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Featured G

ESG: Seeds Are Sprouting

J. Patrick Bradley |

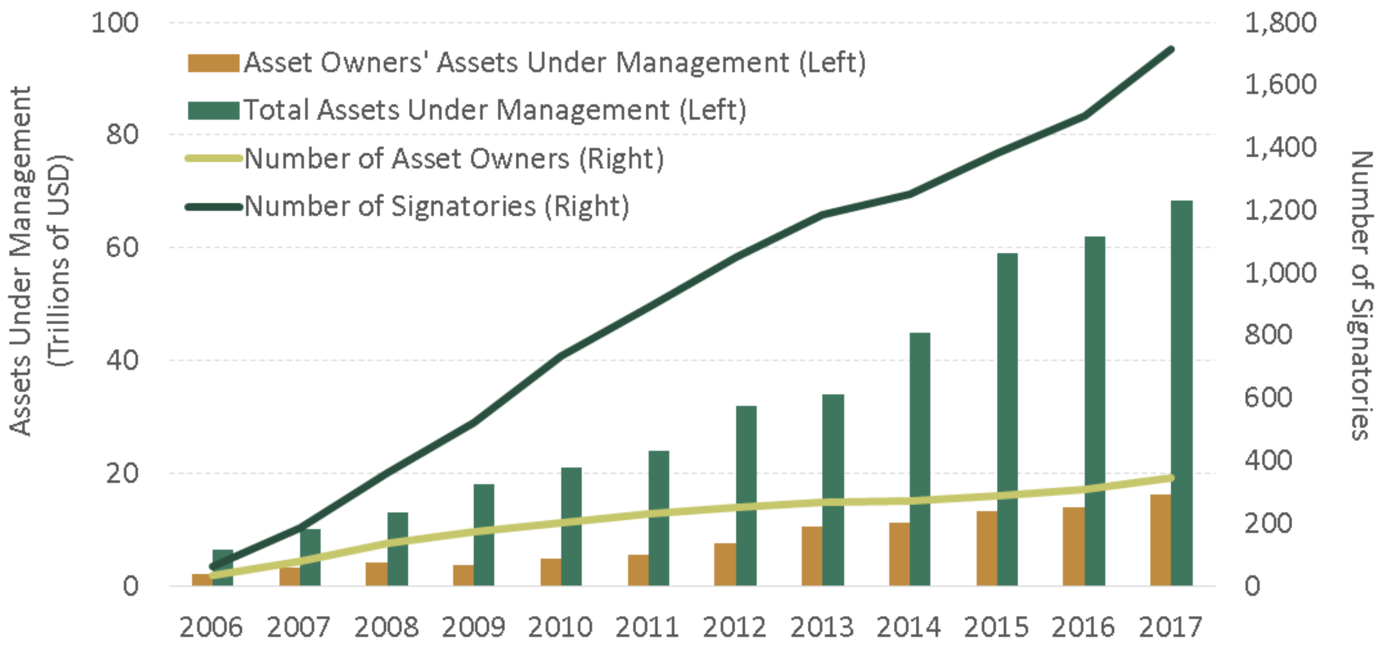
The economic and investment worlds are awash in acronyms. One of the latest that is garnering increasing attention and application is "ESG," which stands for Environmental, Social, and Governance. ESG factors can influence an investment in a company or in a particular geography, whether it is a manufacturing plant that a company plans to build in a specific locale or an investment in a country's sovereign bonds. These factors are increasingly believed, with some academic support, to have an important impact on an investment's potential return, but tend to be more widely discussed with respect to equity research. However, our discussion below will focus on these criteria and their relevance and potential impact on investing in sovereign government bonds, an area where their application has taken root and seen rapid growth.

Genesis and Momentum of ESG Factors

While there is no exact date for when such criteria began to be utilized, some of the earliest examples include religious investors seeking to avoid investing in "sin" stocks, like tobacco, gambling, and defense contractors. Much of the discussion of such socially responsible investing has revolved around equity investing. Environmentally, a company might be evaluated on its energy usage or pollution; socially, a business might be assessed on how it protects shareholder rights or addresses community needs; and, for governance, a company would be evaluated on the independence of its board of directors or its compensation policies. Our interest, as noted above, is the application of these evaluative criteria to sovereign bond investing.

The current momentum toward including ESG factors in investment research and portfolio construction can be traced to the recent efforts of the United Nations. In 2000, the UN created the UN Global Compact, specifying 10 principles on such factors as human rights and anti-corruption. According to the UN, 9,531 companies and 162 countries currently are signatories to this pact. The UN followed this compact with its Principles for Responsible Investment (PRI) in 2006, an organization that seeks to promote a sustainable global financial system through its network of signatories that have committed to incorporating ESG factors into their investment decisions. The PRI effort began with 63 signatories, representing $6.5 trillion in assets under management (AUM). Most recently, there are over 1,700 signatories, with $68.4 trillion in AUM (see Chart 1). Brandywine Global became one of those signatories at the end of 2016.

Chart 1: PRI Signatories and AUM
As of 4/30/2017



Source: UN-Supported Principles for Responsible Investment (PRI)

Brandywine Global Sovereign Bond ESG Integration

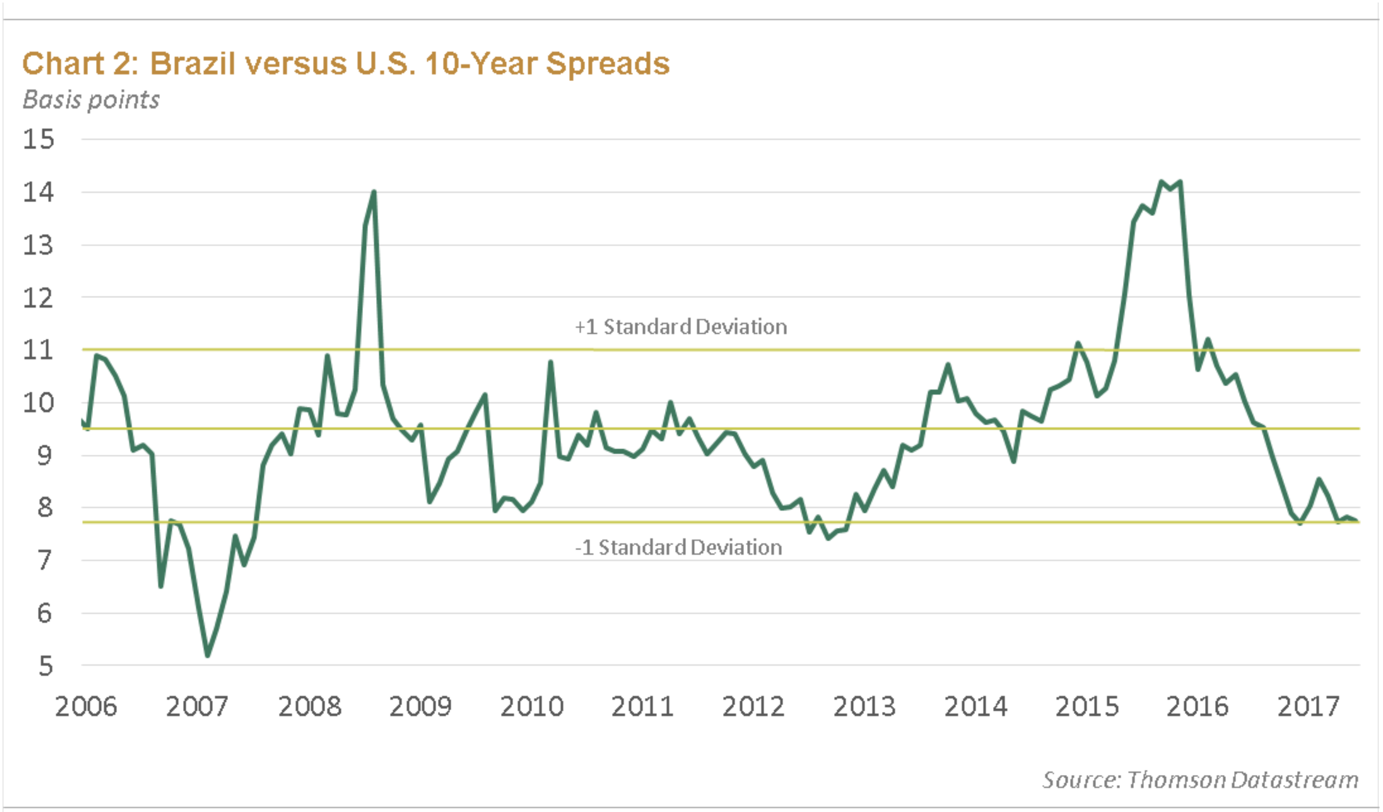
Brandywine Global employs a top-down macroeconomic research process that is designed to exploit price and information risks, risks that can create potential investment return opportunities. In general, Brandywine Global has sought investable opportunities in countries that exhibit good governance and credible institutions, including an independent central bank. Our top-down process evaluates where a country may be in its business cycle, the current tenor of monetary policy, and the catalysts that are expected to drive returns in a particular country's bonds and its currency. ESG factors represent more long-term influences on a country's investment backdrop. Let's review the three factors from a sovereign perspective:

\25A *Environmental*. Environmental factors address a country's energy usage, greenhouse gas emissions, electricity generation via alternative sources of energy, as examples.

\25A *Social*. Social factors include such measures as literacy, diversity, and income equality.

\25A *Governance*. Governance factors address the business environment, corruption, and governmental effectiveness.

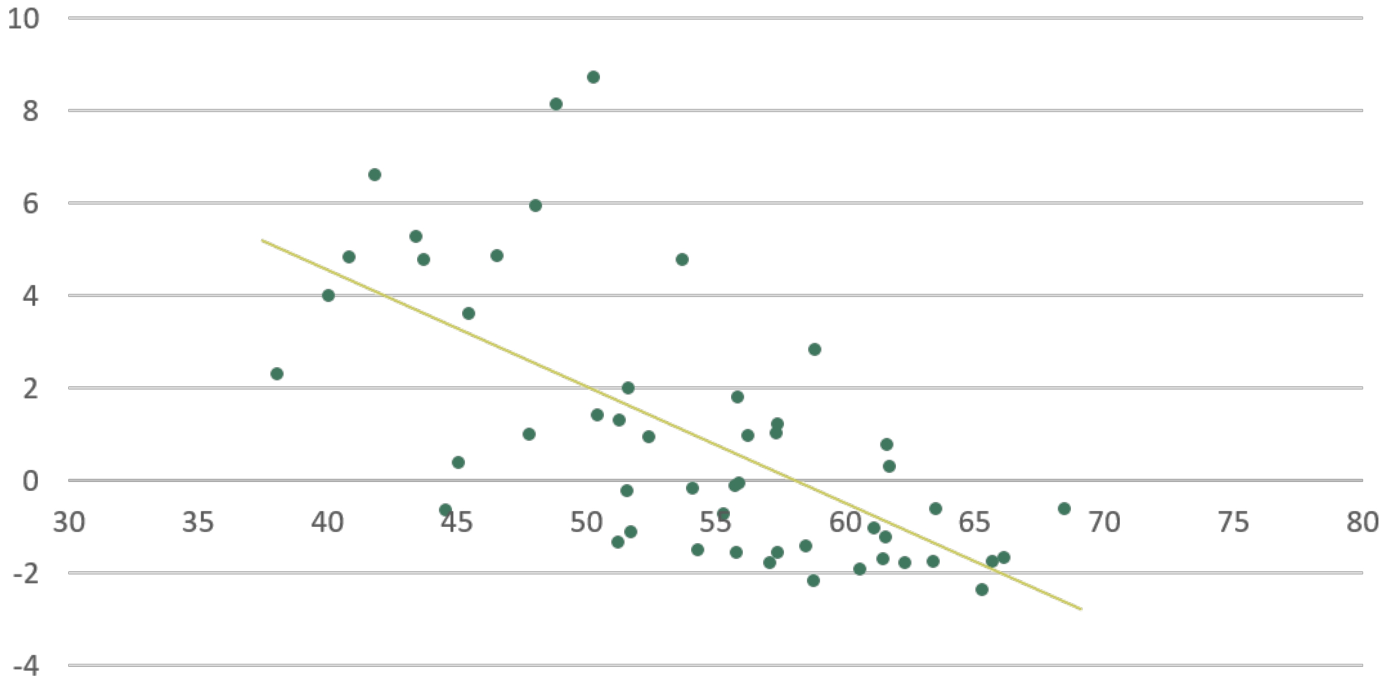
Incorporating such criteria into investment analysis is more than just something that is nice to know. There can a potential investment payoff. As a UN PRI signatory, Brandywine Global has been incorporating this analysis in our process, but even overall, sovereign bond analysis has been increasingly encompassing ESG factors. Academic research provides some support to the inclusion of such factors. For example, in the book *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*, authors Daron Acemoglu and James Robinson explore the governance factor and its role in creating an environment that fosters economic growth, or the lack of it. For example, what led to the Arab Spring? The authors believe the extreme poverty in Egypt and an elite class that controlled power and "organized society for their own benefit at the expense of the vast mass of people" were responsible. An ESG evaluation would help identify these types of country-specific issues and their potential impact on an investment, the result of which can affect a decision to invest or remain invested given any heightened risk. The election cycle can also be a predictor of a financial crisis in a country, according to Manesse and Roubini in their 2005 International Monetary Fund working paper, "'Rules of Thumb' for Sovereign Debt Crises." Looking at interest rate spreads between Brazil and U.S. Treasuries, note the widening out of credit spreads as Brazil's presidential election approached and the Operation Car Wash corruption investigation began in 2014 (see Chart 2). Also note that recently the impact of the aggressive focus on rooting out corruption, the changing policy focus, and a central bank bent on reducing inflation, all supported the spread compression that followed. As observed, governance factors, like elections and corruption, can have a material impact on the cost of debt financings. Brandywine Global maintained an exposure to Brazilian bonds and its currency, the real. The widening of spreads created a "regress to the mean" opportunity, juxtaposed against a belief that meaningful changes in governance would occur. Clearly, ESG factors matter.



Academic literature also supports the hypothesis of an ESG impact on sovereign interest rate spreads. In general, bond spreads do appear to be affected both by financial factors, such as gross domestic product (GDP), government debt, and the like, and so-called extra-financial factors, like ESG. One such study by Capelle-Blanchard, et al., "Environmental, Social and Governance (ESG) performance and sovereign bond spreads: An empirical analysis of OECD countries," finds that ESG scores can indicate sovereign credit risk. In the chart below, we show that ESG scores are inversely related to credit spreads (see Chart 3). The higher the ESG score, the narrower the credit spread. Other things being equal, a country with a low ESG score would experience wider spreads, a higher cost of borrowing, and a higher default risk than a high ESG-scoring country. In turn, higher debt service costs could affect future fiscal policy. By closely studying ESG factors, such risk may be captured sooner than it would by a changed credit rating.

Chart 3: Interest Rate Spread and Composite ESG Score

12-Month Moving Average



Source: Bloomberg (© 2017, Bloomberg Finance LP), Brandywine Global, and Macrobond

A Discussion on Process

There are many different measures that assess ESG factors. Rather than create our own measuring stick, Brandywine Global decided to utilize existing third-party metrics and create a systematic analysis which contains both individual scores for each separate category of Environmental, Social, and Governance and a composite score encompassing all three factors. We review 54 different indicators, covering 188 countries and coming from a variety of sources, including the World Bank and the United Nations.

The countries are ranked from highest ESG to lowest ESG score, divided into quintiles. We compare each country's strengths and weaknesses to the entire universe of countries evaluated, as shown in the table below (see Chart 4). We also review an individual country's performance against its peers in its respective quintile.

Chart 4: Sample Country Strengths and Weaknesses

Brandywine Global ESG Data Summary

		Factors	Percentile
Environment	Strength	% Nuclear Power	0.90
		Energy Imports (% of energy use)	0.75
		Electricity Consumption	0.63
	Weak	% Renewable (non-hydro)	0.14
		Carbon Intensity	0.40
		C02 per capita from fossil fuel use	0.44
Social	Strength	Prevalence of Undernourishment (% of pop.)	1.00
		Military Expenditure (% of GDP)	0.92
		% Seats held by women in national parliament	0.90
	Weak	The Human Development Index Data	0.03
		Poverty Ratio (%pop. At national poverty line)	0.16
		GINI Income Inequality	0.17
Governance	Strength	Business Freedom	0.77
		Ease of Doing Business Rank	0.76
		Regulatory Quality	0.68
	Weak	Control of Corruption	0.28
		Rule of Law	0.38
		Patent Applications	0.43

Source: Bloomberg (© 2017, Bloomberg Finance LP)

Our ESG research synthesizes a large amount of data into a concise yet comprehensive report, which also complements our fundamental research report that is constructed concurrently. To ensure timeliness and incorporate more current "anecdotes" into the analysis, we supplement the statistical ESG review with a qualitative review of recent information, such as the latest GDP numbers. Examples that may not be captured in the statistical information include Portugal, which should receive credit for its effort to generate a larger share of its electricity from renewable energy sources (Environment). Additionally, the Polish government recognizes the aging of its population and has enacted policies that support maternity and services for children (Social).

Most of our portfolio exposures reside in the top two quintiles, although there is no "rule" that dictates these exposures. However, since Brandywine Global has always emphasized good governance and stable institutions along with our commitment to top-down research, it should come as no surprise. We will invest in third-quintile countries when we detect and expect positive changes in an economy. India is an example of such a country. An overall score is taken into account, but Brandywine Global is also looking for the direction of the ESG scores, positive or negative. Finally, the ESG scoring is integrated into our investment process, but does not restrict it.

Conclusion

1. **ESG analysis in investing will continue to grow, as indicated by the rapid increase in the number of UN PRI signatories. Current clients and prospects want to know if and how ESG factors are incorporated into a firm's investment process. The United Nations has moved the commitment to responsible investing forward, but investors now increasingly demand it.**
2. **Equity managers seem to have the lion's share of ESG attention, but this interest is increasingly flowing into the credit markets, as well as to sovereign bonds. Countries through their policies can affect the momentum and sustainability of economic growth and development. Is a country protective of its environment? Are literacy rates improving? Does a country create a system of laws that protects property rights? The academic literature indicates there are real costs here. Some research has indicated a country that ranks poorly on an ESG score experiences higher borrowing costs and, arguably, a greater default risk.**
3. **Brandywine Global has incorporated ESG factors into its research process. Valuation and exploitable anomalies continue to drive our process; a low ESG score alone will not eliminate a country for investment consideration. However, ESG factors contribute valuable information to our research process, and can indicate directional changes in a country's outlook, positive or negative, even before any action by credit ratings agencies.**
4. **More research needs to be done on ESG factors and investing. ESG factors generally exert a long-term influence over investments. Short-term payoffs should not be expected.**

Groupthink is bad, especially at investment management firms. Brandywine Global therefore takes special care to ensure our corporate culture and investment processes support the articulation of diverse viewpoints. This blog is no different. The opinions expressed by our bloggers may sometimes challenge active positioning within one or more of our strategies. Each blogger represents one market view amongst many expressed at Brandywine Global. Although individual opinions will differ, our investment process and macro outlook will remain driven by a team approach.