ESG Integration in Sovereign Portfolios
Long-term value creation

By Aegon Asset Management Netherlands
Aegon Asset Management Netherlands believes environmental, social, and governance (ESG) factors are an important component of sound fundamental credit analysis that can drive alpha and help manage risk in our clients’ portfolios. Though historically not always referred as ESG, understanding country governance has always been a critical part of sovereign investing and the ESG underlying concepts have helped define our investment methodology for decades, being an important and evolving part of our investment process today.

Therefore we have been conducting in-depth analysis of the opportunities and challenges related to ESG integration in sovereign portfolios. We believe that ESG integration is more than a tick-the-box exercise, and that instead, it should be a comprehensive analysis that is fully part of the investment process. Consequently, we explored the current standing of research, tools and data available and the usefulness of country ESG scores computed by specialised providers.

These exercises proved ESG integration to be a value-adding tool to the investment process, and showed that neither the methodologies currently used to build ESG scores, nor the data points used to construct them, are always transparent. Therefore we have built a proprietary score to help us better understand the ESG risks at the country level across our portfolios.
Current state of play

Our analysis of the current state of affairs in ESG integration in sovereign portfolios covered three topics: the existing academic and industry research, the data and scores provided by specialised vendors, and the inclusion of ESG in mainstream credit ratings.

Academic and industry research
ESG integration in sovereign debt portfolios, in its explicit form, is a relatively recent focus of both academia and the industry, and as such, there is little research on the topic. Nevertheless, there is a small but increasing body of literature indicating optimistic prospects regarding the materiality of ESG risks to sovereign creditworthiness. In certain instances, ESG factors have shown a positive correlation with economic growth and fiscal health. In particular, reports suggest that the ESG score of a country has a strong negative relationship with the credit spread and the CDS spread of the country, indicating that default risk decreases as the ESG performance of the country improves. Generally, large bodies of development economics literature link the economic performance of a country to its governance, its environmental management and its social stability.

Data and scores
The current state of play is catching up on that of other asset classes, but some gaps can still be identified. This applies particularly to the quality of the underlying data. It is in large part reported by governments themselves, which becomes an issue as the independence and assurance of the reporting organ decreases. Moreover, many of those underlying data are estimates of an unobservable data point. Also, ad hoc changes in methodology cause jumps in the time series. Finally, the timeliness of the data is another issue when it comes to using it as an investment tool: the data series are usually updated once a year. As a result, relatively aged data is presented as up to date.

Specialised ESG data providers run into similar difficulties. The problems identified in the underlying data translate to the scores, details of the methodology are obscure, and providers use a one-size-fits-all approach: the same scoring methodology is applied to all countries, regardless of the state of development or other factors.

Traditional credit ratings
We also investigated how ESG is integrated in traditional credit ratings. Credit-rating agencies have taken steps towards clarifying how ESG factors enter credit analysis, and those welcoming improvements are made visible thanks to regulatory pressure in Europe and the work of the PRI ESG in Credit Rating Initiative. Nevertheless, discrepancies between this approach and our needs still exist, mainly in the time horizon considered, as well as in the formal, quantitative modelling of ESG risks. Furthermore, the update of the rating usually happens after the fact, once financial markets have assimilated new information. As a participant in the PRI’s ESG in Credit Ratings Initiative, we are collaborating with credit rating agencies and other stakeholders to ensure that ESG factors are effectively incorporated into credit rating models for sovereign as well as corporate issuers.

1. The focus always includes governance, while social and environmental factors are less often included.
ESG performance in practice

Some of the shortcomings we identified can only be avoided by reforming data reporting processes and timeliness, which can be considered a far-fetched objective for the time being. Nevertheless, some issues can be addressed by developing an internal methodology to evaluate the ESG performance of sovereign issuers. Based on the results from our analysis presented above, internalising the process allows us to best capture our current objectives regarding ESG integration. We do so with the overarching goal of identifying the financial impact of ESG factors on sovereigns’ creditworthiness.

Additionally, we believe that a score assessing the materiality of ESG factors should take into account the intricacies of how each dimension might affect the country differently and in a dynamic way. Naturally, it is impossible to reflect these complexities in one single number, and claiming to do so would defeat the benefits of a simple, carefully-designed score. It is however possible to build a score incorporating a certain flexibility, allowing for integration of the different impacts of measures on various sovereigns. This is what we set out to do.

Financial materiality

Traditionally, governance factors are considered more important, relative to social and environmental ones. While there is broad consensus regarding the essential role of institutional development in economic performance, it is less obvious how social and environmental factors represent a risk to the fiscal health of a country. Extreme cases of Caribbean and South-East Asian countries threatened by rising sea levels or extreme weather events, and Middle-Eastern nations shaken by the Arab Spring are clear-cut. It is more difficult to assess the direct effect of those factors on less exposed countries. In any case, it is well-recognised that such links between environmental and social factors and credit risk are increasingly relevant in the long term.

The first step towards building an ESG score is the collection of data. We include data points from publicly available sources such as international institutions, e.g. the World Bank or the World Economic Forum, and NGOs like Reporters Sans Frontières and Freedom House. Combining various sources of data also allows us to widen the range of topics covered by our raw dataset. To quantify ESG risks, we aggregate the raw data into several sub-indicators, capturing particular aspects of E, S and G factors. These are the factors whose materiality is determined: the larger the impact on the credit spread of the country, the higher the final weight in the ESG score.

The computation of those sub-indicators also helps to avoid statistical complications arising from the large number of variables, while keeping a level of detail sufficient for a statistical analysis of materiality. After aggregating those into separate environmental, social and governance scores, these eight numbers are weighted based on materiality for each level of development and combined to form our final ESG score (Figure 2).

![Figure 2: Aggregation process: non-exhaustive list of data, indicators and scores](source: Aegon Asset Management)
Tailored to development

A closer look at development economics shows that a one-size-fits-all approach to ESG factors does not suit the reality of how these factors influence the ability and willingness to repay debt of countries at different stages of development. For instance, a natural disaster affects differently a developing country such as Indonesia with fragile infrastructure and small financial resources to repair it than a developed one like the Netherlands with mechanisms in place to minimise damage and plentiful public coffers.

It is also important to recognise that the materiality of ESG factors does not necessarily follow the established dichotomy between emerging and developed markets. Therefore, we decided to customise our proprietary methodology based on the more disaggregated World Bank country income group classification: low-income, lower-middle-income, upper-middle-income, high-income.

The relative materiality of each factor differs by income group. Governance, ranging from the quality of institutional frameworks to respect for the rule of law tends to be more material to less-developed countries, while environmental factors are most material in upper middle income countries, as they are more reliant on the exploitation of natural resources and exposed to the associated risks. Interestingly, social factors such as income inequality and youth unemployment are the most significant factors in high-income countries, which is visible in the rise of populist political parties as a consequence of increased social discontent.

While non-material factors are still included, their final weight is substantially lower. This allow us to track the evolution of the weights as the materiality could very likely change over time. Thus, the final score is focused on those indicators that matter in terms of credit risk.

Figure 3: ESG weighting tailored to stage of development
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**ESG scores**
The distribution of scores (Figure 4) does not yield surprising results; it confirms the link between ESG performance and development. Developed countries make up almost 80% of the top 50 countries in terms of ESG score, with Nordic nations leading on all fronts. Sub-Saharan countries, however, are relatively equally distributed below the 60-mark, accounting for the majority of countries scoring below 30.

**ESG momentum**
The momentum in ESG scores nuances this story (Figure 5). While developed economies are pretty much stagnant at high levels of ESG score, variability increases as the average income of the region decreases.

- In the most extreme cases, such as in sub-Saharan Africa and in the Middle East, countries descending into (civil) war such as South Sudan, Syria or Libya drag down the momentum score of the region.
- Apart from those countries, negative momentum experienced by the Middle East can be attributed to negative social changes, likely the aftermath of the Arab Spring.
- On the other hand, countries that are starting to recover from violent conflict (Sudan), or simply open up to the rest of the world (Myanmar, Iran) see their ESG score increase dramatically.
- In the case of Asian countries, similarly to central Eurasia and sub-Saharan Africa, the positive momentum is driven by improvements in governance.

Bearing in mind that this ESG score is built to reflect factors that are financially material to credit risk, those results provide an opportunity to allocate capital to countries that are emerging as well-governed, peaceful and sustainable, all of which are signals of good future economic performance.
Bottom-up credit analysis

Our ESG score therefore measures the ESG risk that each country faces given its level of development. Next to that, we use a measure of momentum in ESG, which captures trends in the ESG performance of a country. Together, these measures provide us with a dynamic summary view of the ESG strengths and weaknesses of sovereign issuers. The underlying data is always readily available; particularly poor performances, which might not be revealed in an aggregated score, are flagged for further research. Sovereign credit analysts also conduct bottom-up research to complement and clarify the insights of our quantitative methodology.

This combination of bottom-up and top-down approaches gives the investment team a full picture of the ESG risks and their materiality to a sovereign issuer’s creditworthiness. Further, the Responsible Investment Team advises the investment team during each stage of the process, exchanging views and providing insights into the risks identified, ensuring that the investment team can gradually take more ownership of the process as their knowledge of the issues increases in each cycle.

Figure 6: Aegon Asset Management Netherlands ESG integration process in sovereign portfolios.

Source: Aegon Asset Management
The outbreak of the sovereign crisis in 2012 caused Portugal to be downgraded to below investment grade rating by all three rating agencies. It took the country five years to regain its former rating status, following a path of severe fiscal adjustments. The investment grade rating was regained by S&P and Fitch in 2017, and later by Moody’s in 2018. Since 2012, economic growth has been key in building both confidence and stability in their bond market. The GDP growth of Portugal in the last 5 years has been increasing after an average of -2% in the years after the sovereign financial crisis. In 2017 GDP growth was 2.8%, achieving a stable (2013-2016) or decreasing (2016-2017) debt to GDP ratio.

Credit rating deteriorated at a similar speed as Portugal’s spread differential versus Germany, peaking in the second half of 2011. Relevant short term indicators such as the ability of the country to access wholesale markets indicated caution, and investors adopted a cautious stand. However, our score methodology showed a stable and relatively high score as compared to other countries in the same income group.

In figure 8, it can be seen how labour protection and policy deteriorated significantly in 2012, mainly due to the implementation of reforms that were aimed towards achieving a more flexible economy, which led to a salary devaluation. That effect was compensated by a general positive momentum coming from several other indicators, such as basic rights and needs or institutional strength.

Since 2012, the reforms continued and affected several aspects of the Portuguese economy. An example of that is the steps taken into reducing the energy tariff deficit and increasing the use of renewable energy, which starts to pay off since 2013 onwards. While most of these policy actions improved the long term sustainability prospects of the country, valuations remained expensive and ratings were kept low, increasing the attractiveness of Portuguese bonds even before market indicators started becoming more positive.
Case study 2: France, Germany and Italy

The environmental score of Germany is much higher than that of France and Italy (Figure 9). Germany’s credit spread is also very low, while Italy’s is skyrocketing. This example shows that active management is needed next to the score.

Firstly, while Germany’s environmental score is the highest, it scores poorest on some individual issues. In particular, the country still depends substantially more on lignite coal than its European peers. This very low score is compensated by high scores in most other variables, such as water productivity or land conservation. France, on the other hand, performs relatively well on most indicators, while Italy performs very well on the least material ones, but has an ambitious target to phase out all its coal power plants by 2025, for example. By looking only at the big picture (Germany performing well environmentally), one might miss a material risk that is only seen in the more disaggregated data. Therefore, next to the score, indicators are reported signalling whether there is a substantial problem in an underlying series.

Secondly, the yearly update of the ESG score fails to capture most of the developments currently taking place in a dynamic way, such as the current deterioration of the rule of law in Italy (through the disregard of EU law), or the hesitation to provide humanitarian assistance by the current government driven by unsustainable level of illegal immigration and rise populist political parties. These cause spread fluctuations that cannot be anticipated by the ESG score. This can be expected, as ESG factors highlight longer-term risks that are not yet priced by the financial markets, but could be in the future.
Conclusion

Going through the process of creating a proprietary methodology to assess the ESG performance of countries sheds light on the complexities and opportunities of integrating ESG in sovereign debt portfolios. Due to the clear limitations to the quality and timeliness of raw data, this exercise clarifies the extent to which we can rely on quantitative methods and where additional bottom up credit analysis complement the ESG integration process.

Our proprietary ESG score provides a clear signal of countries’ ESG performance. The methodology has been constructed around core ideas of development economics, in order to have more realistic and robust approach to ESG in sovereigns. Nevertheless it is not enough to simply look at the score to make an investment decision. Instead we also consider the ESG momentum, which is a useful proxy of improvement or deterioration in ESG performance, and help us identify ESG leaders and improvers.

This highlights the importance of developing our own assessment process. It allows us to be in control of all parameters, and thereby to know exactly what the score and the momentum does and does not tell us. Such control helps us pinpoint exactly where more bottom up qualitative credit research is needed. This combination of quantitative and qualitative ESG tools, alongside traditional economic factors, allows the analyst to develop their own view of the issuer’s creditworthiness, which ultimately drives the portfolio construction.
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