

Research by Citi Global Data Insights finds potential for outperformance based on RepRisk data

September 2019

The Citi Global Data Insights (CGDI) team recently published their first research report on “The Rise of AI in ESG Evolution,” which explores some of the similarities and differences between three ESG data providers that use AI as part of their research methodology – RepRisk, TruValue Labs, and Arabesque S-Ray.

The report further examines the differences between analyst-driven ESG vendors (like MSCI and Sustainalytics) and AI-led ESG providers, concluding that “the ESG scores from these AI vendors could add alpha to investment processes and could complement the scores derived by analyst-driven vendors.” In the absence of universal reporting standards on ESG issues, the combination of analyst-driven and AI-driven models provides investors with the “best of both worlds” for their respective investment horizons and processes.

This dual approach – AI combined with human analysis – is exactly what makes RepRisk the ESG data provider for many of the world’s largest financial institutions and corporations. Our AI and machine learning capabilities empower size and scale of our database, while our human intelligence adds depth and relevance to the data.

Here is a summary of the Citi report with details on what makes RepRisk stand out amongst its peers.

- Findings: Potential for Outperformance and Risk Management (based on RepRisk's data and methodology) - The report concluded that:
 - "RepRisk Current RRIs¹ are a powerful tool to identify underperformers, not only based on the ESG highlighted in the Methodology section but also in their financial performance as those stocks attract lower returns."

¹The RepRisk Index (RRI) is a proprietary algorithm developed by RepRisk that dynamically captures and quantifies a company's exposure to ESG and business conduct risks. The RRI ranges from zero (lowest) to 100 (highest). The higher the value, the higher the risk exposure.

- "The firms are categorized as higher risk by RepRisk indeed are associated with lower returns in the development world... which shows the value-add RepRisk potentially has to investment returns."
- "RepRisk is an effective ESG tool that alerts and flags ESG risk incidents of companies which have evidently attracted lower returns."
- Technology Approach – While all three data vendors use different forms of AI to produce ESG scores, RepRisk is the only one to combine AI with human curation. RepRisk is the only firm that has an annotated (i.e., human-labelled) dataset going back to January 2007, which allows us to use advanced machine learning and train our algorithms to be more accurate and effective. Despite TruValue and Arabesque claiming to have data from as far back as 2007 and 2004, respectively, both firms lack human curation in their research process that would allow them to apply advanced machine learning. This approach results in speed over relevance. Additionally, both vendors have had to reverse engineer their data, resulting in distortions and preventing backtesting and other quantitative analysis (both vendors were founded in 2013, RepRisk in 1998).
- Research Approach - RepRisk is the only AI-driven data vendor that focuses exclusively on material ESG risks. TruValue and Arabesque, on the other hand, employ both positive and negative ESG screens as part of their research methodology. As recent findings in a report by Aite Group show, “the methodology that is more popular and more likely to drive greater revenue is the use of ratings based on materiality or a risk framework.”²
- Scope and Scale of Coverage - RepRisk has by far the largest and most comprehensive database of any ESG vendor, both AI-driven and research-driven, with individual entries on 130,000+ public and private companies across both developed and emerging markets. RepRisk is also the only firm that provides data on infrastructure projects and the only vendor that covers 20 languages, giving it an important leg up in coverage of emerging and frontier markets. By comparison, TruValue has coverage of 15,000 public companies in (soon to be) 7 languages, while Arabesque has coverage of 7,000 public companies in 4 languages.

To read the full research report, please contact the Citi Global Data Insights Team at cgdi@citi.com