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PIANO NAZIONALE
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Finanziato nell'ambito del Piano Nazionale di Ripresa e Resilienza PNRR. Missione 4, Componente 2, Investimento 1.3 Creazione di "Partenariati estesi alle università, ai centri di ricerca, alle aziende per il finanziamento di progetti di ricerca di base"



GRINS
FOUNDATION

GRINS – Growing Resilient, INclusive and Sustainable

“9. Economic and financial sustainability of systems and territories”

Codice Identificativo: PE00000018

*Finanziato nell'ambito del Piano Nazionale di Ripresa e Resilienza PNRR
Missione 4 – Componente 2*

SPOKE 4

D4.1.3 – Policy briefs and best practices for SME's access to sustainable finance instruments

February 2025

ESG Rating and Ambiguity

an Informative and Distorted Signal-based approach

Bongermino G. and Romagnoli S.

University of Bologna

Executive Summary

Environmental, Social, and Governance (ESG) ratings have become a fundamental tool for investors, policymakers, and financial institutions aiming to assess corporate sustainability performance. However, significant inconsistencies in ESG rating methodologies lead to market distortions, misallocation of capital, and reduced investor confidence. The ambiguity in ESG ratings stems from variations in disclosure levels, methodological differences across rating agencies, and the influence of subjective investor perceptions. This study presents a structured framework based on an information-based distortion model, which integrates an information matrix assessing data reliability and a garbling matrix capturing subjective market biases. By applying this approach, it is possible to evaluate the effects of policy shocks on the companies' ratings, evaluating the sentiment of market participants towards the different ESG scores.

From the empirical side, we assess how the environmental component is slightly undervalued for most agents, while an increasing pressure on the Social component of the score could favor the evaluation of those companies that operate in environmentally intense sectors. Conversely, governance factors, along with environmental considerations, are currently undervalued, consistently yielding negative impacts across almost all sectors for company rating.

Context and Importance of the Issue

In recent years, ESG considerations have played an increasingly significant role in investment decisions. ESG ratings influence capital flows, corporate strategies, and policy decisions at both national and international levels. Investors rely on these ratings to assess corporate sustainability performance, making them a crucial component in financial markets. However, a major challenge facing ESG assessments is the lack of standardization in data disclosure and rating methodologies.

One of the primary concerns is that the lack of a clear taxonomy set by the different governments led the agency to use varying criteria to evaluate companies, leading to discrepancies in ESG scores. The absence of a universal framework results in the same company receiving different ratings from multiple agencies, making it difficult for investors to make informed decisions, as reported in Inderst & al.[3] and Berg & al.[1]. This inconsistency not only reduces trust in ESG assessments but also creates uncertainty in financial markets, as investment decisions based on conflicting ratings can lead to misallocation of capital.

Another critical factor contributing to ESG rating ambiguity is the quality of corporate disclosures. While some companies provide extensive, verifiable ESG data, others offer limited or selectively curated information. This variation in transparency makes it difficult to compare firms accurately, as rating agencies rely heavily on self-reported data. The lack of a standardized reporting framework exacerbates this issue, allowing companies to present their ESG performance in a way that may not fully reflect their actual sustainability efforts.

Market sentiment and subjective interpretations further complicate ESG assessments. Investors and analysts may weigh certain ESG factors differently based on prevailing narratives, leading to potential biases in how ESG performance is perceived. This subjectivity introduces an additional layer of ambiguity, making it challenging to establish a reliable and objective ESG rating system.

Addressing these inconsistencies is crucial for improving the reliability and effectiveness of ESG ratings. A structured, information-based approach that enhances transparency, standardizes reporting practices, and reduces subjectivity in evaluations can help mitigate these challenges. Establishing clear guidelines for ESG disclosures and harmonizing rating methodologies will strengthen the credibility of ESG assessments, ultimately fostering greater trust among investors and encouraging responsible corporate behaviour.

Methodology and Key Findings

To analyze the impact of ESG rating ambiguity, this study employs a distortion matrix framework, which combines two key elements:

- An **information matrix**, which evaluates the quality, completeness, and reliability of ESG data disclosed by firms.
- A **garbling matrix**, which accounts for subjective market biases and distortions in the perception of ESG signals.

By applying this model, it is possible to identify how different levels of information reliability and subjective interpretation affect ESG scores.

Key findings indicate that ESG ratings are susceptible to systematic distortions, leading to inefficient capital allocation. Under scenarios of increased regulatory scrutiny, firms with low transparency experience greater rating volatility, highlighting the importance of standardized disclosure and a clear regulatory framework. Furthermore, adjusting for ambiguity significantly enhances the predictive power of ESG scores in assessing long-term financial performance. These findings underscore the need for policy interventions aimed at improving ESG rating consistency and reliability.

Policy Options and Analysis

Option 1: Standardizing ESG Disclosure Requirements at sector level

- **Analysis:** The different evaluation criteria and requirements set for the different sectors question the reliability and the validity of the ESG scores as a global sustainability measure. Moreover, it could undermine the effort of different policies to foster ESG disclosure, reducing transparency.
- **Policy Implications:** Require agencies constructing sustainability metrics to use homogeneous and consistent criteria for companies operating across different sectors, fostering intersectoral comparability.

Option 2: Enhancing standardization and transparency in ESG Rating Methodologies

Analysis: The absence of a clear and commonly accepted regulatory standard, such as the SASB materiality map, allows rating agencies to apply arbitrary criteria.

In particular, rating providers construct ESG scores using different data sources, classification methodologies, and definitions of sustainability. This lack of uniformity makes it difficult to compare ratings of the same company across different providers. Moreover, the inclusion of various sustainability-related criteria in corporate disclosures may be reflected inconsistently in ESG ratings, further complicating their reliability and comparability.

- **Policy Implications:** Encourage the adoption of a standardized framework for sustainability-related ratings to limit the discretion of data vendors in constructing ESG scores and enhance the comparability of ratings across agencies. Additionally, the establishment of a regulatory authority overseeing ESG rating agency methodologies—like the framework applied to credit rating agencies—would improve transparency, accountability, and the overall robustness of ESG assessments.

Recommendations

To enhance the reliability of ESG ratings and reduce ambiguity in the market, policymakers should consider a multifaceted approach. Firstly, the implementation of standardized ESG disclosure frameworks is crucial. Establishing a uniform set of guidelines would ensure consistency in corporate sustainability reporting, allowing for more accurate and comparable ESG assessments across industries and regions.

Furthermore, increasing transparency in ESG rating methodologies is essential. Rating agencies should be required to disclose their assessment criteria, weightings, and data sources, thereby reducing information asymmetry and increasing investor confidence in ESG scores.

Finally, there is a growing need for oversight mechanisms to regulate ESG rating agencies. The establishment of a global regulatory body would help enforce compliance with best practices, ensuring that ESG ratings remain robust, objective, and resistant to market distortions. Such measures would contribute to a more reliable and transparent ESG evaluation system, ultimately fostering informed investment decisions and financial stability.

Implementation Considerations

- I. **Institutional Strengthening:** Enhancing the capacity of regulatory bodies to monitor and enforce ESG disclosure standards..
- II. **Stakeholder Engagement:** Collaborating with rating agencies, investors, and industry leaders to refine assessment methodologies and ensure consistency across different sectors
- III. **Policy Coordination:** Align national strategies with global initiatives, such as the Paris Agreement and Sustainable Development Goals, to leverage existing frameworks for ESG regulations, fostering global consistency in regulatory framework.

Conclusion

Ambiguity in ESG ratings poses a substantial challenge to sustainable finance, creating inefficiencies in capital allocation and undermining investor confidence. A structured, information-based distortion model offers a viable solution for addressing these inconsistencies. By standardizing ESG disclosure, enhancing rating transparency, and introducing regulatory oversight, policymakers can improve the reliability of ESG ratings, fostering more informed investment decisions and greater financial stability

References

- [1] Florian Berg, Julian F Koelbel, and Roberto Rigobon. Aggregate confusion: The divergence of esg ratings. 2019.
- [2] Giorgio Bongermio and Silvia Romagnoli. Esg rating and ambiguity: an informative and distorted signal-based approach. *Decisions in Economics and Finance*, pages 1–42, 2025.
- [3] Georg Inderst and Fiona Stewart. Incorporating environmental, social and governance (esg) factors into fixed income investment. Technical report, World Bank Group publication, 2018.