

BRINGING TOGETHER SOVEREIGN DEBT INVESTORS AND CLIMATE INFORMATION PROVIDERS

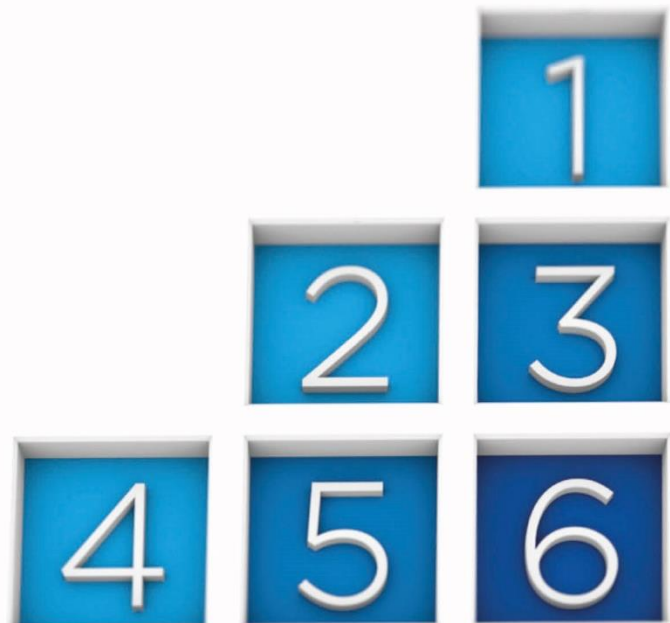


THE SIX PRINCIPLES

PREAMBLE TO THE PRINCIPLES

As institutional investors, we have a duty to act in the best long-term interests of our beneficiaries. In this fiduciary role, we believe that environmental, social, and governance (ESG) issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time). We also recognise that applying these Principles may better align investors with broader objectives of society. Therefore, where consistent with our fiduciary responsibilities, we commit to the following:

- 1 We will incorporate ESG issues into investment analysis and decision-making processes.
- 2 We will be active owners and incorporate ESG issues into our ownership policies and practices.
- 3 We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- 4 We will promote acceptance and implementation of the Principles within the investment industry.
- 5 We will work together to enhance our effectiveness in implementing the Principles.
- 6 We will each report on our activities and progress towards implementing the Principles.



PRI'S MISSION

We believe that an economically efficient, sustainable global financial system is a necessity for long-term value creation. Such a system will reward long-term, responsible investment and benefit the environment and society as a whole.

The PRI will work to achieve this sustainable global financial system by encouraging adoption of the Principles and collaboration on their implementation; by fostering good governance, integrity and accountability; and by addressing obstacles to a sustainable financial system that lie within market practices, structures and regulation.

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INTRODUCTION

Sovereign bondholders' demand for data, analytics and broader information about climate change has outpaced supply from third-party providers, whose product offerings were originally developed to serve equity investors.

To explore the extent to which data and service providers are meeting current demand, the Principles for Responsible Investment (PRI) brought together 10 climate information providers and a group of sovereign debt investors (see Figure 1).¹ Ahead of the workshop, the PRI surveyed the providers on their offerings with the help of its [sovereign debt advisory committee](#) (SDAC).

Figure 1: Workshop participants

Climate information providers	
Baringa	MSCI
Beyond Ratings	S&P Global Sustainable1
Impact Cubed	Sustainalytics
ISS ESG	Urgentem
Moody's ESG Solutions	Verisk Maplecroft
Sovereign debt investors	
AP2	Ninety One
Bluebay Asset Management	Nordea Asset Management
Colchester Global Investors	Payden & Rygel
Danske Bank Asset Management	PIMCO
Fidelity International	QIC
Lazard Asset Management	Robeco
Manulife Investment Management	Western Asset Management
Neuberger Berman	William Blair
Other participants	
Global Footprint Network ²	PRI

The workshop was a rare chance for multiple climate information providers and investors to engage collaboratively. Participants enjoyed having an opportunity to talk about emerging issues with a range of peers.

To facilitate an open exchange and mutual learning, the discussion was held under the Chatham House Rule and in respect of antitrust rules, with participants reminded not to disclose sensitive topics from a commercial perspective.

¹The group gathered across two sessions in February and March 2022.

² Global Footprint Network is a member of the PRI's [sovereign debt advisory committee](#).

KEY THEMES FROM THE DISCUSSION

1) **Climate data for sovereign debt analysis – P.5**

Differences between governments and corporates make it difficult for investors and providers to translate the datasets used for corporate debt and equity to sovereign debt.

2) **Purpose of data from an investor perspective – P.6**

Sovereign bondholders use climate data for a variety of purposes, including risk assessment, outcome measurement and regulatory reporting. The information they need varies in accordance with this range of uses.

3) **What providers offer – P.7**

Providers tend to produce different types of risk ratings, scores, data and portfolio assessment tools. Only recently has product coverage expanded to include sovereign issuers. Some investors seek transparency with regard to methodologies and the ability to apply their own assumptions.

4) **Next steps – P.11**

Information providers could tailor data and services to reflect the different ways sovereign bondholders use them.

CLIMATE DATA FOR SOVEREIGN DEBT ANALYSIS

As investment firms consider the impact of climate change on their assets and businesses more generally, they need data related to physical risk and transition risk. While sovereigns, multilateral organisations and non-governmental organisations release lots of relevant information – with much of it collected and available for example on the World Bank’s [ESG data portal](#) or the IMF’s [Climate Change Indicators Dashboard](#) – many investors have so far found this insufficient and have turned to a growing array of information providers.

As with ESG data generally, the providers’ climate offerings have historically been designed for corporate equity investments. Fixed income requires a different approach, in part because instruments have varying maturities and investors typically focus on downside risk more than opportunities. The PRI’s previous engagement with information providers, [Do ESG information providers meet the needs of fixed income investors?](#), demonstrated that products could be better tailored to this asset class.

Meanwhile, debt issued by sovereigns presents further nuances from a data perspective. When assessing a government’s exposure to climate risk, investors must take into account transition risk across the entire national economy and physical risk across the whole of a country’s territory. In contrast, by their nature corporates have a more limited sectoral and geographical footprint – and have the ability to move location. Furthermore, governments’ capacity to withstand these risks depends on their economic strength, giving rise to fears about income bias in sovereign debt ESG investing and the potential for capital to be withdrawn from countries that need it most.

Assessing how sovereign debt issuers contribute to the fight against climate change is relevant for an investor pursuing a thematic or outcomes-based approach. This also presents challenges. Beyond the public sector’s Scope 1 and Scope 2 emissions, the government has a broader role in setting and enforcing rules and standards, as well as in mobilising international agreements on climate change. Information providers therefore cannot simply map a corporate methodology onto sovereigns. Useful climate data and analysis may also come from non-traditional sources. For example, organisations traditionally focused on non-financial topics, such as political risk, may provide important insights on climate risk.

PURPOSE OF DATA FROM AN INVESTOR PERSPECTIVE

During the workshops, investors offered a variety of reasons for using climate information providers. The range of uses has expanded over time, as regulations and standards have emerged, and different ESG approaches have gained ground. Investors acknowledged that information providers have started developing robust products, but there is room to go further. At present, providers' offerings do not address the variety of investors' uses for climate data. For example, when investors want to assess financial risk they need a different product compared with what they require for reporting purposes (see Figure 2).

Often, investors do not expect the information provider to come up with a perfect number or score. Rather they want a point of comparison with their own analysis or relative information to compare countries. For this reason, they ask that scores be accompanied by qualitative feedback.

Figure 2: Uses for climate data and services

Investors' objective	Description
Assessing financial risk	Investors seek to assess how physical risks or the costs associated with transitioning towards a low-carbon economy will affect a country's ability to service debt, or economic growth in general. This information can also be helpful when engaging with an issuer. Indications of risk have sometimes been packaged into a broader ESG score, but the trend is towards more precise, granular information.
Measuring outcomes	Investors are increasingly signing up to net zero targets, and so they are seeking to map their sovereign debt exposure against carbon emissions and targets, even as the industry continues to seek a common standard.
Reporting for standards and regulations	Investors are starting to consider how to map their sovereign debt investments onto a growing number of regulations and standards related to climate change, such as the EU's Sustainable Finance Disclosures Regulation and the Net-Zero Asset Owner Alliance. While such standards are often not yet fully established or binding for sovereign debt, this is likely to change in the near future. Investors may need a numerical figure for the purposes of reporting even if this has limited use for investment decision-making.

WHAT PROVIDERS OFFER

Providers indicated that their current offerings tend to fall into two categories:

Risk ratings, scores or data to measure some aspect of risk exposure related to climate.

- At one end of the spectrum, this could relate to a discrete part of climate change risk, like exposure to a particular physical risk or performance against carbon emission targets.
- At the other end, climate risk could be amalgamated into a broader environmental or ESG rating, which may draw on economic or political assessments as inputs as well.
- The output could also relate to the broader economy, for example projected exposure of GDP to physical risk. Alternatively, it may be weighted by other factors, such as a country's stage of development.
- This type of offering may be based on data at the country level or aggregated from corporate or asset-level data to create an output for the sovereign.

Portfolio assessment to test portfolios' exposure to climate risk.

- The aggregate carbon emissions of sovereign entities in a portfolio is one example of what can be used for this assessment.
- Future areas of development for providers include stress testing of portfolios, Value at Risk models and portfolio audits.
- The assessment process can involve a bespoke service.

In the pre-workshop engagement, investors reported that their research and engagement with providers showed that the latter cover at least 170 countries or all debt-issuing countries, with no evident bias towards either developed markets or emerging markets.

DATA TYPES

Climate information providers use and provide a range of data for their products. These vary depending on whether the data is capturing physical or transition risks.

PHYSICAL RISK

For physical risk, providers said this data includes:

- Geographical locations susceptible to sea level rise;
- Risk of natural disasters;
- Related environmental topics, such as water stress, agriculture and biodiversity.

The quality of physical risk data varies by geographic location. It was noted that greater collaboration with the insurance industry could improve the quality of data, as the property and casualty insurance sector has historically been on the frontline of calculating physical risks. This would not necessarily

improve data quality in emerging and frontier market countries where insurance coverage is less common.

Some providers can bypass the lack of traditional coverage by turning to alternative data, such as satellite imagery.

TRANSITION RISK

In the realm of transition risk, information providers said that they use and provide data related to:

- Carbon emissions:
 - Country emissions totals: production based (also known as territorial) or consumption based;
 - Emissions from a country's public sector;
 - Emissions intensity;
 - At the time of the PRI's engagement, producing Scope 3 emissions for sovereigns was an area of development;
 - An emissions figure weighted or normalised by GDP;
 - An emissions figure apportioned to bondholders based on debt outstanding.
- Energy use:
 - Energy mix;
 - Rate of change in energy mix (this could be compared with future requirements, like those indicated by the International Energy Agency);
 - Energy imports;
 - Energy efficiency.
- Commitment to mitigate climate change:
 - National emissions targets;
 - Alignment indicators, e.g., performance against emissions targets;
 - Relevant fiscal policies: tax and spending.

As this range of data shows, assessing transition risk for sovereigns involves examining both current emissions and targets for the future. Providers often try to use countries' Nationally Determined Contributions to understand and quantify targets.

A crucial third component of transition risk is the credibility of targets. This is tricky and providers are still working out the best solution to assess it. Other data sources could provide answers, such as how much solar and wind power a country has the physical capacity to produce, given its climate and topography.

When it comes to measuring carbon emissions, double counting at a portfolio level arises if investors hold both a sovereign's bonds and securities issued by entities based within that sovereign. Investors and information providers remain unsure of the best method to deal with this issue.

DATA PROVISION AND TIMELINESS

Information providers indicated that they collect data from external sources such as the World Bank and the Network for Greening the Financial System (NGFS), a group of central banks and financial supervisors. Yet dependency on external data sources creates a risk for providers, for example one expressed concern about being tied into the NGFS's schedule for releases.

As for the timeliness of the third-party data that providers use, workshop participants discussed two concerns. First, data for the most recent time period may not be available. Providers sometimes work around this by estimating a more up-to-date figure. Second, given the unprecedented nature of physical and transition risk, past data comes with a caveat in any case. Providers make a choice about how cautious to be when using past data to infer present-day risk.

METHODOLOGY

The workshops covered providers' methodologies, and in particular some key decisions they make. The aforementioned caution attached to past data highlights the significance of assumptions that underlie methodologies.

Investors and information providers discussed the following methodological topics, either to illustrate best practice or to address dilemmas.

Transparency: Given that methodologies often encompass many assumptions, investors said that transparency is key.

Adjustability: Investors said that they would appreciate the ability to open up providers' models and apply their own assumptions, with the following advantages:

- Investors can conduct simulations using different scenarios;
- For fast-moving events, investors can adjust inputs before the provider would have time to release an update;
- Investors would be better placed to predict some inputs, such as the feasibility or likelihood of certain policies.

However, one investor voiced a concern that investors may not always understand the model and subject matter sufficiently to change the inputs.

Frequency of methodological updates: Providers discussed how they decide when to update the methodology. They must weigh the following reasons for and against updating more often:

- Reasons for more frequent updates:
 - Methodological best practices are often changing quickly, for example as better datasets become available or climate scenarios are updated;
 - Events such as international conflict or a change in government may make models outdated, as these events can trigger significant policy changes, including related to environmental policies.

- Reasons against more frequent updates:
 - They can be complicated for investors and other end-users as understanding a new methodology takes time and effort;
 - They can hinder comparability across time periods.

One provider's solution to ease this dilemma was to release updates separately, giving investors the choice to stay with the old methodology or update to the new one. In addition, providers noted that the better the methodology was in the first place, the better it would be able to assess future risk accurately. In theory, this should mean that the model to some extent prices in events that take place after its launch, and so requires fewer updates.

Scope: Providers must decide the scope of information to consider in their methodology. The feedback loops between climate risks and other areas of analysis, like politics and monetary policy, mean that considering certain aspects of the former in isolation may not be useful. However, investors may prefer to analyse other topics themselves rather than delegating this to climate information providers.

NEXT STEPS

Over the coming years, investors will likely continue to require accurate and meaningful climate change data for their sovereign debt holdings, so the market for information will probably continue to grow.

The PRI supports and is working with signatories and several industry organisations on the [ASCOR project](#), which has been established to create a public tool giving investors a common understanding of sovereign exposure to climate risk and of how governments plan to transition to a low-carbon economy.

In the meantime, PRI will continue to make use of its convening power to connect investors with information providers. Workshops like these allow frank discussions on challenges and opportunities and hopefully are productive for all parties.

For providers, these sessions:

- provide the opportunity to learn why investors want data and how they will use it;
- encourage more transparency over methodology and data sources;
- offer a forum to explore opportunities to engage with sovereigns where data is lacking;
- serve as a stimulus for providers to diversify the data sources they use and engage with institutions that produce data to find out more about their processes and practices.

For investors, these sessions can help clarify why they want data, what they will use it for, and how this relates to portfolio objectives. For example, investors may seek scores or data indicating which countries are best shielded from risks related to climate change, but they should recognise that skewing investments towards these countries may not be the best way to achieve a global reduction in emissions or to protect countries from the physical effects of climate change. Therefore, investment managers and asset owners should discuss proposed climate solutions with each other more often, and even include investment consultants if they are involved in the investment process.

Separately, the PRI will also look for opportunities to expand the conversation, in particular by inviting sovereign debt issuers to the table.

The Principles for Responsible Investment (PRI)

The PRI works with its international network of signatories to put the six Principles for Responsible Investment into practice. Its goals are to understand the investment implications of environmental, social and governance (ESG) issues and to support signatories in integrating these issues into investment and ownership decisions. The PRI acts in the long-term interests of its signatories, of the financial markets and economies in which they operate and ultimately of the environment and society as a whole.

The six Principles for Responsible Investment are a voluntary and aspirational set of investment principles that offer a menu of possible actions for incorporating ESG issues into investment practice. The Principles were developed by investors, for investors. In implementing them, signatories contribute to developing a more sustainable global financial system.

More information: www.unpri.org



The PRI is an investor initiative in partnership with UNEP Finance Initiative and the UN Global Compact.

United Nations Environment Programme Finance Initiative (UNEP FI)

UNEP FI is a unique partnership between the United Nations Environment Programme (UNEP) and the global financial sector. UNEP FI works closely with over 200 financial institutions that are signatories to the UNEP FI Statement on Sustainable Development, and a range of partner organisations, to develop and promote linkages between sustainability and financial performance. Through peer-to-peer networks, research and training, UNEP FI carries out its mission to identify, promote, and realise the adoption of best environmental and sustainability practice at all levels of financial institution operations.

More information: www.unepfi.org



United Nations Global Compact

The United Nations Global Compact is a call to companies everywhere to align their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption, and to take action in support of UN goals and issues embodied in the Sustainable Development Goals. The UN Global Compact is a leadership platform for the development, implementation and disclosure of responsible corporate practices. Launched in 2000, it is the largest corporate sustainability initiative in the world, with more than 8,800 companies and 4,000 non-business signatories based in over 160 countries, and more than 80 Local Networks.

More information: www.unglobalcompact.org

