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The Ascent of Green Bonds

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Introduction

Across the global economy, Environmental, Social, and Governance (ESG) factors are becoming more important and better integrated into the activities of governments, investment managers, plan sponsors, consultants, and industry. I've written on this topic earlier, most recently in Reflections on Meetings in Washington, D.C. In that post, I wrote about the growing attention leveled on ESG factors and, specifically, the acute awareness that environment and climate risks are receiving from both governments and companies. There are growing initiatives to arrest environmental deterioration; however, addressing these forces creates a cost. Increasingly, entities—whether they be sovereign, municipal, or corporate—have turned to green bonds in increasing numbers to finance climate-related initiatives.

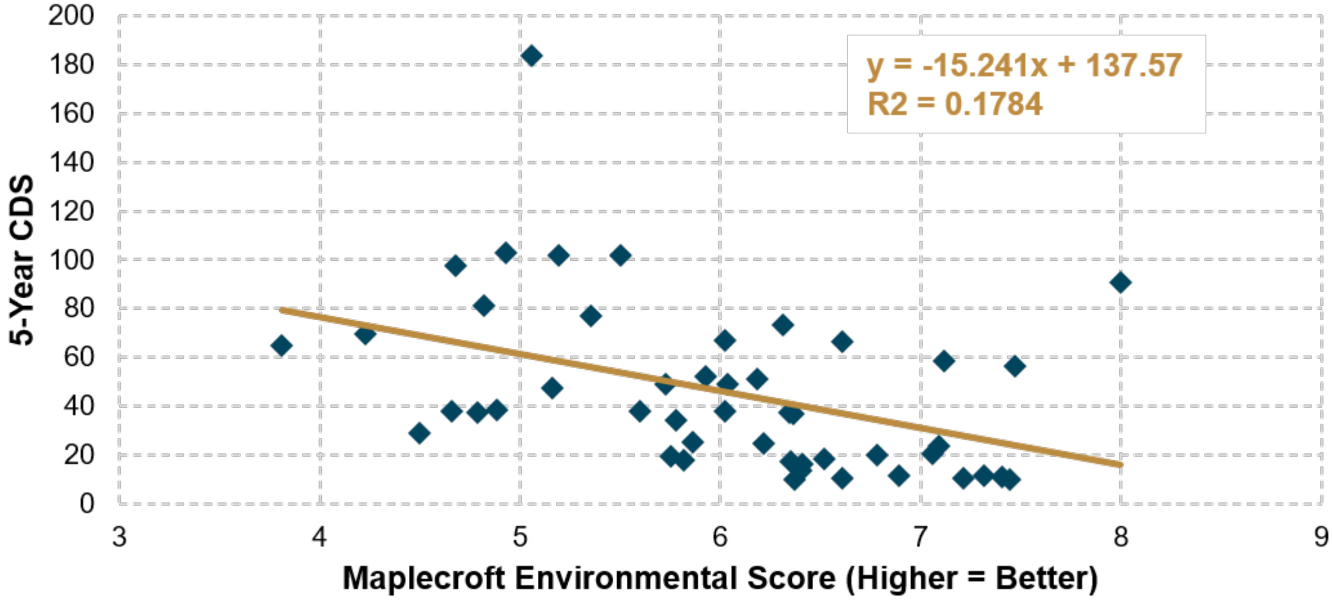
A Brief Analytical Recap

In our analysis of ESG factors and their impact on sovereigns we found that governance is the more significant factor in explaining credit default swaps (CDS) and interest rate spreads; I've also discussed these spreads in prior ESG-related blogs. Our internal work has also shown a relationship between our ESG score for a country and the sovereign's credit rating. Chart 1 also shows the negative relationship between a country's CDS and its environmental risk score, which we charted for the 68 countries. This chart concludes that a favorable E risk ranking score correlates to a lower CDS, and likely implies a lower cost of debt. In our view, given the greater focus on climate risks, the significance of the E factor could increase within our analysis. The failure of countries to address environmental issues—such as deforestation, greenhouse gas emissions, and renewable energy generation—could first pose a reputational risk, and then broad structural changes as a result of climate change impact. For example, over 200 investors issued a statement last year directing companies to eliminate deforestation from their production—including their supply chains—in the aftermath of the Amazon fires. This perception could negatively affect Brazilian assets in the short term. Deforestation in Indonesia and Malaysia led the European Union (EU) to stop importing palm oil to produce biofuels. Therefore, it's a reasonable expectation that environmental factors may increasingly be reflected in asset prices.

As mentioned earlier, there is a statistical relationship between a country's environmental ranking and its CDS, and the implied impact on its borrowing costs. The demands of the marketplace will pressure governments, among other actors, to address the environment. The prospect of higher cost of debt may be enough to compel issuers to address environmental issues. Green bonds represent a financing vehicle to pursue climate mitigation policies, reduce a country's carbon footprint, and invest in renewable sources of electricity generation.

Chart 1: 5-Year CDS and Our Environmental Score

Percent, As of 12/31/2019



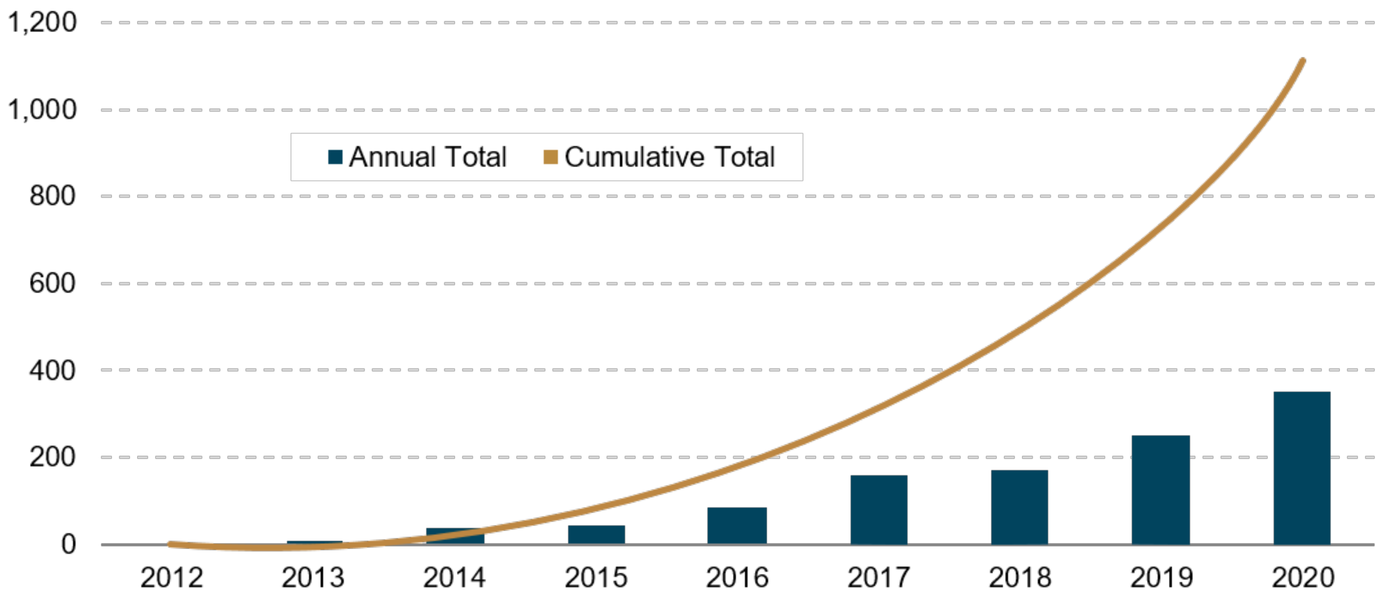
Source: Bloomberg (© 2020, Bloomberg Finance LP), Verisk Maplecroft, Brandywine Global

A Simple Definition

Simplistically, the bonds are “green” because their proceeds support a variety of environmental projects or goals. The issuer attests that these funds will go to support green projects. That’s the message in Chart 2. The growth of green bond issuance has been nothing short of breathtaking, going from virtually zero to over a trillion dollars. But this includes all issuers, like asset-backed bonds, corporations, local government, and sovereigns—just to name a few (see Chart 2 and 3).

Chart 2: Global Green Bond Issuance Over Time

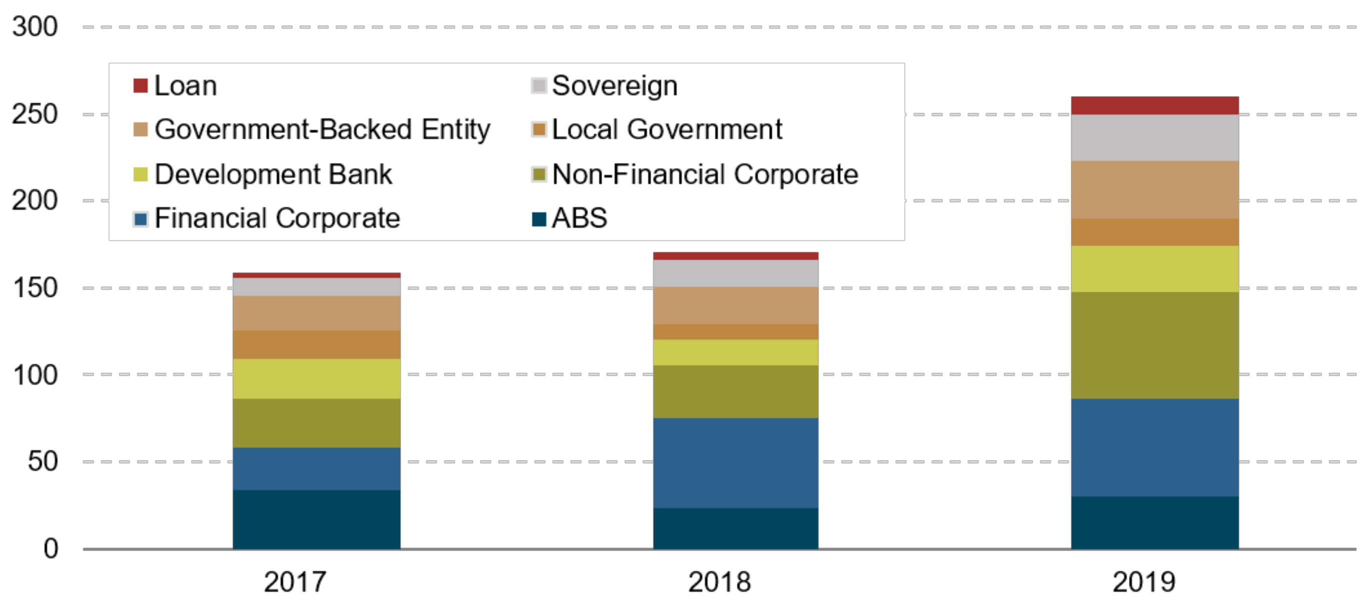
USD Billions, As of 1/22/2020



Source: Verisk Maplecroft and Climate Bond Initiative

Chart 3: Green Bond Issuance

2017-2019, USD Billions, As of 12/31/2019



Source: Climate Bond Initiative

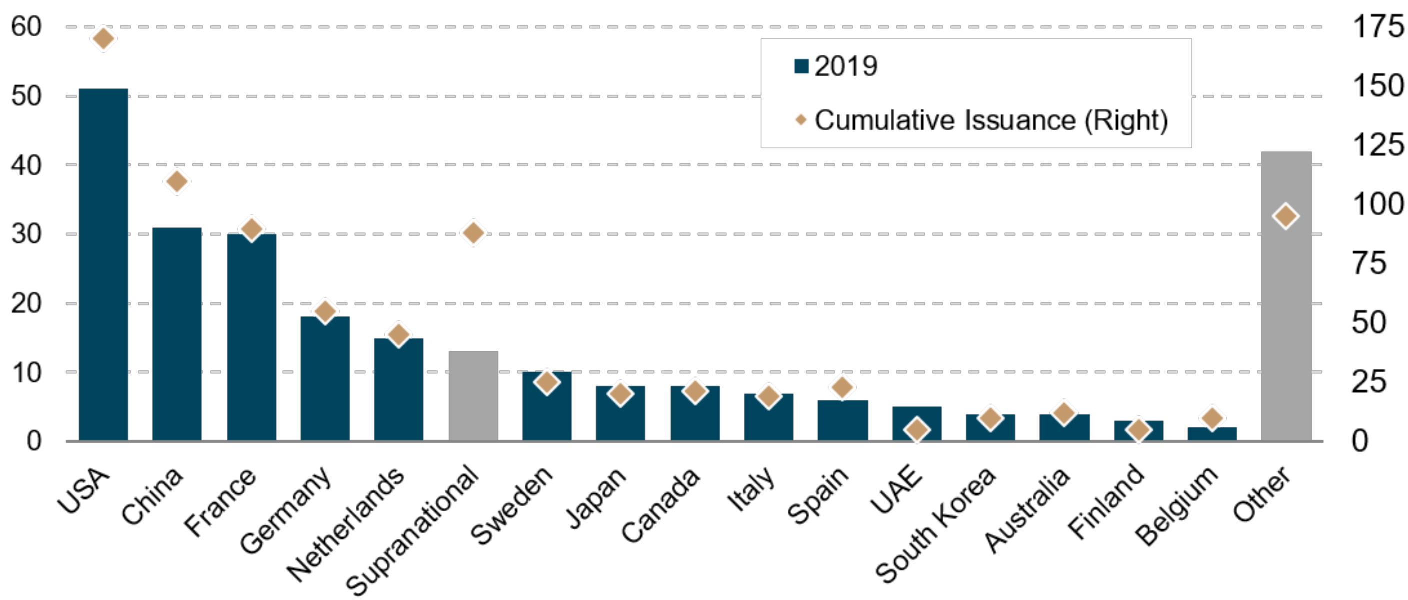
The proceeds of these bonds can be used for a variety of environmental purposes. By far the largest usage of these funds is on renewable sources of energy investment, although other areas of green project investments continue to grow. Waste and water management are being addressed with these funds, and green transportation projects are also beneficiaries.

The Paris Agreement Momentum

The green bond market is still relatively young and despite the phenomenal growth, these bonds comprise a relatively small part of the total bond market capitalization. The European Investment Bank (EIB) issued the first green bond back in 2007—and to this day—remains a sizeable issuer of green bonds, with the funds directed to renewable energy and projects designed to improve energy efficiency. The EIB bonds are denominated in different currencies. Over the years the number of issuers has continued to increase, as entities focus on climate change impacts and ways to address the negative spillovers. The market continues to grow because of the increasing demand for such bonds by investors. The Paris Agreement is an important driver for further growth of such bonds, especially by sovereigns. The goal of the Paris Agreement is to address climate change and pursue actions that limit the increase in global average temperature to 2°C above pre-industrial levels this century, with the goal of a 1.5°C rise in temperature. The desired aim is to shift to a carbon-neutral global economy. Many countries have promised to eventually hit zero carbon emissions, as they shift energy generation away from fossil fuels and toward renewable sources of electricity. The UN has indicated that 60 countries have such a goal and include France, Germany, and the U.K; however, the largest producers of carbon emissions do not have such a goal, including China and the U.S. Green bonds seem to be an ideal source of funding for governments to meet these climate change-related goals. Yet, there has not been a stampede of sovereign issuers. Part of the problem may be the lack of a universal definition outlining what a green bond is and what entity or institution would certify that a bond is green. Presently, the Climate Bonds Initiative (CBI) and the ICMA's Green Bond Principle can be used by an issuer to certify that a bond is green. The largest issuers of green bonds can be found in the U.S, China, and France, as shown in Chart 4. Emerging markets would also benefit from issuing green bonds to support climate mitigation efforts. Why countries have not embraced these bonds in greater numbers is not clear. The investor demand is certainly there, given the oversubscribed Chilean green bond issued recently. Fiscal space, or the lack thereof, could be constraining these governments.

Chart 4: 2019 Green Bond Issuance Top 15 Countries

USD Billions, As of 12/31/2019

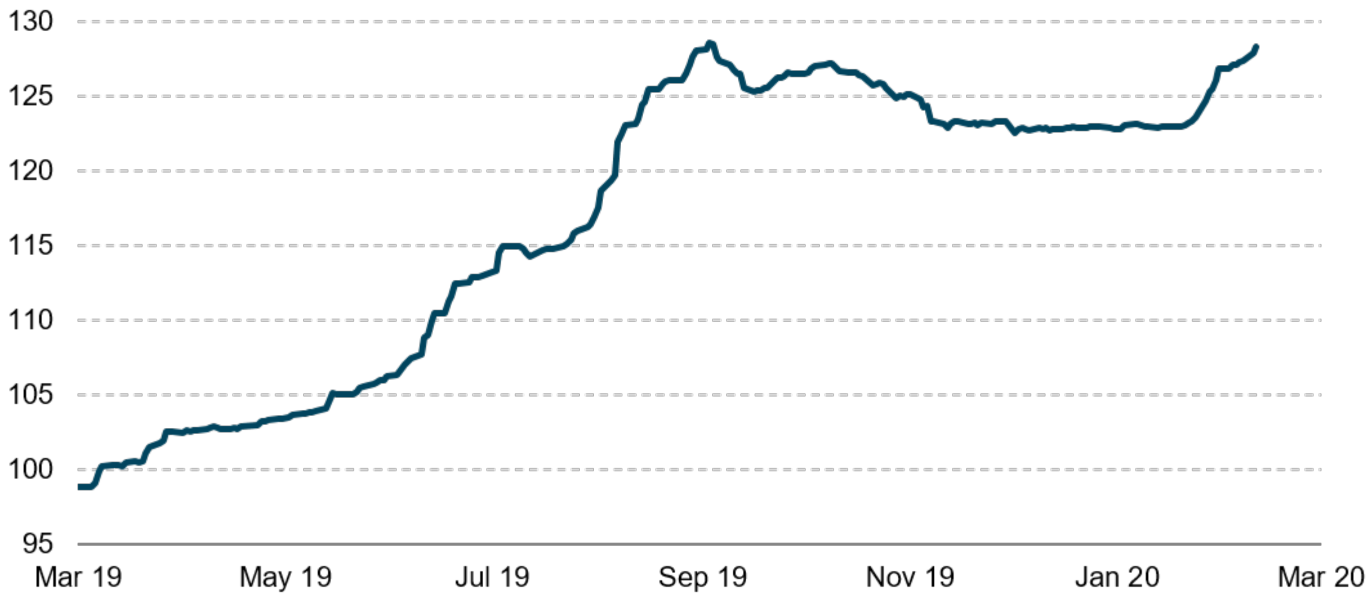


Source: Climate Bond Initiative

Sovereign issuance, as shown in Chart 4, has begun to accelerate with countries increasingly recognizing this source of funding. Some of that issuance will come from countries that have already tapped into green bonds, like France, Poland, and Chile. The European Green Deal could give incentive to countries to issue green bonds to fund their climate initiatives. This European effort pledges to address energy production, building renovation to improve energy efficiency, and produce environmentally cleaner modes of transportation. Emerging markets are disproportionately affected by climate conditions, which could be a good market for them to tap in orders. Poland, for example, is criticized for its use of coal to produce electricity. About 80% of Poland's electricity is produced from coal. Under the auspices of the EU, the Polish government has promised to increase its investment in renewable sources of energy and importing cleaner sources of energy. As a bondholder of Poland's regular sovereign debt, we think this is constructive for the country in the longer-term. Poland was the first sovereign government to issue a green bond in 2016 and has come to market on three different occasions, most recently in 2019. Chart 5 shows the price movement for Poland's recently issued 30-year green bond, with a 2% coupon. This green bond paid the same coupon as the regular sovereigns and carried the same credit ratings. The price movement shows solid investor interest, as well as Poland's efforts to reduce its carbon emissions.

Chart 5: Poland's Recent Green Bond Price Performance

As of 2/11/2020



Source: Bloomberg (© 2020, Bloomberg Finance LP)

Conclusions

While this blog only touches the surface of sovereigns in the green bond universe, there are some preliminary observations we can make:

- Environmental issues are garnering increased attention and a country's approach to the environment and related risks can affect its CDS, how much it pays for debt, and even future economic growth;
- Green market bond capitalization will continue to grow and sovereign issuers will increasingly utilize this market; and,
- Investors will continue to have a strong appetite for these assets.

As new issuance continues to grow, we along with the broader industry, will need to contend with certification, reporting, the return premium, market liquidity, and any portfolio diversification benefits that may accrue from including sovereign green bonds in a portfolio.

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