

Political Risk, Sustainability and Sovereign Credit: Pricing High-Frequency Political, Environmental, Social and Governance News

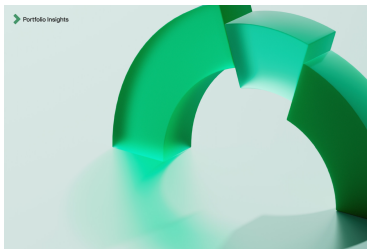
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Sovereigns and ESG Taking a stance in a complicated world

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Does ESG Matter for Sovereign Debt Investing?

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KEY FINDINGS

- Our research shows that environmental, social, and governance (ESG) scores are significant drivers of sovereign credit spreads. Debt issued by countries with high social and governance scores in particular, tend to have tighter credit spreads.
- The relationship between ESG scores and credit spreads is particularly strong for emerging market countries, where we find evidence of an additional risk premium relative to developed markets.
- We find no evidence that investors are penalized for ESG-aware investment strategies in the form of lower returns, but our analysis does support the case for in-depth ESG analysis in the context of an active approach to portfolio management.

ABSTRACT

ESG has become a hot topic in investment circles. In this article, the authors train the ESG lens on sovereign debt. They carry out an empirical analysis to assess whether environmental, social, and governance factors drive pricing and investment returns of sovereign external debt. Their major finding is that ESG considerations matter for sovereign bond investing, even after relevant macroeconomic and credit variables are taken into consideration. This is particularly the case for emerging markets, where they document evidence of an additional ESG risk premium relative to developed markets. Furthermore, by testing an ESG-focused investment strategy, the authors examine the hypothesis that ESG could potentially detract from investment returns. They find no evidence over the historical time frame that an ESG-focused investment strategy results in any investment disadvantage. In addition, results suggest support for potential advantages of an active approach to ESG portfolio management.

TOPICS

ESG investing, fixed income and structured finance, portfolio construction, performance measurement

Our research shows that environmental, social, and governance (ESG) factors are important drivers of sovereign credit spreads and that an ESG-based trading strategy should not detract from investment return potential.

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- Premiums are based on the probability of repayment
- Hard to quantify because repayment is based on ability and political willingness to pay
- Rely on heuristics to make good enough decisions
 - Democratic institutions (North and Weingast 1989; Beaulieu et al. 2012)
 - Financial institutions Bodea and Hicks 2015; Copelovitch et al. 2018
 - Partisanship (Barta and Johnston 2018; Brooks et al. 2022)

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Erosion vs. investment in natural/human capital and/or governance of the economic and political system can lead to long-term fiscal strain/strength

Environmental, Social and Governance (ESG) factors



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- Data availability and incorporation remain a problem
- Proprietary algorithms

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How creditors update their expectations of sovereign creditworthiness in a systematic, transparent way using high-frequency data

- News coverage reveals information about commitment to ESG in “real time”

The GDELT Project

Global Database of Events, Language and Tone's Global Knowledge Graph (GDELT-GKG)

- Updates every 15 minutes with worldwide media
- Domestic and international outlets tagged by theme and tone
- > 4 billion articles in 65 languages

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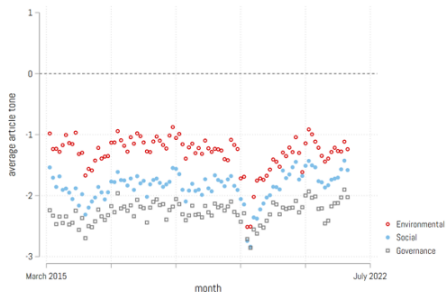
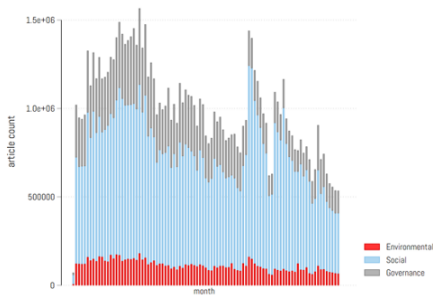
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Aggregate to a daily observation

- **Frequency** (# of articles (X) on Y theme) × **Tone** (Avg. sentiment of X articles on Y theme)

Measuring ESG



Count of articles under E, S and G themes (left) and average sentiment (right)

Unit: Country-day observation for sovereign bond issuers, 2015-2020

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Dependent variable: Daily 10-year sovereign bond spreads (Bloomberg)

- Winsorized at 1st/99th percentile and log-transformed

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Error correction model (ECM) with dynamic fixed effects

- Distinguish short-term vs. long-run fluctuations
- Measure the rate at which a variable returns to equilibrium

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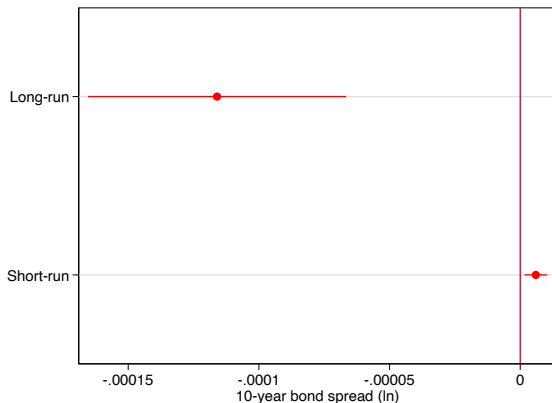
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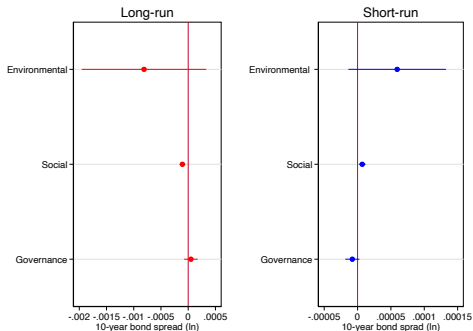
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Controls: Volatility (VIX), Democracy (V-DEM), GDP per capita, Current account (% GDP)



The more frequently and positively the media reports on ESG, the less expensive it is to borrow capital in the long term ... but ESG news is mispriced in the short term

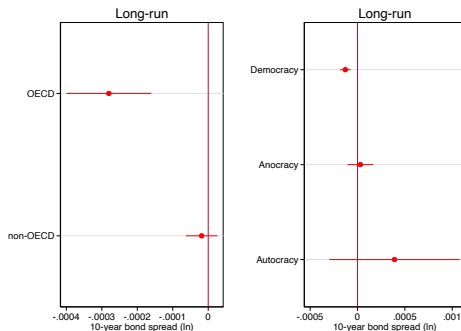
...but mostly S matters



Which factors drive the results? Real-time ESG effects are driven by social factors . . . and still mispriced in the short term

- G is reasonably well captured by existing indicators
- E is the least reported on

...and mostly for rich democracies



Which countries drive the results? Real-time-ESG effects are driven by OECD democracies ... and still mispriced in the short term

- Deeper bond market access
- Deeper news coverage
- Heightened focus on sustainable investment

Creditors incorporate ESG-related news when assessing sovereign risk

- Recognize substantive impact of ESG in the longer term
- Especially for social news in rich democracies
- Mistakenly perceive risks in the short term (Arbitrage? Processing?)

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More nuanced approach to understanding how creditors formulate their expectations of sovereign risk