

ESG and Sovereign Fixed Income Investing: A Better Way

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As environmental, social and governance (ESG) factors become more broadly incorporated into investment decision-making, sovereign fixed income investors are grappling with the best way to benchmark and quantify these factors across a diverse group of countries. While some may use a simple approach of investing in countries with the highest third-party ESG ratings, we disagree. Instead, we think that this “paint-by-numbers” approach is systematically biased against developing countries, where the potential for ESG improvement is arguably greater, and would result in a pool of low yielding, highly correlated, and geographically concentrated countries. Morgan Stanley Investment Management has developed what we consider to be a better approach.

Morgan Stanley Investment Management (MSIM) has developed a framework for benchmarking sovereign ESG performance that allows investment teams to quantify and compare ESG factors across the entire array of emerging and developed markets—from Papua New Guinea to Portugal. By correcting for income-per-capita, and adding an MSIM analyst-driven momentum factor, our approach seeks to reward positive changes from countries with the greatest opportunity for ESG improvements. The result presents genuine opportunities for yield and diversification in portfolios in a manner consistent with ESG and sustainability goals. This broad approach is a powerful component in our toolkit for integrating ESG factors into sovereign investing.

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Why unadjusted third-party ESG ratings miss the mark

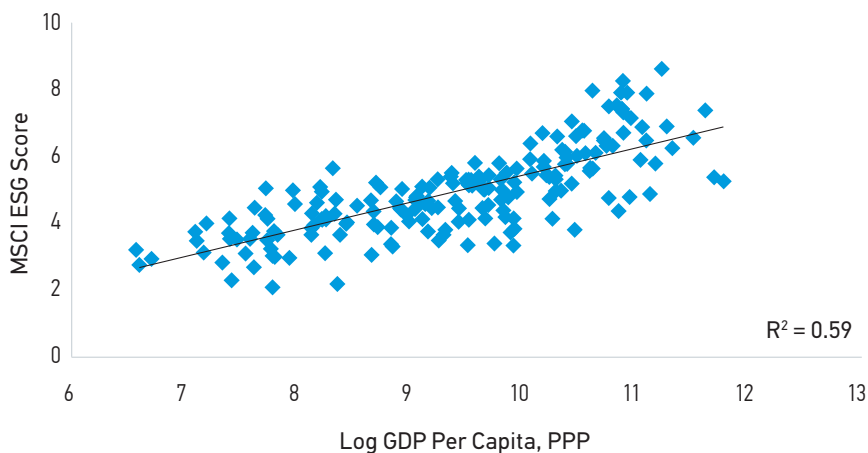
We use the underlying environmental, social and governance scores from MSCI as the basis for our benchmarking framework. The advantage of third-party ratings is that they provide a quantifiable measure using standardized methodology that covers nearly every country in the world, even the smallest frontier market bond issuers. However, we think that simply applying unadjusted third-party ESG ratings misses the mark.

First, a sovereign ESG benchmarking strategy that relies on unadjusted ESG scores is systematically biased against developing countries, where the potential for ESG improvements is greater. As shown in *Display 1*, a country's level of wealth has explained nearly 60% of the variation in MSCI's aggregate ESG scores.¹ The direction of causality between wealth and ESG scores likely runs in both directions. Improvements in ESG factors may contribute to a better growth environment, causing wealth to increase. In the other direction, rich countries have more resources to spend on improvements in ESG factors.

Another useful lens through which to examine this problem is the top decile of investable countries² with the highest MSCI aggregate ESG scores. Of the 12 countries in the top 10% of highest unadjusted ESG scores, all are members of the Organization for Economic Co-operation and Development (OECD), which *The Economist* often refers to as a "club of mostly rich countries."³ All of the countries are in the top two deciles of global wealth, and five are in the

DISPLAY 1

Wealth has explained nearly 60% of the variation of MSCI's ESG scores



The index performance is provided for illustrative purposes only and is not meant to depict the performance of a specific investment. **Past performance is no guarantee of future results.** See Disclosure section for index definitions.

Source: IMF, MSCI, MSIM. Data as of July 2019.

top decile. There is also a problem of geographic concentration, as 9 of the 12 countries are in Western Europe.⁴ Given the level of wealth and resources in these countries, their bond markets are very low yielding when compared to the global opportunity set, and display a high degree of correlation.

A Better Way: The MSIM Approach

The MSIM approach rewards countries for positive ESG progress by incorporating timely expert judgment, and corrects for the systematic bias against developing countries by controlling for a country's level of wealth. The result is a framework for quantifying ESG performance that we believe is more aligned with investors' sustainability goals, but also provides for genuine diversification⁵ and opportunities.

MSIM sovereign ESG scores start with the underlying environmental, social and governance scores provided by third parties. While our past research has primarily linked changes in governance to changes in asset prices, we choose to equally weight the environmental, social and governance scores for two reasons.⁶ First, we believe that this simple approach best fits investors' desire to incorporate a more holistic sustainability factor into the investment process. Second, we have increased the weighting of the environmental score from 25% because the social and governance factors are so highly correlated with each other that we believe it makes sense to decrease their collective weight.⁷

¹ We use the natural log of a country's GDP per capita at purchasing power parity (PPP) levels, as provided by the International Monetary Fund (IMF). The logarithmic transformation approximates percentage changes in wealth, and better accounts for the intuitive idea that a change from \$5,000 to \$10,000 per capita GDP is much more significant than a change from \$35,000 to \$40,000. We use PPP values because it helps account for differences in the cost of living in different countries. Our dataset includes 188 countries where we have both ESG ratings and wealth data.

² Our complete dataset examines all 188 countries where we have both MSCI ESG scores,

and wealth data from the IMF. We calculate the wealth, environmental, social and governance deciles on this full global dataset. We then identify the 121 countries with tradable debt as our opportunity set for this selection, meaning that there are 12 countries in the top decile of this investable universe.

³ The Organization for Economic Co-operation and Development is a think tank, commonly referred to by *The Economist* as a "club of rich countries". Source: <https://www.economist.com/the-economist-explains/2017/07/05/what-is-the-oecd>

⁴ See *Display 2* for the full list.

⁵ Diversification does not eliminate the risk of loss.

⁶ See *ESG: The Impact of Governance on Emerging Market External Debt Returns*. MSCI's ESG scores assign a 50% weight to the governance pillar, and 25% weights to the social, and environmental pillars.

⁷ The correlation of the social and governance scores is .82. A principal component analysis (PCA) of the environmental, social and governance scores shows the social and governance factors as highly correlated with the first principal component, explaining approximately 60% of the variance of the dataset. The environmental factor is highly correlated with the second principal component. The environmental score has low correlation to the social, governance and country wealth factors.

Since we prioritize change at the margin for ESG factors, we adjust scores by a momentum factor. This factor consists of two parts. The first part is provided by a third party and is based on momentum in the existing data. The second part is a momentum factor based on an MSIM sovereign analyst's subjective analysis of the environmental, social, and governance developments in a country over the past 12-18 months. This is important both because we believe that change at the margin is often what moves asset prices, and the underlying data used by third parties often comes with a significant lag.⁸ These analyst-provided momentum scores can help incorporate key changes in a timelier manner, as well as allow for flexibility to incorporate expert views about the issues that matter in a given country that may not be fully reflected in the scoring methodology.

Finally, because sovereign ESG scores have been so highly correlated with a country's level of wealth, we normalize by GDP per capita using linear regression. The result is a score that allows us to quantitatively benchmark countries against their income-predicted ESG performance.

This approach has three key advantages in our opinion. The first is broad comparability. Portfolios may contain bonds from a wide array of sovereign issuers, and this framework affords the investment teams a consistent basis for benchmarking emerging and developed markets. Second, we believe there is a compelling sustainability and practical argument for using a framework that rewards improvements in ESG factors, even if coming from a low base—as is the case with most developing nations. Third, the MSIM approach results in a much more interesting and diverse opportunity set. As illustrated in *Display 2*, the top decile using the MSIM framework is a geographically diverse group of

DISPLAY 2 Comparison of Top Decile

MSCI Top Decile

COUNTRY	WEALTH DECILE	ENVIRONMENT DECILE	CONTINENT
Norway	10	10	Europe
Sweden	9	10	Europe
New Zealand	9	10	Oceania
Denmark	9	8	Europe
Iceland	10	10	Europe
Switzerland	10	7	Europe
Canada	9	10	Americas
Finland	9	9	Europe
Australia	9	10	Oceania
Austria	9	7	Europe
Luxembourg	10	4	Europe
Germany	10	4	Europe
Avg	9.4	8.3	

MSIM Top Decile

COUNTRY	WEALTH DECILE	ENVIRONMENT DECILE	CONTINENT
Norway	10	10	Europe
New Zealand	9	10	Oceania
Sweden	9	10	Europe
Brazil	6	10	Americas
Chile	7	9	Americas
Iceland	10	10	Europe
Denmark	9	8	Europe
Canada	9	10	Americas
Uzbekistan	4	4	Asia
Finland	9	9	Europe
Georgia	5	7	Asia
Australia	9	10	Oceania
Avg	8.0	8.9	

ESG ratings are not intended as a recommendation and are subject to change. Ratings are relative and subjective and are not absolute standards of quality. Ratings do not remove the risk of loss.

⁸ The underlying data sources for these scores come largely from NGOs and international organizations such as the World Bank. As an example, a key data source is the World Bank's World Governance Indicators, where scores for a given year are generally published in fall of the following year.

emerging and developed markets, an important contrast to the geographically concentrated group of wealthy countries using the unadjusted ESG scores. This presents genuine opportunities for yield and diversification in portfolios in a manner consistent with ESG and sustainability goals.

Conclusions

MSIM's sovereign ESG benchmarking framework is a helpful tool in a broader ESG toolkit. It allows investment teams to quantify and compare sovereign ESG performance on a portfolio level. It informs, but does not dictate, the decision-making process. By controlling for wealth and incorporating a momentum factor, it rewards ESG improvements by countries with greater scope for such improvements.

We continue to develop and enhance our sovereign ESG toolkit. While the advantage of this benchmarking framework is its broad scope, our emerging and developed market investment teams continue to explore new alternative data sources that can help us achieve our goal of capturing greater real-time changes in ESG momentum that will better inform portfolio decision-making and asset price modeling.

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