express their ESG views on an issuer before making an investment. The views can then be taken into account by portfolio managers when constructing their portfolios and making investment decisions. However, they are not prescriptive, as there may be valid reasons for the portfolio managers to take a different investment position that is in opposition to the ESG signal.

BlueBay has purposely disaggregated the management of material ESG risks by the issuer from the investment materiality, which enables them to better understand the extent to which ESG risks are indeed investment-relevant and under which circumstances. They believe this level of transparency is particularly important in a fixed income environment, where the asset class operates differently than equity, and ESG factors play out in different ways. Such insights inform their wider knowledge and understanding of ESG fixed income dynamics, and ultimately enables them to make more informed investment decisions. This process is already generating value by formalizing ESG integration into fundamental credit research and investment decision-making processes, providing insights into ESG fixed income dynamics, and fostering ownership and accountability.

Box 7. Blue Bay AM: ESG Approach to National Development Banks and State-Owned Enterprises

Normally they are treated following the corporate issuer's ESG evaluation, and the state-owned nature is an element assessed mainly under the governance section. However, 100 percent state-owned companies tend to think more about their credit and ESG metrics relative to sovereigns than privately owned corporates. The ESG evaluation framework works along the same principles and approach as the sovereign discussed above.

PART 6

Leading by Example: Success Stories in Latin America and the Caribbean

6.1. FIRA's Long Journey to Become a Sustainability Champion in Mexico[43]

Established in 1954 by Mexico's federal government, Trust Funds for Rural Development (FIRA) is a second-tier development bank that offers credit and guarantees, training, technical assistance, and technology-transfer support to the agriculture, livestock, fishing, forestry, and agribusiness sectors in Mexico. Until 2012, FIRA did not use external sources of funding. But then it started working with multilateral organizations such as the French Development Agency (Agence Française de Développement, or AFD), the IDB, and later on the German state-owned investment and development bank, KfW. Those new partners began asking for sustainability information. That is how FIRA started a long journey that ended up making it one of the sustainability champions among financial institutions in Mexico. FIRA had been progressively integrating sustainability into its practices for years but it lacked formalization: most of its sustainable practices were not formally documented in policies and processes approved by their Board. All this work had to be done along with the gathering of all information into a single window.

FIRA had also started issuing debt in its domestic market. The issuance of its first green bond in May 2019 represented a turning point in the process of fully integrating ESG factors into its business model. In 2017, FIRA wanted to issue green bonds, but there was a lack of standards for the agriculture sector, specifically for the protected agricultural activities that FIRA wanted to finance through the issuance of a green bond. In collaboration with the IDB and outside experts, FIRA developed the methodology to evaluate the positive environmental impacts of protected agriculture. The Climate Bond Initiative (CBI) then adopted that methodology. FIRA issued the first CBI-certified green bond in the agriculture sector.[44] A few months later, it issued another green bond certified by CBI according to their new forestry criteria.[45]

During the thematic bonds roadshows, investors began to inquire about FIRA's ESG profile. The issuances and their innovative features also got the attention of international investors, but they needed more information to be able to integrate FIRA into their portfolios. As FIRA began investigating providers and methodologies, they realized that the first big step was the promotion and disclosure of their sustainability strategy and achievements.

[43] This section is based on an interview with Alberto Lara, Deputy CFO, FIRA.

[44] https://www.climatebonds.net/standard/protected-agriculture.

[45] https://www.climatebonds.net/resources/press-releases/2020/02/recibe-fira-la-primera-certificaci%C3%B3n-del-climate-bonds-initiative.

Thus began a huge internal project to create the FIRA ESG portal. Launched in October 2020, the portal received positive feedback from the investment community. In October 2020, FIRA was the first public development bank to issue a gender bond on the Mexican domestic market. FIRA had come far enough in the ESG space for some renowned international investors to include it in their investment universe, and the gender bond saw a few big names come back to the local Mexican market.

FIRA's pioneering experience can serve other public and non-public banks in Mexico, LAC, and globally. In Mexico, the move toward integration of ESG factors at the regulatory level has started. CONSAR, the Mexican regulatory entity for pension funds, recently announced that starting in April 2022, local pension funds (AFORES) will have to incorporate ESG factors into their methodologies and measurements. The details are still being developed, but FIRA's pioneering work may well provide them with a competitive edge.

6.2. Eletrobras: Green Bond Issuance as the Opportunity to Develop an ESG Rating

In 2020, the IDB, together with consulting firm SITAWI, were supporting Eletrobras to prepare their Green Bond Framework. Vigeo was contracted to provide an SPO on the Framework. An SPO assesses the issuance, including its sustainability and its compliance with international standards such as the International Capital Markets Association (ICMA) Green Bonds Principles. It also looks at the issuer's overall sustainability profile.

Vigeo's view on Eletrobras ESG profile did not coincide with the IDB's view of the institution's E&S performance. After discussions, Eletrobras realized that Vigeo was basing its evaluation on an assessment from 2018 when Vigeo had conducted a sectoral review. It appeared that the ESG assessment had been done only on publicly available information, which at the time did not provide a fair picture of Eletrobras' sustainable performance. Fortunately, this discovery coincided with Vigeo's 2020 review of its sectoral assessment. The IDB decided to support Eletrobras in the process, with the help of SITAWI. The results were striking: Eletrobras scored 67/100 on its Vigeo Eiris rating, while the previous score had been 30/100, which led the company to become first among utilities in the world and in the Top 39 from a universe of almost 5,000 companies covered. Eletrobras is now starting, with support from the IDB, the process to obtain a solicited rating from Vigeo. The solicited rating will allow Eletrobras to access its full ESG profile and to use it in its dialogue with investors and other external stakeholders.

For Eletrobras: participation in the evaluation and classification process of Vigeo Eiris, this year for the first time, demonstrated that Eletrobras' business practices, especially those related to ESG aspects, are well aligned with best market practices. It also allowed Eletrobras to identify areas of improvement, especially in transparency on ESG-related matters. Communicating in a transparent manner on business actions that contribute to the resilience and sustainability of socio-ecological systems, adding positive impacts to the planet, people, governance, and prosperity, is a key commitment for companies committed to the 2030 Agenda, such as Eletrobras.

For the IDB, the Eletrobras case indicated growing importance for investors of the ESG profile of the issuer vs. the sustainability of the issuance itself. Understanding the ESG firms' methodologies and processes is crucial for issuers. But even more crucial is the availability of the information. Because Eletrobras did not disclose much ESG information publicly, Vigeo could not assess them properly. Public issuers must work on showcasing their ESG performance.

For Sitawi, ESG ratings are becoming increasingly relevant for investors worldwide. Therefore, companies should look carefully to see how ESG rating agencies have assessed them. Investor relations departments should be aware of these ESG questionnaires and should be ready to answer them. Fortunately, Eletrobras was already covered by sustainability indexes such as DJSI and it was familiar with ESG methodologies, which helped them answer the Vigeo Eiris questionnaire and improve their ESG rating. Corporate ESG assessment may prove complex when the company is not properly advised on the importance of engaging with ESG rating agencies. It is important for SPO providers to warn the issuer about the corporate ESG rating or score they may have for the issuer already, even before the SPO is finalized.

6.3. Chile Thematic Bond Issuances: Historic Low Yields and Success in both Domestic and Global Markets[46]

Poland issued the first-ever sovereign green bond in December 2016. Chile issued the first sovereign green bond in LAC in June 2019. The first green bond issuance was the Chilean government's first encounter with the ESG investing world. The Ministry of Finance led the project, which began with a one-year period of internal capacity building involving other ministries (Environment, Transport). It included engagement with national and international institutions. Key stakeholders were the IDB, the Climate Bond Initiative, Vigeo Eiris, and several investment banks.

The SPO process had a steep learning curve. The Ministry of Finance had to coordinate other ministries to answer Vigeo's thorough SPO questionnaires. Vigeo raised several questions, from the regulatory requirements of public consultations for infrastructure projects to the legal framework for the protection of indigenous people's lands. Other smaller issues, such as the integration of E&S aspects in the bidding process for infrastructure projects, were also queried. The result was a success. Vigeo Eiris expressed the highest level of assurance on the contribution of the contemplated bonds to sustainable development (Vigeo Iris SPO). The bond was also certified under the Climate Bonds Standards.

"The first green bonds were issued in June 2019 (USD and EUR tranches). Both operations were very successful and allowed the Republic to achieve several milestones, including the lowest yields ever in both currencies (3.53 percent for the dollar-denominated and 0.58 percent for the euro-denominated bonds), low spreads (95 basis points over the U.S. Treasury rate for the dollar-denominated and record-low 50 basis points over the benchmark interbank rate for the euro-denominated bonds), record demand from global markets (12.8 times the amount offered for the dollar-denominated bonds and 4.7 times for the euro-denominated bonds), and an important broadening of Chile's investor base toward institutional investors with green mandates (totaled more than 460 accounts for both transactions)" (Vigeo Iris SPO).

[46] Interview with Patricio Sepulveda, head of the Debt Management Office, Ministry of Finance.

Table 3. Chile's Green Bond Issues

Date of Issue	Size	Tenor	Climate Bonds Sector Criteria
June 2019	US$1.418 billion	31 years	Solar Low-carbon transport Low-carbon buildings - upgrades Water infrastructure
July 2019	EUR 861 million (US$979 million)	12 years	Solar Low-carbon transport Low-carbon buildings - upgrades Water infrastructure
January 2020	EUR 693.685 million (US$764 million) tap of previous	11 years	Low-carbon transport
January 2020	US$900 million tap of previous	30 years	Low-carbon transport
January 2020	EUR 1.269 billion (US$1.398 billion)	20 years	Low-carbon transport
January 2020	US$750 million	12 years	Low-carbon transport

*As of March 2020.

The green bond issuance was an opportunity for Chile to engage with new ESG investors. They had questions about the country's general commitment to sustainability beyond the green bond itself, such as on mining activities, which were not part of the eligible use of proceeds of the bond. The certainty of the issuance allowed the government to initiate a dialogue with new and existing investors on new topics. One topic that emerged in most of the meetings was the government's commitment to report on the bond and to disclose ESG data.

Thanks to this first success and the establishment of a relationship with those new investors, Chile reissued green bonds in early 2020 and issued its first social bonds in November 2020. The social bonds were issued in local currency with simultaneous participation of non-residents that achieved a record in participation (48 percent). Local capital markets benefit from the development of ESG investing, and sovereign issuers have a crucial role to play in this development.

For Patricio Sepulveda, ministerial capacity building is key. Having dedicated staff to handle investor relations is crucial, especially to explore a new and rapidly evolving market such as ESG investing. The team consists of six people, full or part-time, dedicated to answer investor requests, including ESG matters.

The requests for information are demanding and exhaustive with respect to ESG disclosures and impact reporting obligations. One person, assigned to the topic within the Debt Management Office, coordinates with other institutions and local players. Significant coordination efforts were established between the Ministry of Finance and the Ministry of Environment to implement the project's selection process and reporting processes.

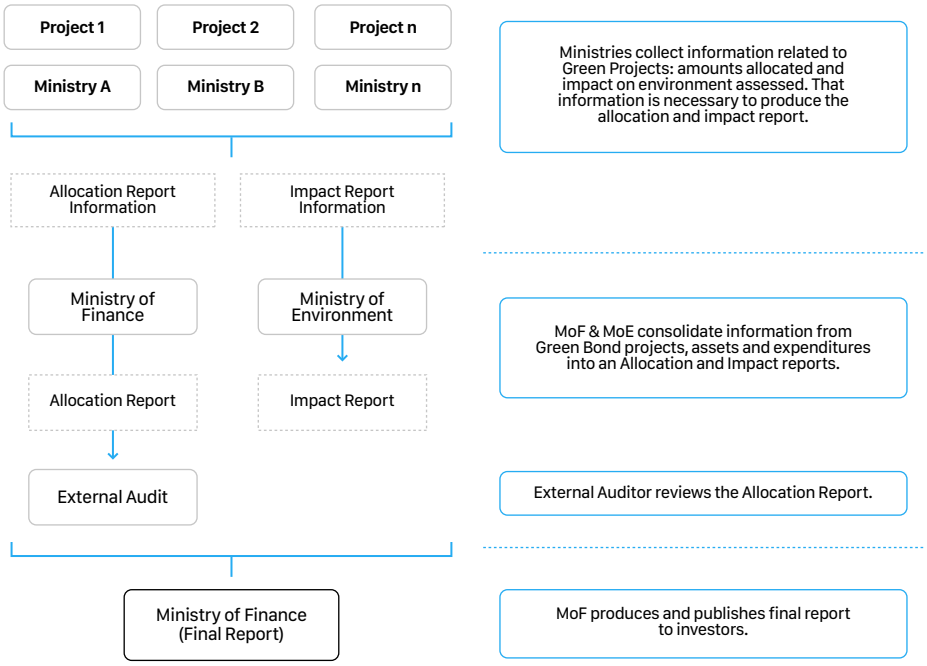
Commitment to reporting and transparency is necessary and requires resources. Chile followed the highest standards on the market with the CBI certification. "The Climate Bonds Standard and Certification Scheme is a labeling scheme for bonds and loans. Rigorous scientific criteria ensure that bonds and loans with Certification are consistent with the 2 degrees Celsius warming limit in the Paris Agreement."[47] The reporting obligations are demanding, and every year certification is subject to renewal to ensure that compliance with the CBI framework lasts over time. Also, a comprehensive set of information and reports are available at the dedicated page of the Ministry of Finance:[48] the eligible projects and use of proceeds are reported at the project level,[49] including all verification reports, frameworks, case studies, etc." Lastly, beyond inter-ministerial coordination, mobilizing and training the people at different ministries to support the reporting process is perhaps the biggest challenge of all: a very complex exercise!"

[47] Bond issuers, governments, investors, and financial markets use the scheme globally to prioritize investments which genuinely contribute to addressing climate change: https://www.climatebonds.net/standard

[48] Dedicated page to Green Bonds framework: https://www.hacienda.cl/english/public-debt-office/green-bonds.html

[49] The Project Portfolio of Chile's 2020 Green Bonds is available at: https://www.hacienda.cl/english/public-debt-office/green-bonds/2020/project-portfolio-of-chile-s-2020-green-358240.html

Figure 18. Chile Green Bond Framework - Reporting Process



Source: Ministry of Finance (2019).

PART 7

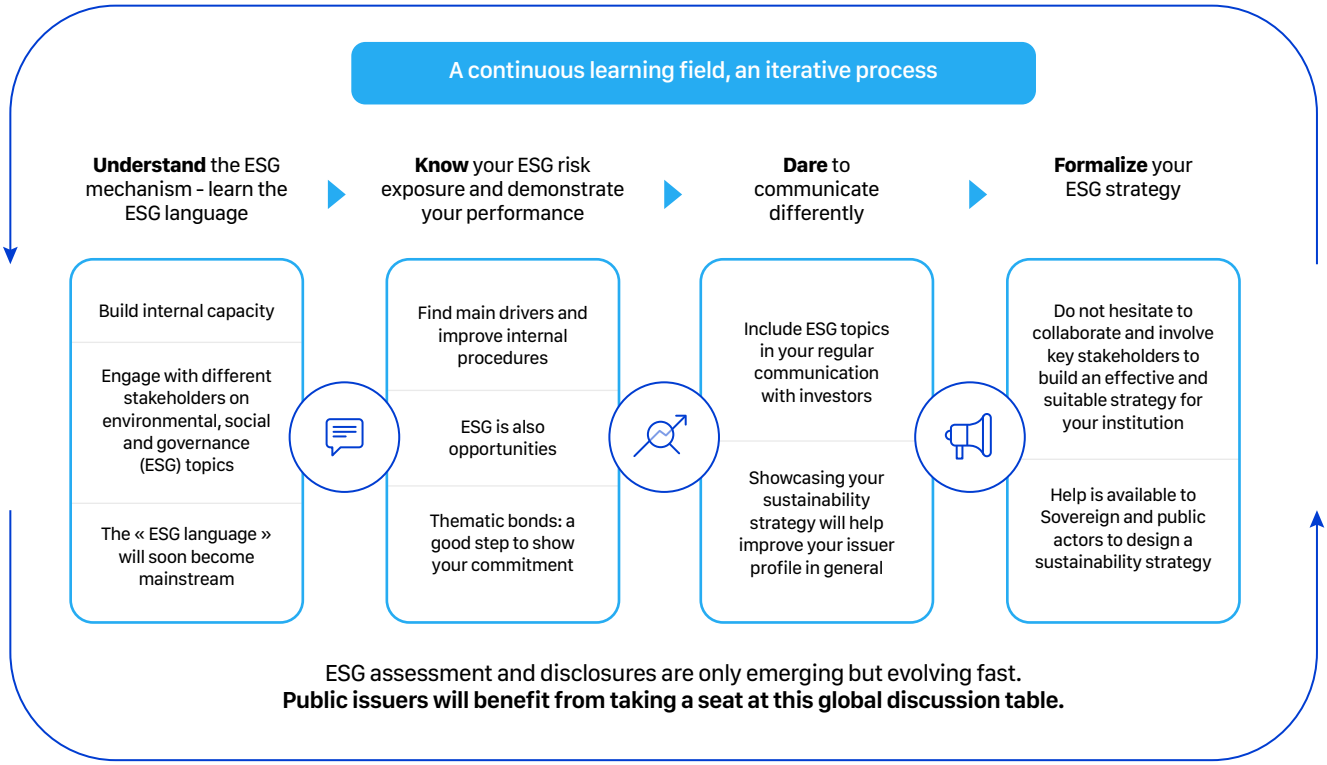
Recommendations for Issuers in Latin America and the Caribbean

There is now a strong business case for countries to consider their ESG profile. Increasingly, investors and asset managers integrate ESG into their decision-making processes due to risk-return considerations, their clients' demands, disclosure, and other regulatory aspects. ESG and sustainable finance are currently at the heart of major policy debates involving a wide range of stakeholders within the financial community—from CRAs to investors and ESG specialists—but also regulatory and supervisory bodies, governments, the scientific community, and academia.

Although an increasing number of investors have ESG investing strategies and responsible investment policies in place, ESG factors have been integrated into decision making mostly about equity portfolios rather than fixed income investments. Few investors, even among the responsible investment community, have a systemic approach to ESG integration in their sovereign debt portfolio.

This situation is rapidly evolving. Investors implementing consistent ESG integration throughout their portfolio are starting to apply ESG considerations to address sovereign bonds. CRAs are increasingly integrating ESG factors in their credit rating methodologies, and ESG profiles are increasingly assessed in green and social bonds markets where sovereign and sub-sovereign bond issuances represent more than half of the outstanding issued volume. Investors are likely to award a premium to first movers in the ESG space, and emerging economies can leapfrog developed economies in this field. Figure 19 provides a synopsis of the recommendations on engaging with ESG sovereign investing.

Figure 19. Recommendations on Engaging with ESG Sovereign Investing



Source: Authors' elaboration.

7.1. Understand the ESG Mechanisms: Learn the ESG Language, Build Internal Capacity

Emerging economies have a natural interest in gaining in-depth understanding of the methodologies upon which third-party ESG provider assess their sustainability attractiveness, especially in the absence of a global standard. Treasury departments or debt management offices should develop specific in-house expertise to interact with the main data providers and to play an active role in determining how industry standards develop. Sovereigns are the main primary data providers, while ESG profile providers compile data from several sources.

It is important to engage with different stakeholders on ESG topics, even if there is no one-ESG-fits-all. It should come as no surprise if, when engaging with different types of stakeholders, their points of interest and sensibilities vary significantly. Financial markets will eventually settle on ESG standards and common taxonomies. In the meantime, countries, NDBs, and SOEs can play a crucial role in defining such standards.

Box 8. ESG Resources

Must-follow initiatives:

UN PRI Sovereign initiative to facilitate the incorporation of ESG factors in sovereign debt analysis and inform engagement on ESG topics with sovereigns and other country stakeholders.
https://www.unpri.org/investment-tools/fixed-income/sovereign-debt

UN PRI - ESG in Credit Risk and Ratings Initiative: to enhance the transparent and systematic integration of ESG factors in credit risk analysis. The PRI is facilitating a dialogue between CRAs and investors to cultivate a common language, discuss ESG risks to creditworthiness, and bridge disconnects.
https://www.unpri.org/investment-tools/fixed-income/credit-risk-and-ratings

Must-read publications:

- Engaging with Investors on Environmental, Social, and Governance (ESG) Issues: A World Bank Guide for Sovereign Debt Managers (Hussain, 2020)
- Riding the Wave: Navigating the ESG Landscape for Sovereign Debt Managers (Boitreaud, Gratcheva, Gurhy, et al., 2020)
- Sovereign Investor Relations: From Principles to Practice (Knight and Northfield, 2020)
- OECD Business and Finance Outlook 2020: Sustainable and Resilient Finance (OECD, 2020)

Recommendations for countries on corporate governance practices that can leverage and promote ESG-related disclosures within each national jurisdiction:

- Guidelines on Corporate Governance of State-Owned Enterprises (OECD, 2015)
- OECD Guidelines for Multinational Enterprises, 2011 Update (OECD, 2011)

For relevant academic works on the impact of ESG factors on credit risk and financial performance see Annex I.

7.2. ESG Performance Is a Combination of Risk Exposure and Risk Management: Know Your Risks and Demonstrate Your Performance

Once familiarized with the raw data available and the main existing methodologies and products, countries can showcase their strengths and the strategies they are implementing to mitigate risks. Investors value the momentum. For example, investors characterize climate change and biodiversity losses as the main forward-looking risks (WEF, 2020). Countries with the capacity and willingness to preserve them can benefit from a higher ESG profile. With regard to climate change-related physical risks, while risk exposure might lie beyond a government's scope of action, efficient risk mitigation policies can lessen the impacts when the risk materializes. Investors will positively receive countries that take the lead to disclose a TCFD-like report at the national level, for example, or SDG achievement levels. There are many ways to demonstrate commitment. Issuing a thematic bond can be a valued first step. Development banks have developed many approaches to support mitigation policies, including climate change market risk transfer schemes. Recently, the IDB and the AFD launched the Natural Capital Lab to catalyze innovative ways to efficiently and sustainably put LAC's natural capital ecosystem services at the service of the region. Good results on the ESG front must be promoted: integration into an index, or positive rebalancing in the ESG version of an index, strong performance on a solicited ESG rating from an ESG firm, and others.

7.3. Dare to Communicate Differently: Engage with Investors on ESG-Related Matters

With respect to economic and financial metrics, investors are reassured if they know that issuers are properly identifying and managing ESG-related risks. Public issuers developing a proactive stance in this area will benefit from a competitive edge. This increased transparency should involve public officials beyond financial experts. For sovereign issuers, for example, investors welcome the ability to engage with representative from the agriculture, environment, transport, or energy ministries during roadshows or at international finance events.

Engagement not only benefits investors; dialogue will also allow public issuers to better understand investors' concerns, methodologies, and logic and to address potential misconceptions. It will strengthen long-term relationships and may even create opportunities by allowing issuers to explore new capital opportunities to fund SDG-related commitments. Thematic bond roadshows are a good way to start engaging in this new way. More traditional rendez-vous with investors, such as presentations of fiscal plans, can also be a good channel to start including ESG-related topics in the dialogue with investors.

Because the topic is growing in importance, there are now some initiatives that can be a good opportunity to start engaging. The World Bank is organizing ad-hoc meetings with DMOs on ESG- related matters. The IDB-led LAC Debt Group is another forum to engage on the matter. The Emerging Markets Investors Alliance is also a dedicated forum. NDBs and SOEs are important actors in this dialogue. Investors value discussions with SOEs, as they often impact the country fiscal situation (in revenues and costs), and NDBs are often mandated to implement part of the country sustainability agenda.

7.4. Develop and Communicate a Clear Sustainability Strategy

For sovereign issuers, developing and communicating a national sustainability strategy aligned with the SDG framework and nationally determined contributions is essential to channel climate and sustainable investments. By showcasing a clear sustainability strategy, countries can demonstrate how they intend to reach sustainable development and climate goals over time. This ongoing process requires constant dialogue with key stakeholders in the country. Cross-cutting initiatives among ministries to build sustainability capacities (planning, designing, investing, monitoring, and reporting) facilitate this process. Investors benefit from clear standardized, harmonized, and consistent data on ESG aspects of national economies. International financial institutions and other relevant actors have developed tools to support the development of a holistic sustainability agenda and related monitoring, reporting, and verification processes.

For public entities in general, communicating clearly on their sustainability commitments and regularly on their progress in achieving sustainability targets is key. Support for such communication can vary, from an annual sustainability report to a sustainability portal.

- Formalizing a sustainability strategy is not a quick or easy process. Start with what exists (for countries: existing policies, SDG and NDC commitments; for NDBs and SOEs: sustainability strategy, E&S policies and E&S risks management systems, sustainable reports, green and social bonds frameworks, etc.) and build upon it.
- Involve key stakeholders to build effective sustainability strategies.
- Seek assistance: many international institutions such as the IDB have developed programs and tools to accompany public issuers on their journey.
- For countries, use the SDGs and/or the Paris Agreement, which are the most common sustainability frameworks.
- Communicate through the roadmap because investors value momentum.

The world of ESG performance for public debt issuers is nascent and still lack structure. Some investors are already calling for global standards, but the principles are set, and a wait-and-see strategy from issuers may not pay off. Investors care about ESG performance but also closely watch momentum. The incentive to consider these aspects and to be among the first adopters has never been stronger for public debt issuers.

Annex 1. Academic Literature Review Table

Year	Author(s)	Title	Main findings
1996	Erb, C., C. Harvey, and T. Viskanta.	The Influence of Political, Economic, And Financial Risk on Expected Equity Returns	• Country risk measures are correlated with future equity returns. • Country risk measures are highly correlated with country equity valuations.
1996	Erb, C., C. Harvey, and T. Viskanta.	The Influence of Political, Economic, And Financial Risk on Expected Fixed Income Returns	• Country risk measures are significantly correlated with international bond metrics, such as real yields. • Political risk is an important determinant for countries' overall risk premium.
1998	Haque et al. IMF working paper	The Relative Importance of Political and Economic Variables in Creditworthiness Ratings	• Including political events improves the explanatory power of regressions of credit ratings using economic and political variables.
2003	Ciocchini, F., E. Durbin, and D. Ng.	Does Corruption Increase Emerging Market Bond Spreads?	• Countries that are perceived as more corrupt pay a higher risk premium when issuing bonds. • The global bond market assigns a significant cost to corruption. An improvement in the corruption score from the level of Lithuania to that of the Czech Republic lowers the bond spread by about one-fifth.
2003	Glennerster, R. and S. Yongseok. IMF Working Paper	Is Transparency Good For You and Can the IMF Help?	• Transparency reforms promoted by the IMF have created more informed markets and reduced borrowing costs for emerging market countries that volunteered for them. • The effects are stronger for countries with initially low transparency.
2006	Cady, J. and A. Pellecchio	Sovereign Borrowing Cost and the IMF's Data Standards Initiatives	• Subscribing to the Special Data Dissemination Standard (SDDS) reduces launch spreads by an average of 20 percent, while participation in the General Data Dissemination System (GDDS) reduces spreads for those countries with access to capital markets by an average of 8 percent. • These estimates correspond to discounts of some 50 and 20 basis points, respectively.
2010	Drut, B.	Sovereign Bonds and Socially Responsible Investment	• It is possible to build portfolios with an increased average socially responsible investment rating without significantly harming the risk/return relationship. • This result differs when considering sub-ratings related to the environment, social concerns, and public governance. • Socially responsible portfolios of sovereign bonds can be built without a significant loss of mean–variance efficiency.
2012	Maplecroft	Societal Gains and Political Freedoms Provided Leading Insight into Political Instability	• Countries displaying poor ESG indicators are often more prone to shocks from social events (i.e., poverty, illiteracy, ethnic and religious differences, and demographic factors).
2012	Bundala, N.	Do Economic Growth, Human Development and Political Stability favor sovereign Creditworthiness of a Country? A Cross Country Survey on Developed and Developing Countries	• Equality-adjusted index (HDI), low unemployment, and political stability are positively correlated with credit ratings.
2012	Moretti, L.	Transparency and Emerging Market Bond Spreads	• For 18 emerging market economies over the periods 1999–2007 and 2008–2012, the effect of publishing the IMF Article IV reports is negligible, while publishing the Reports on the Observance of Standards and Codes (ROSC) has led to a reduction in spreads of nearly 30 basis points in the pre-crisis sample 1999–2007.
2012	UNEP FI, Global Footprint Network	A New Angle on Sovereign Credit Risk E-RISC: Environmental Risk Integration in Sovereign Credit Analysis	• Countries' environmental performance (ecological footprint and biocapacity) is not taken into consideration in traditional sovereign credit risk analysis.

Year	Author(s)	Title	Main findings
2013	Brandao-Marques, L., G. Gelos, and N. Melgar. IMF Working Paper	Country Transparency and the Global Transmission of Financial Shocks	• The more opaque an emerging market, the more it amplifies shocks emanating from financial centers and the more domestic bond and equity markets are impacted. • Increasing the availability of information about public policies, improving accounting standards, and enhancing legal frameworks can help reduce the unpleasant side effects of financial globalization.
2013	Principles for Responsible Investment	Sovereign Bonds: Spotlight on ESG Risks	• Corruption and sovereign bond performance are clearly correlated. • A highly educated, IT-literate society paired with a repressive political system can increase the risk of political regime change. • The market and CRA are failing to factor in major environmental risks, given mounting evidence of their importance.
2014	Han, X. H. Khan, and J. Zhuang, ADBI Working Paper Series	Do Governance Indicators Explain Development Performance? A Cross-country Analysis	• Government effectiveness, political stability, control of corruption, and regulatory quality all have a more significant positive impact on country growth performance than voice and accountability and rule of law. • The best governance-performing Asian developing countries grow faster than the worst-performing ones by up to 2 percentage points annually (2.5 percent for Middle East and North African countries). • No significant relationship is found for LAC countries or at the global level. • The nature of the political regime is not found to be significant. • Good governance is associated with both higher per capita GDP and higher GDP growth over time.
2016	Capelle-Blancard, C., M.-A. Diaye, R. Oueghlissi, and B. Scholtens	Environmental, Social and Governance (ESG) performance and sovereign bond spreads: an empirical analysis of OECD countries	• Countries with good ESG performance tend to have less default risk and thus lower bond spreads. This relation is more significant for longer-duration bonds. • Environmental performance seems to have no impact, and governance performance has a higher impact than social performance. • ESG performance proves to have a stronger impact for Eurozone countries. • Country sustainability performance had stronger influence on bond spreads during the global financial crisis.
2016	UNEP FI, Global Footprint Network	ERISC phase II: how food prices link environmental constraints to Sovereign Credit Risk	• Higher and more volatile food prices are key transmission mechanisms through which environmental risks and constraints such as climate change, ecosystem degradation, and water scarcity will impact national economies. • If these impacts are significant enough, they may affect a country's credit rating and the risk exposure of sovereign bondholders.
2016	Hoepner, A., Oikonomou, I., Scholtens, B., and Schröder, M.	The Effects of Corporate and Country Sustainability Characteristics on The Cost of Debt: An International Investigation	• Country sustainability, relating to both social and environmental frameworks, has a statistically and economically impactful effect on direct financing of economic activity. • A one-unit increase in a country's sustainability score is associated with an average decrease in the cost of debt of 64 basis points. • The environmental dimension of a country's institutional framework is approximately twice as impactful as the social dimension in determining the cost of corporate loans.

Year	Author(s)	Title	Main findings
2016	Berg, F., P. Margaretic, and S. Pouget	Sovereign Bond Spreads and Extra-Financial Performance: An Empirical Analysis of Emerging Markets	• A country's average cost of capital decreases with its environmental and social performance (J.P. Morgan EMBI, 2000–2012). • Bond spreads lag ESG performance. • ESG performance does not appear to be correlated with credit ratings. • Governance is considered in credit ratings but appears to have no impact on bond spreads.
2017	Choi, S. and Y. Hashimoto, IMF Working Paper	The Effects of Data Transparency Policy Reforms on Emerging Market Sovereign Bond Spreads	• Data transparency policy reforms, reflected in subscriptions to the IMF's Data Standards Initiatives (SDDS and GDDS), reduce the spreads of emerging market sovereign bonds by up to 15 percent in the year following the implementation of the reform (550 bp initial average spread).
2017	Duyvesteyn, J., M. Marnes, and P. Verwikmeren	Political Risk and Expected Government Bond Returns	• Bond prices adapt slowly to changes in political risk. • Bond returns are higher for countries whose political risk ratings have improved. • Bond returns are lower for countries whose political risk ratings have deteriorated.
2018	Jeanneret, A.	Sovereign Credit Spreads under Good/Bad Government.	• An analysis of 74 countries over the 2001–2016 period shows that sovereign credit default swap (CDS) spreads decrease with government effectiveness, particularly in countries exhibiting severe default risk, high indebtedness, and poor economic conditions.
2018	Margaretic, P. and S. Pouget.	Sovereign Bond Spreads and Extra-Financial Performance: An Empirical Analysis of Emerging Markets	• Over the period 2001–2010, an emerging country's average cost of capital decreases with its governance and social performance. • A good social performance signals an emerging economy's long-term orientation and commitment to repay its debt in the future. • Financial markets are slow to reflect the effects of changes in social policies on a country's solvency.
2018	Robertson, C. and V. Lopez	Thoughts from a Renaissance Man ESG in EM and FM – really?	• There is virtually no correlation between sovereign bond pricing (using credit default swaps) and ESG scores (after adjusting for per capita GDP) and not much of a correlation in the equity markets.
2018	UN Environment, Imperial College, SOAS University of London	Climate Change and the Cost of Capital in Developing Countries	• For the Climate Change-Vulnerable Countries Group, for every US$10 paid in interest by developing countries, an additional dollar will be spent due to climate vulnerability. The magnitude of this burden will at least double over the next decade. • This correspond to 117 bp additional borrowing cost on average, translating to US$40 billion additional interest paid over the last decade. This figure is expected to grow to US$146–168 billion over the next decade. • Investments in social preparedness can partially mitigate, by an estimated -0.67 percent, the impacts of climate vulnerability reducing it to an average 50 additional bps.
2018	Paun, A., L. Acton, and W.-S. Chan	Fragile Planet Scoring Climate Risks Around the World	• India, followed by Pakistan and the Philippines, are the countries most vulnerable to climate change. South and South-East Asian countries account for 5 of the 10 most vulnerable countries. Mexico and Colombia are also in this group. Brazil ranks as the 19th most vulnerable. • Developed market countries in general rank better, with Israel (12th) the most vulnerable DM country and Australia next at 29th, and the United States at 39th over 67. • Finland, Sweden and Norway, followed by Estonia and New Zealand, are the five least vulnerable countries.

Year	Author(s)	Title	Main findings
2019	BlueBay, Maplecroft	The Role of ESG Factors in Sovereign Debt Investing	• Among 97 DM, EM, and frontier countries analyzed between Jan 2013 and May 2018, the hard currency spread of the best ESG performers was approximately 70 percent lower than those of the worst. • Governance is the most important factor but does not show a linear relationship. • Environmental and climate risk have no impact.
2019	Hermès Investment and Beyond Ratings	Pricing ESG in Sovereign Credit	• Countries with the lowest ESG scores have, on average, the widest CDS spreads, and countries with the highest ESG scores have the tightest spreads. • There appears to be a positive correlation between sovereign ESG scores and sovereign credit ratings. However, there is a very wide variation in ESG scores within each rating band, suggesting that credit ratings do not entirely explain the extent of CDS spreads. • Among the three dimensions of ESG, governance has the strongest relationship with sovereign CDS spreads. Environmental risks do not seem to have a strong relationship with sovereign CDS spreads.
2019	Blackrock Investment Institute	Sustainability: the bond that endures Tools and insights for ESG investing in fixed income	• It is feasible to create portfolios that offer a significant uplift in key sustainability metrics, including ESG scores and measures of carbon intensity, while adhering closely to key characteristics of standard bond indexes, such as their duration and yield. • Sustainability-related factors explain a meaningful share of the variation in credit spreads across EM government issuers today. Poor ESG performers tend to pay a higher market premium to issue debt and vice versa.
2020	Bouyé, E. and D. Menville	The Convergence Of Sovereign ESG Ratings	• Growing interest for ESG and sovereigns has led to changes in MSCI and Sustainalytics methodologies. • ESG scores show a moderate correlation with CDS. Augmented credit scores such as Beyond Ratings' perform much better. • Globally there is a high correlation between ESG sovereign scores of the main providers.
2020	Nemoto, N. and L. Liu. ADBI Working Paper Series	Measuring the Effect of Environmental, Social and Governance on Sovereign Funding Costs	• Better ESG performance is associated with lower default risk, higher credit ratings, and therefore lower funding costs. • The social factor is significant among Asian countries, while governance is significant among OECD countries. • The environment factor does not appear to have a significant impact.

Annex 2. List of Investors Interviewed and Credit Rating Agencies, ESG Research/Data, ESG Index Providers Contacted by Phone or Email

Credit Rating Agencies (various divisions were contacted)
1. Moody's Investor Service
2. 427mt (Moody's)
3. S&P Global Market Intelligence
4. S&P Dow Jones Indices
5. Trucost (S&P)
6. Fitch Ratings

ESG Research/Data Firms
7. Sustainalytics
8. Verisk Maplecroft
9. Beyond Ratings & FTSE Russell (LSEG)
10. MSCI
11. RobecoSAM
12. RepRisk AG
13. Vigeo Eiris
14. ISS ESG

Index Providers
15. JPMorgan

Investors
16. BlueBay AM
17. PIMCO
18. PGGM
19. CDPQ
20. Global Evolution

References

Bugler, W. 2019. Colombiuan Financial Sector has a Long Way to go to Integrate Climate Risks, Finds SFC Survey. *Acclimatise News*. Available at: https://www.acclimatise.uk.com/2019/06/04/colombian-financial-sector-has-a-long-way-to-go-to-integrate-climate-risks-finds-sfc-survey/

Battiston et al. 2019. Climate Risk Assessment of the Sovereign Bonds Portfolio of European Insurers. EIOPA Financial Stability Report, December 2019. Frankfurt, Germany: European Insurance and Occupational Pensions Authority (EIOPA). Available at: https://www.eiopa.europa.eu/sites/default/files/publications/reports/eiopa_dec2019_financial-stability-report-thematic_review_climate_risk.pdf

Berg, F., J. F. Kölbel, and R. Rigobon, 2020. Aggregate Confusion: the Divergence of ESG Ratings. SSRN. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3438533

Blackrock Investment Institute, 2019.Sustainability: The Bond that Endures: Tools and Insights for ESG Investing in Fixed Income. Blackrock Investment Institute. Available at: https://www.opiniopro.com/2019/11/blackrock/sustainability-the-bond-that-endures-tools-and-insights-for-esg-investing-in-fixed-income/

Castellani et al. 2019. Investment Gaps in Latin America and the Caribbean. *International Development Policy* 11(1). Available at: https://journals.openedition.org/poldev/2894

CBI (Climate Bonds Initiative). 2019. Latin America & Caribbean Green Finance State of the Market 2019. New York, NY and Washington, DC: United Nations Development Programme, IDB Invest, and Inter-American Development Bank. Available at: https://www.climatebonds.net/files/files/CBI_LAC_SotM_19_web_02.pdf

CFA Institute. 2017. CFA Institute Annual Report, Fiscal Year 2017. Charlottesville, VA: CFA Institute.

Cingano, F. 2014 Trends in Income Inequality and its Impact on Economic Growth. OECD Social, Employment, and Migration Working Papers No. 163. Paris, France: OECD Publishing.

Eccles, R. G. and J. Strohele. 2018. Exploring Social Origins in the Construction of ESG Measures. SSRN. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3212685

Environmental Finance. 2020. Sustainable Bonds Insight 2020. Available at: https://www.environmental-finance.com/pages/sustainable-bonds-insight-2020.html

Fitch Ratings. 2019. What Investors Want to Know: ESG Relevance Scores for Sovereigns. April 8. Available at: https://www.fitchratings.com/research/sovereigns/what-investors-want-to-know-esg-relevance-scores-for-sovereigns-08-04-2019

Frisari, G., et al. 2019. Climate Risk and Financial Systems of Latin America: Regulatory, Supervisory and Industry Practices in the Region and Beyond. IDB TN-01823. Washington, DC: Inter-American Development Bank. Available at: https://publications.iadb.org/publications/english/document/Climate_Risk_and_Financial_Systems_of_Latin_America_Regulatory_Supervisory_and_Industry_Practices_in_the_Region_and_Beyond.pdf

FTSE Russell. 2020. Assessing the Impact of COVID-19 on Sovereign Yields through Healthcare Services. April 17, 2020 Available at: "Assessing the Impact of COVID-19 on Sovereign Yields through Healthcare Services"

Hsu, P. H., H. Liang, and P. Matos, 2017. Leviathan Inc. and Corporate Environmental Engagement. Darden Business School Working Paper 2960832. ECGI Finance Working Paper 526/2017. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2960832

Han, X., H. Khan, and J. Zhuang. 2014. Do Governance Indicators Explain Development Performance? A Cross-Country Analysis. ADB Ecopnomics Working Paper Series 417. Manila, The Philippines: Asian Development Bank.

Krukowska, E. and L. Millan Lombrana. 2020. EU Approves Biggest Stimulus Package in History with $572 Billion Plan. Bloomberg Green. Available at: https://www.bloomberg.com/news/articles/2020-07-21/eu-approves-biggest-green-stimulus-in-history-with-572-billion-plan

Institutional Investor. McKinsey: ESG No Longer Niche as Assets Soar Globally. Available at: https://www.institutionalinvestor.com/article/b15cc1dxds8k97/mckinsey-esg-no-longer-niche-as-assets-soar-globally

Ministry of Finance of Uruguay. 2019. Sovereign Debt Report, July 2019. Ministry of Finance of Uruguay. Available at: http://deuda.mef.gub.uy/innovaportal/-file/27254/2/sovereign-debt-report-july-2019.pdf

Moody's. 2018. Sovereigns – Global: Environmental, Social and Governance Risks Influence Sovereign Ratings in Multiple Ways. Available at: https://www.moodys.com/research/Moodys-ESG-risks-influence-sovereign-ratings-in-multiple-ways--PR_385774

PIMCO. 2020. Bonds: ESG Into Action. Available at: https://www.google.com/search?q=PIMCO+ESG+Report+2020&rlz=1C1EJFC_enUS822US822&oq=PIMCO+ESG+Report+2020&aqs=chrome.0.69i59.311j0j7&sourceid=chrome&ie=UTF-8

TCFD (Task Force on Climate-Related Financial Disclosures) 2017. Available at: https://www.fsb-tcfd.org/

WEF (World Economic Forum). 2020. The Global Risks Report 2020. https://www.weforum.org/reports/the-global-risks-report-2020

UNDP (United Nations Development Programme). 2020. Mexico's Central Bank, UNEP and UNDP call on Financial Sector to Plan for Environmental Risks. Available at: https://www.undp.org/content/undp/en/home/news-centre/news/2020/Mexico_central_bank_ UNEP_UNDP_call_on_financial_sector_to_plan_for_environmental_risks.html

UNEP FI (United Nations Environment Programme Finance Initiative) and United Nations Global Compact. 2019. An Introduction to Responsible Investment for Asset Owners. Geneva, Switzerland: UNEP Finance Initiative and United Nations Global Compact. Available at: https://www.unpri.org/download?ac=6520.