MFS® White Paper

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Developed Market Sovereign Bonds

ESG Factors Under the Spotlight

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In brief

- The explicit integration of environmental, social and governance (ESG) factors into the sovereign bond analysis process is relatively nascent, though some ESG factors have been an integral part of sovereign bond analysis for many years.
- MFS' approach to developed markets sovereign bond analysis is to integrate ESG factors into the research process, alongside other factors, to reach a single, holistic investment recommendation.
- Our approach recognises the differences when engaging with sovereign issuers as compared with engaging with companies as an equity or corporate bond investor.

Sovereign bonds are a major component of the fixed income market. They represent the largest single group within the fixed income investment universe and therefore the largest share of global assets under management. Within the Bloomberg Global Aggregate index, for example, Treasuries and sovereign bonds represent nearly 54% of market value.[1] Agency, local authority and supranational issuers account for a further 9%, 3% and 2% of market value, respectively. By comparison, industrial bond issuers account for just 10% of this index. Other major indices are not too different: In the Bloomberg Pan-Euro Aggregate index, Treasuries and sovereign bonds represent nearly 61% of market value, and agencies, supranational and local authorities' bonds account for an additional 15%.

The world of sovereign issuers is often divided into emerging markets (EM) and developed markets (DM). This division reflects, among other things, the riskiness of the issuer and the type of analysis undertaken by investors. DM sovereign bonds are the focus of this paper. These bonds have historically been viewed as having relatively low credit risk, especially those issued by large countries such as the US and Germany. The credit quality of many developed market sovereign issuers has deteriorated over the past two decades, however, as public sector borrowing has risen in almost every country. The deterioration has led the credit rating agencies to downgrade many DM sovereigns.

For example, until 2013 the United Kingdom was rated Aaa by Moody's, but since then its rating has declined to Aa3. In 2001, Spain's rating was raised to Aaa by Moody's, but in 2012 in the wake of the Eurozone debt crisis, it was downgraded to Baa3 (the lowest investment-grade rating); although it has recovered since then to Baa1, it is still a far cry from a triple-A rating. The most noteworthy recent example among DM sovereigns is Greece, which was upgraded to A1 by Moody's in 2002 and then, following the GFC and the Eurozone debt crisis, downgraded several times: to A3 in April 2010, to Ba1 (sub-investment grade) in June 2010 and to C in March 2012. In a reversal of fortune, Greece's credit rating improved to Ba3 in November 2020.

The importance of integrating ESG into sovereign debt analysis

During the Eurozone debt crisis, bonds issued by Greece, Ireland, Italy, Portugal and Spain experienced much higher volatility than anticipated, leading investors to place greater importance on thorough analysis, including areas related to ESG factors. While it is true that considering some ESG factors has been an integral part of sovereign bond analysis for many years, the explicit integration of these factors is still in its relative infancy. Historically, DM sovereign bond analysis has considered factors such as population profile, stability and policy of governments, and labour market structure as part of the macroeconomic and fiscal analysis of the issuer. This has been combined with valuation considerations to result in an investment decision. In recent years, there has been an increased focus on integrating the consideration of ESG factors into DM sovereign debt analysis more explicitly because of the experience of the Eurozone debt crisis and other reasons.

While the drivers of the further integration of ESG into sovereign debt analysis are known, there are also some very significant barriers to the approach gaining traction.

The impetus for explicit ESG inclusion in DM sovereign analysis can be categorised into three broad areas:

- **Seeking to improve investment performance** – With the increasing effects of climate change on countries' economies around the globe, focusing solely on macroeconomic and fiscal data indicators can lead to suboptimal investment decisions. Greater awareness of the impact of climate change as well as social factors on the performance of DM sovereign bonds is driving investors to seek additional factors for consideration. Independent research suggests ESG scores have been drivers of sovereign credit spreads; countries with high social and governance scores in particular have tended to have tighter credit spreads. The relationship between ESG scores and credit spreads is especially strong in EM where there is additional risk premium relative to DM.[2]
- **Investor demand** – Asset owners' desire to address climate change as well as the social and governance aspects of their portfolios, alongside increased awareness of the potential performance implications of these factors, has further driven the explicit integration of the consideration of ESG factors into investment analysis.
- **Regulation** – Regulatory bodies are increasingly emphasising the disclosure of ESG factors as it relates to both the research process (*e.g.*, integration of ESG considerations in identifying investments and portfolio construction) and product development and marketing (*e.g.*, investment product categories).

Barriers to integrating ESG

While the drivers of the further integration of ESG into sovereign debt analysis are known, there are also some very significant barriers to the approach gaining traction. The first obstacle relates to the *consistency of data* in this area. Although rating agencies and other data providers are developing many measures related to ESG factors, most of the data with a longer track record relate to governance and some social trends as measured by the OECD, the World Bank and the European Commission. There is very little data a sovereign debt analyst can access when examining a broader array of factors that could have an influence on performance and how to measure it.

The second obstacle is that *ESG factors are often connected to other factors*. A country's credit quality over time depends on a range of macroeconomic factors, such as economic growth, policy decisions, governance standards and the ability to withstand external shocks, as well as social trends and environmental changes. Such considerations are often intertwined, and it is impossible to identify and select material ESG factors that affect bond performance in a statistically significant manner. The nature of a country's governance can impact social trends as well as its ability to withstand external shocks such as droughts, floods and fires while a country that is less affected by climate change can maintain credit quality with poorer governance.

The third obstacle is the *characteristics of the asset class*. DM sovereign bonds, as mentioned, is the largest asset class in fixed income, and its importance as a benchmark for pricing other higher risk securities and the range of investors that buy government bonds for a variety of different reasons mean that performance is often affected by government policy, bank regulation, risk-on/risk-off sentiment in other markets, currency fluctuations and macroeconomic expectations.

A range of ESG factors can influence DM sovereign debt performance. Despite the obstacles, it is worthwhile identifying, monitoring and incorporating them into the investment analysis since ignoring them can lead to suboptimal performance.

ESG Integration in DM sovereign bond analysis

ESG integration in the research process requires that investors consider ESG-related factors in an explicit way as an integral part of the investment analysis process. In doing so, it is important to recognise the unique characteristics of sovereign issuers as compared with issuers of corporate bonds or company equity.

ESG integration in investment analysis requires that investors consider ESG-related factors in an explicit way as an integral part of the research process.

First, there are different positions of influence. While corporate bond issuers and listed companies are law *abiders*, issuers of sovereign bonds are law *setters*: They decide on the legal frameworks in which they operate.

Second, while the management and boards of companies have various legal responsibilities with respect to their shareholders and creditors, governments are beholden to the people of the country they govern. Consequently, investors should not seek to influence government behaviour in the way they might seek to influence the management of a company if they are not satisfied with the company's strategy or performance.

Third is the issue of measurement and data. While companies can measure or model their emissions levels, it is much harder to do this with any degree of accuracy at a country level, so goals to reduce environmental impact, for example, are quite different from those of private entities. The influence that investors can exert over private companies has also spurred the development of ESG-factor reporting initiatives such as the Global Reporting Initiative, the Task Force on Climate-Related Financial Disclosure (TCFD) and the Sustainability Accounting Standards Board (SASB). These exist because investors want to assess ESG factors in a systematic manner and exercise influence over companies. The same does not hold true for sovereign bonds, although there are some supernational bodies, such as the World Bank, the IMF and the United Nations, that measure some items that fall under the rubric of ESG.

As a result, most investors in sovereign bonds must develop their own frameworks to integrate ESG factors into their research process, based on their particular investment goals. Some advocate mapping material factors and then assessing their timeliness to try to judge their influence on a country's creditworthiness. Often the aim is to apply a rigid systematic approach, with each country assessed according to predetermined criteria and scales, resulting in an ESG score that enables comparisons.

At MFS, our DM sovereign bond analysts recognise the importance of explicitly integrating ESG factors into the research process. They also recognise that this is a challenge, given the data available, the fluid nature of the influence such factors have on credit quality, and the need for regular reviews of materiality and timeliness.

MFS' approach to DM sovereign analysis and engagement

At MFS, our purpose is to create long-term value for our clients by allocating capital responsibly. We view sustainability as synonymous with long-term active investing — and long-term active investing is precisely what MFS has been doing for almost a century. Our investment approach requires remaining adaptable and changing with the times, combining collective expertise with thoughtful risk management built on a foundation of shared values and collaboration among teams of diverse thinkers. This approach and the underlying culture shape the way in which we integrate ESG into our DM sovereign bond analysis process.

Our objective when integrating ESG into our research process is to produce a single investment recommendation rather than separate ESG and economic (or valuation) scores.

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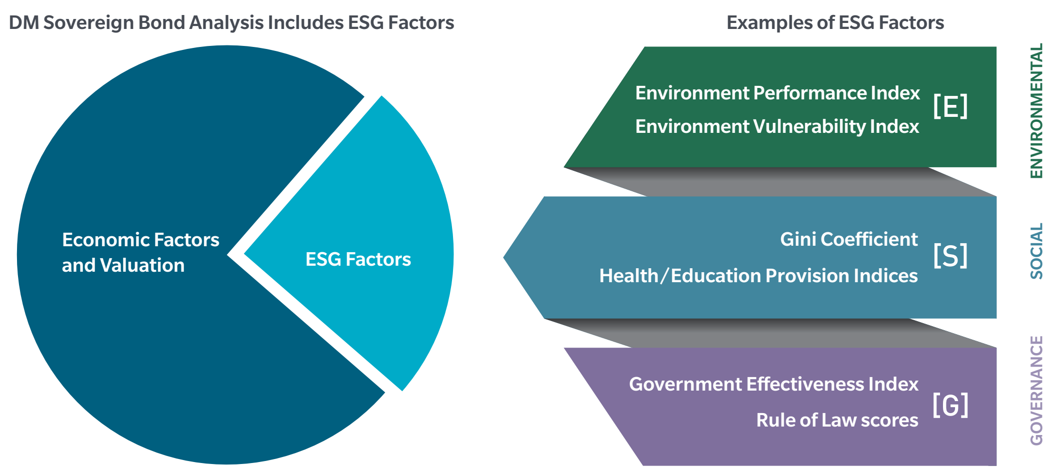
When considering the effects of ESG factors on sovereign bond performance, our analysts recognise that ESG factors may have a relatively stronger influence on long-term performance, while in the short term, many other factors, including central bank policy, government policies, currency fluctuations and market conditions, may have a relatively greater impact.

Some examples of ESG factors considered include:

- **Environmental:** climate risk, resource management and environmental performance and vulnerabilities
- **Social:** income inequality, educational quality and intensity, health provisions, demographics
- **Governance**: various measures such as the World Bank's Governance Effectiveness and Rule of Law rankings

These factors are assessed alongside more traditional metrics to reach an active investment decision. (see Exhibit 1).

Exhibit 1: Developed Market Sovereign Bond Analysis Factors



The list of factors is long, and rather than rate them for all the issuers in the same way (*e.g.*, 60% governance, 20% social and 20% environmental), we focus on the those we judge to be the most relevant for a specific issuer. In determining these, we start with a common set of factors; each of them is assessed in terms of *materiality* and *timeliness* — what will be the likely effect on credit quality and is there a time horizon associated with this, or is it something that could happen at any time?

The assessment of both materiality and timeliness feeds into the way we seek to engage with issuers as well as the investment recommendation. For example, a country might become more prone to flood damage due to climate change; this may be a long time in the future, but flood defences need to be built now and this requires funding. The country needs to decide whether it can afford the defences without harming its credit quality. The analysis of materiality and timeliness is designed to highlight what poses a near-term risk or opportunity and what needs to be addressed over time, as well as the costs involved and whether the issuer can afford to fund mitigation without damaging its credit quality.

As highlighted above, engaging with sovereign issuers is very different from engaging with companies. The purpose of our engagement in the DM sovereign bond world is to gain further insight and a better understanding of how issuers plan to address the areas we might be concerned about. There are many ESG-related initiatives in the DM sovereign bond universe nowadays: the UK Government's Green Financing Framework (June 2021); the EU Recovery Fund, where one third of funds must be directed to green objectives; and many others. These enable us to monitor progress against goals and targets, and to better understand the priorities of each government.

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The level of engagement with sovereign issuers is increasing, but it is still significantly below the level of corporate engagement. MFS' sovereign analysts engage with issuers through calls with the relevant officials in a country's treasury and/or finance ministry, by meeting officials during country visits and by initiating calls to explore topics deemed relevant and important.

The goal of integrating ESG into our research process is to ensure the analysts' investment recommendation contain the ESG factors they deem relevant. The fluid nature of ESG factors means that we need to allow analysts plenty of discretion. They are best positioned to determine what is important and what isn't. The nature of the distribution of returns in fixed income investing is such that we are more concerned about the downside than the upside. We want our analysts to focus more on what could go wrong than on what could go right.

Rather than assigning the same weight to an ESG factor for all issuers, our analysts decide which factors are most relevant for a particular issuer by considering a wide range of factors. For example, in a country with strong, stable institutions and the regular, peaceful transfer of power, election results are less likely to affect bond yields than election results in a country where the government is less representative and the transfer of power disorderly. Similarly, in countries where income inequality is high, fiscal policies that raise taxes are more likely to lead to civil unrest or government instability than in countries where income inequality is low.

Once our analysts determine the relevant factors to incorporate into their research process, they assess these together with economic factors and valuation and arrive at a single investment recommendation.

Conclusion

Explicitly integrating ESG into in the sovereign debt analysis process is gaining momentum, driven by investors' desire to address climate change and other social and governance factors, along with a greater awareness of the implications of these factors for investment performance. This trend is being further propelled by regulators' increasing emphasis on standardised ESG disclosure.

The MFS approach to incorporating ESG analysis into the research process focuses on producing a single investment recommendation that takes account of economic, valuation and ESG factors. This is a flexible approach that allows analysts to decide which factors among many are most relevant to an issuer. Integrating ESG in an explicit way as an integral part of the sovereign bond research process is consistent with MFS' mandate to create long-term value by allocating clients' capital responsibly.

Case Studies

Austria

In its overall funding strategy, the Republic of Austria, like some other European countries, takes into account sustainability and climate change factors. The Austrian Debt Management Office (DMO), a department of the treasury, is tasked with developing and implementing the funding strategy for the country's climate-related plans.

MFS' sovereign analysts met with officials from Austria's treasury and DMO in May 2022 as part of their engagement efforts with sovereign issuers. The purpose of the meeting was to understand the overall strategy in terms of sustainability and related funding, and to gain further insight into idiosyncratic risks that could affect the country in the short and medium term. Topics discussed included Austria's plans to reduce its dependency on Russian natural gas, the proportion of funding that will be allocated to reduce flood risk in certain areas and the possible effect of climate change on the tourism industry.

Overall, our analysts view Austria's ESG standing as solid and do not believe ESG risks will have a material effect on their investment view of the country's bonds. For example, the country's energy mix contains a larger portion of renewables than the EU overall, and its economy is diversified and not excessively reliant on one or two sectors (see Exhibits 2A and 2B).

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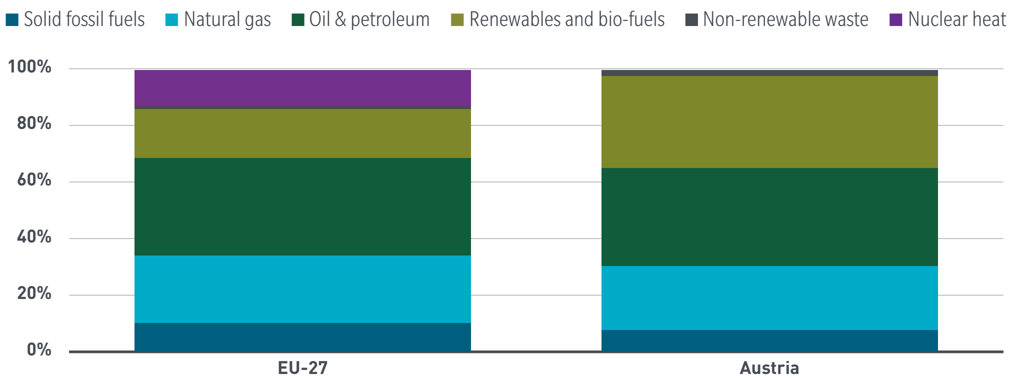
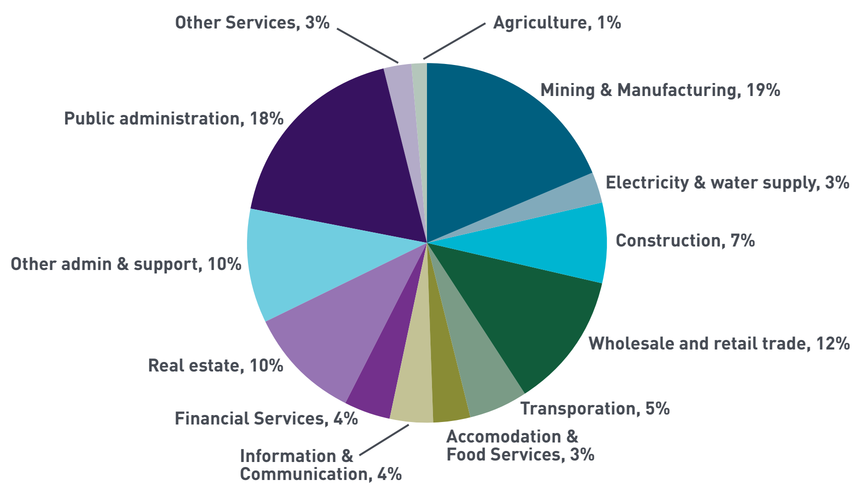
Exhibit 2A: Austria's energy mix



Source: Eurostat energy statistics, 2020.

Exhibit 2B: Sources of economic activity



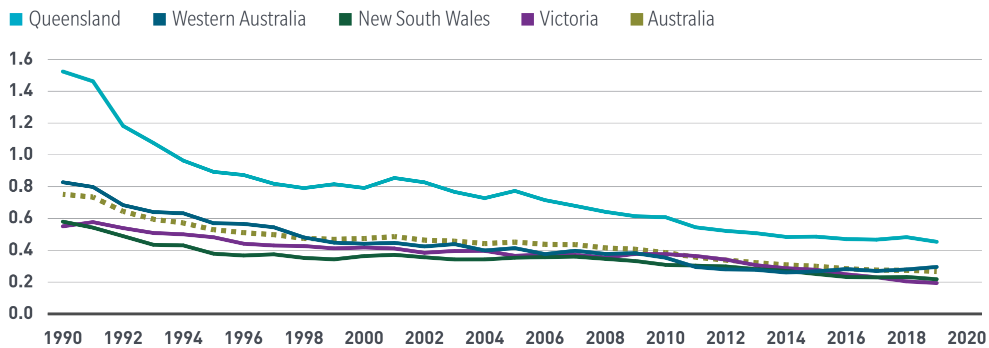
Source: Austria Statistics Office, 2021.

Queensland, Australia

Environmental issues are central to the outlook for the resource-rich Australian state of Queensland. Although much has been achieved in terms of reducing Queensland's GHG intensity, it remains the most carbon-intensive state in Australia, and mining royalties are an important contributor to state revenue, as Exhibits 3 and 4 show. Global decarbonisation efforts challenge extractive industries such as coal and gas that are integral to the state economy, certain regional and urban communities and government finances such as mining royalty revenue collections, complicating the transition away from the mining industry. Moreover, the climate change impact on the Great Barrier Reef and the tourism sector is raising the uncertainty around a significant source of economic activity for the state. Queensland, a tropical state on a largely dry continent, is also vulnerable to a wide range of natural disasters such as bushfires, floods, droughts and cyclones.

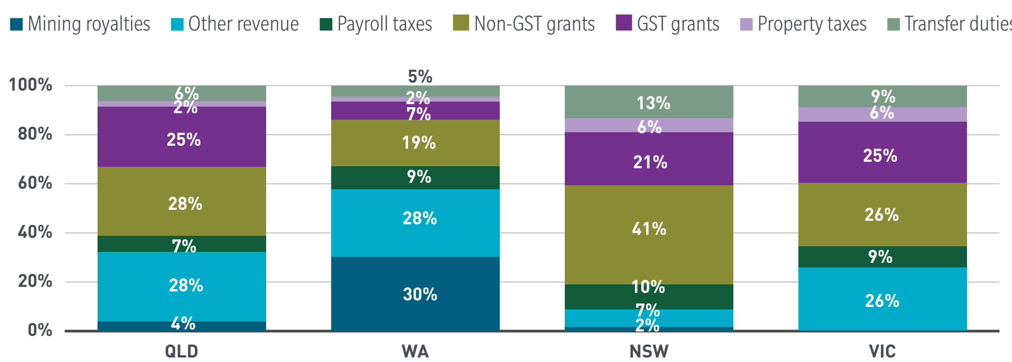
Recently, we established a dialogue on ESG with representatives of the Queensland state government, namely the debt management office, the Queensland Treasury Corporation (QTC), on various issues, including the overall progress on climate risk mitigation. Engagement will be ongoing, with initial discussions considering the challenges as well as the opportunities, such as government support for renewable energy production and green industries, like solar-powered hydrogen and ammonia production in Gladstone, for example. Further investigations will be made related to improvements to physical and institutional infrastructure in areas such as water, solar and transport by the public sector, as well as its partnership with the private sector and management of its green bond issuance to facilitate funding through the capital markets.

Exhibit 3: Greenhouse gas emissions for Australia and the major states



Sources: State and Territory Greenhouse Gas Inventories 2019 (DISER, 2021). National, state and territory population: September 2020 (ABS, 2021). Australian National Accounts: State Accounts, 2019-20 financial year (ABS, 2020). DISER = Department of Industry, Science, Energy and Resources. ABS = Australian Bureau of Statistics. Note: Emissions shown are per real gross state domestic product (t CO2-e per $1000).

Exhibit 4: Government revenue breakdown for the major states (FY 2020–2021)



Sources: NSW Treasury, WA Treasury, QLD Treasury, VIC Treasury, Australian Bureau of Statistics. QLD = Queensland; WA = Western Australia; NSW = New South Wales; VIC = Victoria.

United Kingdom

Climate and environmental objectives are taken seriously by the UK government. One key objective is achieving a legislated net zero emissions target by 2050 (another is its hydrogen strategy). For bond investors and analysts, it is important to try to determine how the economy will be affected by such a reduction in greenhouse gas emissions and the transition from fossil fuels to green technology. For instance, potential changes in the labour market as well as to GDP need to be assessed. This is why it is important to consider relevant publications like the government's Ten Point Plan and incorporate what this might mean for the UK, and also to engage with the government's bond issuance program.

The UK government laid out its Green Financing Framework in June 2021. This effectively describes the financing plans via green gilts and saving bonds that further the government's environmental objectives. It sets out the basis for the 'identification, selection, verification and reporting' of the green projects eligible for financing using green gilt proceeds.

MFS analysts attended the initial virtual investor call hosted by the UK Debt Management Office (DMO), which provided investors with the necessary information regarding the inaugural green gilt, launched via syndication in September 2021. An updated green gilt investor presentation used to market UK funding plans was made available in October 2021. Our analysts will continue to attend DMO investor calls regarding green gilts and the Green Financing Framework to incorporate ESG considerations into our research process (including how these fit into the broader gilt supply remit). In addition, the UK treasury has indicated it will produce an annual allocation report and further impact reports to provide greater transparency.

Endnotes

[1] Bloomberg, May 2, 2022.

[2] Lupin Rahman, Jeremy Rosten, Pierre Monroy and Shuo Huang, *The Journal of Fixed Income*, Summer 2021, 31(1) pp 51 – 64.