

RJEF Special Issue

“Artificial Intelligence for Enhanced ESG Integration in Economic Forecasting”

The integration of Artificial Intelligence (AI) and Environmental, Social, and Governance (ESG) criteria is becoming increasingly vital in economic forecasting. AI technologies, with their advanced data processing and predictive capabilities, can significantly enhance the accuracy and depth of ESG analysis. This integration allows for more comprehensive assessments of risks and opportunities related to environmental sustainability, social responsibility, and corporate governance practices. By leveraging AI, organizations can process large volumes of ESG data more efficiently, leading to better-informed decision-making that aligns with long-term economic and sustainability goals.

Furthermore, AI-driven ESG forecasting can help identify trends and patterns that might be overlooked using traditional analytical methods. For example, machine learning algorithms can detect subtle signals in data that indicate potential ESG-related risks or opportunities, providing early warnings to investors and policymakers. This capability is crucial in today's rapidly changing economic landscape, where issues such as climate change, social inequality, and corporate governance are increasingly influencing financial performance and economic stability. Recent studies highlight the growing impact of ESG factors on investment decisions and market performance, underscoring the need for sophisticated tools like AI to navigate these complexities.

In addition, the synergy between AI and ESG supports the development of innovative solutions to global challenges. AI can facilitate the creation of new business models and investment strategies that prioritize ESG principles, promoting sustainable growth and ethical practices. For instance, AI can optimize resource allocation to reduce environmental impact, enhance social welfare through targeted interventions, and improve corporate governance by increasing transparency and accountability. As AI technology continues to evolve, its application in ESG forecasting will likely become even more sophisticated, driving progress towards a more sustainable and equitable global economy. Recent advancements in AI algorithms and ESG data integration are paving the way for more dynamic and responsive economic models that can better address the urgent needs of our time.

The Romanian Journal of Economic Forecasting (RJEF) invites submissions for a special issue focusing on the integration of Artificial Intelligence (AI) and Environmental, Social, and Governance (ESG) criteria in economic forecasting. This special issue aims to explore how AI technologies can enhance the accuracy and relevance of economic models, particularly in addressing the growing importance of ESG factors in economic and financial analysis.

We welcome original research articles, review papers, and case studies that cover, but are not limited to, the following topics:

- Machine learning and deep learning applications in economic prediction models.

- AI-driven big data analytics for macroeconomic and microeconomic forecasting.
- Predictive analytics using AI for financial markets and economic indicators.
- Models incorporating ESG factors into economic and financial forecasting.
- The impact of ESG criteria on long-term economic growth and stability.
- Quantitative methods for assessing ESG risks and opportunities.
- The role of AI in enhancing ESG data quality and availability.
- Case studies demonstrating successful integration of AI and ESG in economic models.
- Policy implications of AI and ESG integration for sustainable economic development.
- Ethical considerations and biases in AI-driven economic forecasting.
- The future of AI and ESG in shaping economic policies and strategies.
- Comparative analysis of traditional versus AI-enhanced economic models.

Submission Guidelines: Manuscripts should be prepared according to the RJEF submission guidelines, available on the journal's website. All submissions will undergo a rigorous peer-review process. Submissions should be sent to rjef_submit2@ipe.ro.

Important Dates:

- **Submission Deadline:** March 31, 2025

Guest Editors:

- **CHI-WEI SU**

Distinguished Professor

Department of Finance, School of Economics, Qingdao University, Qingdao, China

Email: cwsu7137@gmail.com

- **MALIN SONG**

Full Professor and Director

Collaborative Innovation Center for Ecological Economics and Management, Anhui University of Finance and Economics, China.

Email: songml@aufe.edu.cn