



ALMA MATER STUDIORUM
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DEPARTMENT
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prof. Amy R. Ward
Editor-in-Chief
Operations Research

November 24, 2025

Subject: Submission of Manuscript for Publication

Dear Professor Ward,

We are pleased to submit our manuscript, "Bootstrap Enhanced Scenario Optimization, a Case Study in Two-Echelon Logistics," for consideration in *Operations Research*. This paper contributes to the field of distributionally robust optimization by presenting a novel theoretical framework that integrates forecasting and stochastic optimization. We posit that this framework offers significant potential for enhancing research and management practice and stimulating further studies within the operations research community.

The manuscript introduces a novel approach to distributionally robust optimization. This approach leverages maximum entropy bootstrap with bagging—a potentially underutilized yet robust and readily defensible forecasting method—to yield a parsimonious and efficient solution. While demonstrated within a real-world logistics context, the methodology possesses broader applicability and offers a credible alternative to prevailing DRO methodologies when suitable data series of past values of problem data are available. A computational study validating the approach's scalability is included.

The manuscript fully conforms to the journal's submission guidelines. The application makes use of real-world data already used in a prior work presented at the SOCO 2023 conference (Maniezzo & Zhou, 2023), but it contains a completely different approach that significantly advances the state-of-the-art by introducing entirely novel forecasting and optimization methodologies. This results in a substantially enhanced analysis of the two-echelon logistics problem, extending its implications for inventory management. This work has not been previously published nor is it currently under review elsewhere. We affirm that no generative AI was used in the preparation of the manuscript besides style and syntax checking and that all ethical guidelines of the journal were meticulously followed. We appreciate your consideration and look forward to your feedback.

Sincerely,

Vittorio Maniezzo, University of Bologna
Livio Fenga, University of Exeter Business School