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Abstract

Sustainable investing demand continues to accelerate. For asset managers, investing sustainably requires a new set of tools to uncover attractive investment opportunities. From alignment with long-term sustainability initiatives to identifying securities that may show high resiliency under extreme scenarios, a comprehensive sustainability analysis is key. In fixed income, this exercise goes beyond integrating environmental, social and governance (ESG) criteria into the investment process and reaches much further than just incorporating green or social labeled bonds. Sustainability assessment requires judgement on whether an issuer is actively facilitating long-term growth in a sustainable way for both people and the environment.

To investigate how to incorporate sustainability into sovereign portfolios, we conducted research to explore different potential approaches. Sustainable investing in sovereign debt requires an additional set of tools and expertise beyond traditional portfolio management practices. From SDG achievement to sustainability risks and controversies as well as commitment to advancing sustainable growth, identifying sustainable sovereigns requires a comprehensive and tailored process.

In this paper, we outline a practical approach to align a sovereign portfolio to specific sustainability goals by combining bottom-up analysis and a holistic, portfolio-level view. We cover different components of the sustainability analysis of countries as well as sovereign engagement, labeled bond assessment and the role of ESG integration in sustainability-themed portfolios. We conclude with two practical examples that reflect our approach to the sustainable assessment process.

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Current state of sustainble investing in sovereigns

A new way of sovereign investing

Demand for sustainable investment solutions continues to grow. The longterm consequences of short-term decisions are becoming clearer for the broad society. From consumers and businesses to governments and investors, we believe a broad secular shift toward sustainability is underway. The concept of responsible investments (RI) is strengthening every year as investors pursue focused investment solutions that can generate competitive financial results and drive real change for people and for our planet.

To implement responsible investing techniques, investors use a variety of tools. From exclusions and bestin-class selection to ESG integration and sustainability-themed portfolios, different strategies across all asset classes can help investors pursue competitive financial outcomes and redirect capital flows to effectuate responsible investing objectives. Although sustainable investing within sovereign bonds has lagged other mainstream asset classes due to the slow nature of the market, ample opportunities exist to align capital with sustainability initiatives, potentially providing a first mover advantage. By utilizing a comprehensive sustainability framework that is tailored to reflect the unique attributes of sovereign issuers. asset managers can assess sustainability alignment in sovereigns and construct a sustainability-themed government bond portfolio that can align with investors' beliefs and provide attractive long-term performance opportunities.

A dominant theme in sustainability alignment in sovereigns focuses on issuers' ability to improve sustainability practices while continuing to promote healthy economic growth. Sovereign issuers play a major role in the journey toward a more sustainable world. After all, governments are responsible for creating a groundwork for sustainable growth and enforcing rules that facilitate sustainable long-term growth. For asset managers, aligning a government

bond portfolio with sustainable growth initiatives requires incorporating a new way to look at sovereign issuers and utilizing methodologies that go beyond traditional tools in the research process.

Embracing sustainability challenges worldwide

In 2015. 193 Member States of the United Nations adopted 17 Sustainable Development Goals (SDGs) to be achieved in a time horizon of 15 years. This set of 17 goals incorporated a total of 230 individual indicators to monitor the 169 individual targets that would apply to every country in the world. regardless of their level of development. These provided a broad landscape for objective measurement of the efforts towards sustainable development globally. In such a context, sovereign states are in a key position to tackle sustainability challenges, as governments themselves have the power to drive the change towards a more sustainable future¹. Their role will only be more relevant as the different sustainability

Figure 1: United Nations' Sustainable Development Goals





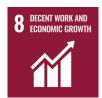






























challenges become more visible for the development of our society.

The 17 SDGs encapsulate challenges that apply to every country in the world in a clear and straightforward manner. For investors, the SDGs provide a useful framework to analyze countries on the methodology that was designed as an assessment instrument for governments' progress on their own pledges.

Principles of an SDG scoring methodology

The agreement of the world leaders to address universal goals and specific key performance indicators is a very important first step. To continue, it is necessary to pinpoint those targets to specific variables that can be tracked and traced through the years in a transparent and homogeneous way.

There are remarkable examples of this effort, like the SDG tracker designed by Oxford University² and the Sustainable Development Report elaborated by Cambridge University³. These tools are helpful not only for researchers, but also for governments as they can assess the sustainability of their own activities to aid in communication and for regulatory framework design⁴.

Despite the growth in responsible investing, inconsistent nomenclature remains a key obstacle for asset managers and asset owners alike. To uphold the credibility of the market and to ensure that the different best practices are recognized and reinforced, several regulatory authorities are incorporating frameworks and taxonomies that will translate into diligent disclosure requirements⁵. It

is thus necessary that the preferred investment methodology remains transparent and allows for a granular approach that helps to understand the impact that a sustainable portfolio aims to achieve.

At Aegon Asset Management we base our sustainability methodology on the works of the Bertelsmann-Stiftung and Sustainable Development Solutions Network (SDSN)⁶ partnership, sponsored by the United Nations. Our transparent scoring methodology is founded on this independent and credible framework and leverages reliable data sources. By using more than 100 indicators per country we have built an SDG scoring methodology that allows us to reflect our views on sustainability in 172 countries across the world.

Sovereign sustainable assessment in practice

Comparability between different countries

Evaluating the sustainability of sovereign issuers requires a tailored approach. From quantitative inputs such as SDG scores to qualitative assessments of sustainability risk, a comprehensive sustainability research framework combines various inputs to form a holistic view of an issuer's sustainability profile. The assessment methodology should be flexible and granular enough to account for differences between countries.

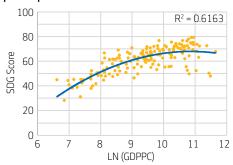
While the universal nature of the 17 SDGs. allows a fair approach to all countries in the world, it is crucial that countries focus on those sustainability goals that represent a challenge for them, instead

of those that are close to completion. In developed countries, poverty, as defined by the UN to mean a lack of basic capacity to participate effectively in society, is virtually eradicated, while the consumption patterns put into danger the climate transition. On the other hand, developing countries may have governance institutions that are not as strong and CO2 emissions per capita that remain at low levels due to the stage of economic development.

An absolute SDG scores comparison can help identify differences between countries and isolate the perceived leaders from the laggards, but a higher SDG score does not automatically mean that a country is on the right track to sustainable development. For example, the set of

policies currently in place may not be yet reflected in the scores, but will affect the future assessment of such country. As a result, it is important to evaluate SDG scores within the context of other country attributes, such as development stage or GDP level, and to evaluate countries relative to other regional peers There is a known correlation between the level of development of a country and its overall SDG progress (Figure 2). In many cases, the higher the development level as measured by GDP, the higher the SDG achievement score. However, this relationship can also be the inverse as developed countries actually score lower on certain SDGs.

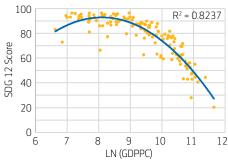
Figure 2: Relationship between SDG score and the natural logarithm of GDP per capita⁷



Source: Aegon AM. As of December 2020.

Some specific cases are noteworthy. In *SDG 9: Industry, Innovation and Infrastructure*, countries with a higher level of GDP per capita score very highly on this development challenge. On the other hand, *SDG 12: Responsible Consumption* shows the exact opposite relationship, as developed countries do not consume in a way that is sustainable in the long run and, as such, have lower SDG scores as they are also expected to carry their share of the burden (Figure 3).

Figure 3: Relationship between SDG 12: Responsible Consumption and LN (GDP per capita)

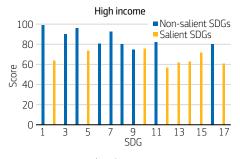


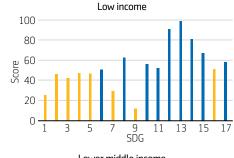
Source: Aegon AM. As of December 2020.

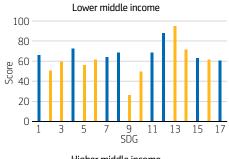
By conducting a thorough sustainability assessment, we look beyond the high-level SDG scores to recognize and reconcile such relationships and ultimately identify gaps in the country's sustainability profile. Challenge gaps—those SDGs that show a significant lag against the general average—are dependent on the initial circumstances of each country, in terms of development,

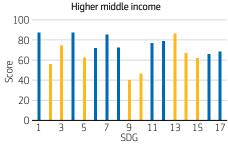
income and region. For example, by splitting all countries into different income groups, we can identify which SDGs are the most challenging per specific group, or what we denominate "salient SDGs", and assess whether a country is leading or lagging within its reference group.

Figure 4: Salient SDG scores identified represented per income group





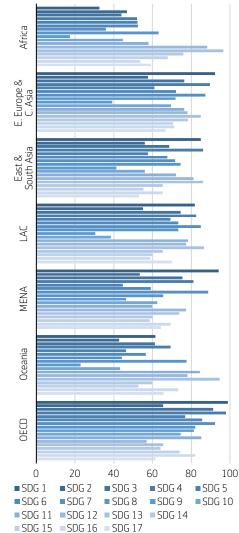




Source: Aegon AM, internal SDG scoring methodology. As of December 2020. Income groups align with the World Bank Atlas method: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-worldbank-country-and-lending-groups

Besides income group, geographical location or fact of OECD membership can also help to identify a relevant peer group and SDGs where the largest challenge gaps exist, and thus, where the most effort is needed. For example, SDG 10: Inequality and lack of SDG 9: Infrastructure stand out as a challenge for non-OECD countries. Given differences that exist across countries, we believe geographic diversification within a sustainability-themed portfolio is highly important to contribute to all SDGs consistently.

Figure 5: Average SDG scores per world region



Source: Aegon AM. As of December 2020.

Momentum in sustainability

Besides single period SDG scores, it is important to assess sustainability momentum over prior years. We measure sustainability momentum as the amount of progress made in the last three to five years in the different SDGs. Rather than a static, single score, momentum offers a dynamic interpretation of a country profile. It can help identify future sustainability leaders that have steady improvements in SDG achievement and point out red flags in case of scores deterioration.

However, reality cannot be summarized in a single number; momentum assessment becomes truly meaningful when it is done on par with qualitative analysis. An issuer's ambition on implementing sustainability policies and the progress achieved on the already announced plans are forward-looking, and these elements will likely define what the data will look like in the coming years.

Sustainability categories

To communicate our views on sovereign sustainability in a clear and standardized way, we classify countries into different sustainability categories. This helps in defining the final investment universe for a sustainability-themed government bond portfolio.

To appreciate different levels of sustainability profiles between countries, we use five categories: leader, influencer. improver, neutral and detrimental. The classification is based on a range of factors from SDG scores to momentum and current policies in place to tackle sustainability challenges or controversies. Although our sustainability framework includes a leader category, we recognize that reality remains complex, and that there is no country in the world in an absolute leading position or free from

controversies. Rather, our categorization approach reflects countries' sustainability profiles relative to peers. Using these sustainability categories, we can then form an investable universe for a sustainability-themed portfolio.

Sovereign Sustainability Categories

Leader	Achieved critical SDGs and outstanding commitment to sustainability
Influencer	On track to achieve some SDGs, clear commitment to sustainability and limited sustainability risk
Improver	Above average sustainability profile with low risk and promise to tackle controversies, but faces SDG achievement challenges
eutral	Not on track to achieve most SDGs, no clear ambition and average

higher sustainability risk and possible major controversies

Not on track to achieve the SDGs.

sustainability risk

Source: Aegon AM

The role of labeled bonds

Green, social and sustainability bonds, also referred to as labeled bonds, are one way that investors can allocate capital toward sustainable projects. While sovereign issuance of labeled bonds has increased materially in recent years, it pales in comparison to the broader bond market. Further, there are many issuers that may be advancing SDGs, but do not issue green, social or sustainability bonds.

As a result, we believe that building a sustainable portfolio must go beyond the inclusion of labeled bonds only. In fact, investors must address a broader set of questions that relate to the sustainability and green credentials and the range of activities that an issuer is facilitating. Further, investors must complete a critical assessment of the true alignment with sustainability at an issue and issuer level.

Building a sustainable sovereign portfolio

Overall sustainability profile

From a sustainability perspective one cannot expect that, selecting a handful of countries with strong sustainable profiles will immediately lead to a robust sustainable portfolio. The complications are caused by current level of development and regional biases among countries. We advocate for a global and holistic approach in portfolio construction. Depending on the investors' beliefs, these issues could be addressed from a different angle.

In the absence of a specific SDG target, an investor seeking a sustainable sovereign portfolio would normally adopt and follow a holistic approach to cover all of the 17 SDGs. If a portfolio should include countries selected exclusively on their overall SDG category, there is a risk that only a subgroup of countries will end up in the final investment universe. which will bias the portfolio's profile towards a set of similar sustainability challenges. Therefore, when constructing a sustainable portfolio, top-down analysis can help diversify the portfolio and increase the likelihood that there are no gaps across SDGs due to regional or income group clustering.

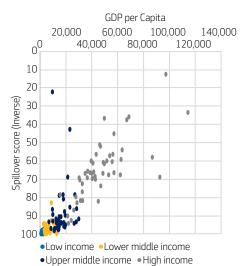
Diversification is essential not only from a risk-return perspective, but also to achieve exposure to a wider range of sustainability angles. Investing in countries from different sustainable categories, different regions and income groups may help to fulfill the objective that the capital is allocated to a broad scale of sustainable development needs.

Assessing externalities

The 17 SDGs aim to achieve fairness in a way that no one is left behind. To ensure that the sustainable development goals are achieved globally, countries should be mindful not only about their

internal sustainable agenda, but also about a potential footprint they have abroad. Economic relationships between countries and globalization sometimes bring unintended negative impact from one country to another. The effect of these externalities, as we refer to them. must be identified to assess whether a country is able to and wants to address. the issue in a sustainable manner. The lack of consciousness towards other countries might lead to a lower final sustainability category for an issuer. The problem of externalities can be a potential issue in portfolios with a high presence of developed countries (Figure 6). This is due to the fact that these economies tend to make use of the production capacity of countries with lower GDP per capita to maintain their consumption level.

Figure 6: Spillover score vs. GDP per capita



Source: Sachs, J. et al (2020), Aegon AM. As of December 2020. The spillover score measures the impact caused by a country that diminish the capacity of others to achieve their sustainability goals, including environmental, economic and security factors. A score of 0 indicates significant spillover while a score of 100 indicates little-to-no spillover.

From this perspective, a country that implements sustainable policies locally while externally harming the

development of other countries, is not fully tackling the sustainability issues and cannot be claimed free from controversies or a leader in sustainability. A country should enable others to become more sustainable by reducing its external interference. Examples of spillover activities include:

- Environmental: Use of natural resources and pollution
- Economic: Financial secrecy and unfair trade
- Security: Arm trading and international crime

In a sustainability-themed portfolio, investors should be mindful of these effects and monitor countries' performance not only on a standalone basis, but also in relation to their global impact.

Need for fundamental assessment

In addition to a sustainability assessment, fundamental analysis is still a vital part of forming a holistic risk and return assessment of the sustainable investment universe. This stage of portfolio construction brings together the conventional sovereign analysis of the strength of fundamentals, such as current macroeconomic conditions: valuations, including fair value versus market price; qualitative inputs, such as sentiment indicators and market positioning; and technicals, including price behavior or volumes. Active management is key for any sovereign portfolio as sustainability assessment is typically not directly linked to economic performance of a country.

Intuitively, the higher the sustainability score, the more stable the country should be given better governance and future economic prospects, but discord may come from the mismatch in the

investment time horizon. Sustainability is a long-term secular shift. By aligning government bond portfolios with this long-term transition, investors aim to capture upside potential as countries move toward sustainable growth. However, short-term credit risk may not be captured in an SDG score. As a result, a fundamentally risky country can be disguised as a country with a promising sustainability profile, presenting nearterm fundamental risks to investors. To ensure short-term risks and longterm benefits are incorporate into the investment framework, the sustainable universe should be challenged by sound fundamental analysis.

The role of ESG integration

In the context of sustainability alignment, ESG integration remains a valid portfolio construction tool at a fundamental level. The purpose of ESG integration is to increase portfolio resiliency under extreme scenarios and to anticipate a deterioration in the creditworthiness of a country by identifying risks in environmental, social or governance factors.

By integrating ESG criteria into portfolio management, investors are usually trying to capture financial materiality of nontraditional factors in pursuit of better performance or reduced risk to capital. With sustainability-themed portfolios, the goal is not only to generate returns, but to align capital allocation with investors' values even if there is no direct. link to outperformance. Consequently, even though ESG integration and SDG alignment differ in nature and by their purposes, a certain degree of overlapping is to be expected, as some elements (e.g., institutional strength, climate adaptation or basic rights and needs) are conceptually close (Figure 7). In other words, we believe it is important to combine ESG integration with an SDG

alignment assessment to form a more holistic view.

It is notable how much ESG integration practices differ per ESG data provider and across asset managers. Mostly, these differences arise from a lack of a universally accepted standards and diverse interpretations on what the relevant factors are when it comes to analyzing the creditworthiness of a country. We provide further analysis about this issue in our ESG Integration in Sovereign Portfolios paper published in 2018. The exercise of SDG alignment is different in this aspect, as the starting point is already defined very granularly by the UN. For this reason, alignment with this set of goals is less subjective, and investors could adopt their methodology to a number of asset classes.

Figure 7: Relationship between ESG scores and SDG scores



Source: Aegon AM internal ESG methodology and internal SDG methodology. As of December 2020. Each dot represents a country and compares its ESG score against its SDG score.

Sovereign engagement

At Aegon Asset Management, we believe active engagement with issuers can improve investment decisions and potentially drive positive change. Each asset class requires a different approach, and this also applies to sovereigns, as outlined by the UN PRI⁸. As investors, we have a responsibility to drive positive changes by implementing capital allocation mechanisms that encourage countries to develop sustainably.

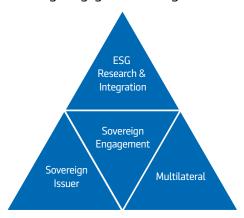
Our sovereign engagement framework provides an opportunity to increase communication between Aegon asset Management and sovereign issuers. Through this engagement, we aim to improve our assessment on the long-term economic growth and macroeconomic stability in a more inclusive and sustainable way as outlined in the SDG goals. In the context of sustainability, SDG indicators can be used to foster engagement dialog with governments and monitor their progress toward achieving the stated sustainability challenges.

Additionally, with increasing sovereign issuance of labeled bonds, including green, social and sustainable bonds we see a positive trend of increased interest from issuers to hear feedback from investors, which may help build up engagement practices.

From this point of view, we identify two key courses of engagement:

- Dialog: Aims to ensure that we have regular points of contact with a country representative to ask our questions, raise concerns and improve transparency on fundamental, ESG and sustainability topics. This dialog can improve the assessment of a sovereign's plans and progress on credit-relevant ESG issues and sustainable pledges.
- Action: Designed to address specific issues within a country that requires attention from the government. This can be a change in the existing policy, implementation of new rules or mitigation actions for past events mostly to encourage investments that contribute to real-world outcomes. Engagement for action is not straightforward; investors should be mindful of any political sensitivities that might prevent a government to address a controversy. Therefore, we embrace a realistic and pragmatic approach to identifying engagement themes and targets. Further, collaboration is key to advancing change; real action can be achieved more likely in collaborative initiatives with other asset managers or asset owners.

Sovereign engagement at Aegon



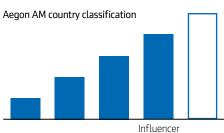
Source: Aegon AM

As active owners of sovereign debt, we seek adequate disclosure and transparency on ESG factors and progress on SDGs. Given the long-term investment horizon of a sustainabilitythemed sovereign portfolio, we believe it is paramount that we analyze these risks upfront and engage with issuers on ESG topics and SDGs to understand the creditworthiness and determinants of sovereign bond performance. Active engagement can help in assessing the sustainability profile of a developed and emerging country, and ultimately can help inform portfolio construction and alter portfolio composition.

Case study: Canada – Influencer

Sustainability assessment





Peer group comparison

Canada is a high-income country and OECD member. In most of the SDGs, Canada outperforms its peers but in salient challenges related to the environment, for example SDG 15: Life on land, or SDG 12: Responsible Consumption and Production, it is lagging.

Figure 8: SDG score comparison vs. identified peers on salient SDGs

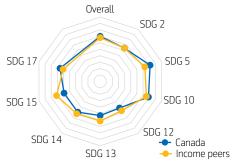
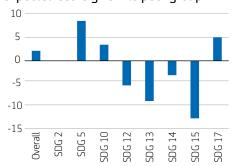


Figure 9: Residuals show the difference in absolute terms between the actual score of a country per SDG and its expected score given its peer group



Source: Aegon AM's proprietary sustainability assessment. As of December 2020.

Sustainability development outline:

As a country with a high level of development, Canada shows strong scores in many of the sustainability challenges. To highlight some of the achievements, we can refer to SDG 4: Quality Education, that scores at 100, with net primary enrollment rate and lower secondary competition rate at 100%. With respect to SDG 16: Peace, Justice, and Strong Institutions, the country has significant achievements on important indicators including safety, property rights, corruption, child labor, weapons exports and press freedom.

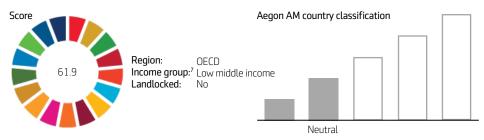
As for the areas of improvements, the government needs to focus on the environmental issues that are guite in line with the Canada's level of development. For example, with respect to SDG 12: Responsible Consumption and Production, the country lags on electronic waste, SO2 emissions embodied in imports, productionbased nitrogen emissions and nitrogen emissions embodied in import. In terms of SDG 13: Climate Action, the country has a poor outcome for most components. Canada's rate of CO2 emissions is quite high at 14.43 tCO2/ capita in 2019, versus a world average of about 4.8.

Classification comment:

Canada shows credible efforts in climate action by increasing the share of carbon-free energy in the energy mix to two-thirds of the overall mix mostly consisting of hydro, nuclear and other renewables as of 2018, which is substantial compared to relevant peers. However, its climate action efforts are tainted by significant operations involving oil extraction from its tar sands that create significant carbon emissions, consumes large amounts of water and results in material biodiversity loss. To improve the sustainability profile, the government should increase their efforts in mitigating the environmental effects of this industry.

Case study: Indonesia – Neutral

Sustainability assessment



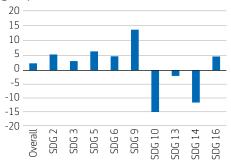
Peer group comparison

Indonesia is a lower middle-income country in the region of East & South Asia. In many of the SDGs, Indonesia performs close to the reference group, while visibly lagging in some salient issues like SDG 10: Reduced Inequalities.

Figure 10: SDG score comparison vs identified peers on salient SDGs



Figure 11: Residuals show the difference in absolute terms between the actual score of a country per SDG and its expected score given its peer group



Source: Aegon AM's proprietary sustainability assessment. As of December 2020.

Sustainability development outline:

Indonesia is a country with rapid economic growth that helped to achieve significant progress in many sustainable issues as reflected in its high SDG 8: Decent Work and Economic Growth score. The country has made enormous gains in poverty reduction, cutting the poverty rate by more than half to 9.78% in 2020 since 1999. This is seen in SDG 1: No Poverty, where Indonesia scores better than other lower middle-income countries. The score in SDG 4: Quality *Education*, is strongly outperforming both income and regional peers with the literacy rate at around 95%, an impressive progress over the past decade.

Areas of concern include on inequality and climate agenda. The score on SDG 10: Reduced Inequalities, is visibly lagging compared to peer group. Wealth is concentrated and Indonesia's rankings on wealth inequality indices are weak. As for the climate, Indonesia has been experiencing serious environmental deterioration. The most important environmental issues are forest degradation (unregulated cutting, fires, smoke and haze, and erosion), water pollution from industrial wastes and sewage and air pollution from motor vehicles and industry in urban areas. The forest fires cause smoke and haze too. Indonesia has one of the highest rates of deforestation in the world. As a result, the scores SDG 14: Life on Land, and SDG 15: Life below Water, are lagging.

Classification comment:

Indonesia has achieved great economic growth at the cost of the local environment. The country has not shown notable evidence in transitioning its energy mix from coal and fossil fuels, while deforestation continues to be a problem. There is no indication that the government has taken steps to deal with palm oil industry and its role in deforestation. Moreover, the economic growth has not benefited everyone, wealth and gender inequality are a significant concern.

Conclusion

Incorporating sustainability alignment into sovereign portfolio construction process can allow investors to mitigate risk, contribute to sustainable growth and pursue competitive long-term performance. Constructing a sustainably aligned sovereign portfolio starts with a comprehensive bottom-up approach and requires a thorough country-by-country assessment. To complement the bottom-up research, we conduct a top-down evaluation to identify portfolio biases, such as regional and specific SDG concentration or the existence of externalities

Determining the sustainability of sovereign issuers can be achieved by using a credible framework like the UN Sustainable Development Goals which can help asset managers build a transparent and homogeneous method for assessing countries on social and environmental challenges. Quantitative inputs can help set the foundation for a comprehensive analysis, but data alone does not tell the full story on the sustainability agenda.

Further, not all SDGs are equally challenging for different counties. A qualitative assessment of SDG achievement and sustainability risk can complement quantitative inputs. An evaluation of sustainability momentum, or the intention of advancing sustainability, can refine our sustainability assessment.

By combining all aspects of a government's sustainability profile, we can categorize issuers into one of five sustainability categories and isolate an investable universe for a sustainability-themed sovereign portfolio. Finally, engagement with issuers, albeit more limited with sovereigns, can help encourage advancement of sustainable growth initiatives and achievement of the SDGs.

Utilizing a thorough sustainability assessment process with fundamental research and top-down views, we believe a sustainable approach to sovereign investing can help contribute to sustainable growth and generate competitive long-term financial returns.

References

¹UN PRI (2017). Macro opportunities: Driving growth.

²Ritchie, Roser, Mispy, Ortiz-Ospina. "Measuring progress towards the Sustainable Development Goals." SDG-Tracker.org, website (2018)

³Sachs, , J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., Woelm, F. (2020). The Sustainable Development Goals and COVID-19. Sustainable Development Report 2020. Cambridge: Cambridge University Press.

⁴As an example, the government of the Netherlands assessed its own development on the different SDGs using the approach from SDSN and Bertelsmann institute. Source: SDG Nederland (2020). Vierde Nederlands SDG Rapportage - May 2020.

⁵In Europe, the regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.

⁶Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., Woelm, F. (2020). The Sustainable Development Goals and COVID-19. Sustainable Development Report 2020. Cambridge: Cambridge University Press.

⁷Plotting natural logarithms help us comparing data points that are far away in terms of scale. As a result, GDP per capita remains comparable for countries that are in different stages of development. This way, a 1% increase in the current level of GDP per capita is reflected proportionally in the graph, regardless of the initial stage of development of a country.

⁸UN PRI, ESG engagement for sovereign investors (2020)

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