

Preface: Advances of OR in commodities and financial modelling

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The *Annals of Operations Research* invited submissions of papers to a special volume on *Advances of OR in Commodities and Financial Modelling*, on the occasion of the *55th Meeting of EWGCFM (EWGCFM 2015; <http://ewgcfm2015.iam.metu.edu.tr/index.html>)*, which was organized by the *Institute of Applied Mathematics (IAM; <http://iam.metu.edu.tr/>)* of *Middle East Technical University*, *EURO Working Group “Commodities and Financial Modelling” (EWGCFM; <http://www.ewgfm.eu/>)*, and *The Association of European Operational Research Societies (EURO; <http://www.euro-online.org/>)*. This conference took place on the campus of *METU (<http://www.metu.edu.tr/>)* in Ankara, Turkey, during May 14–16, 2015. The participants of *EWGCFM 2015* as well as other researchers in the area were welcomed to submit their recent research achievements.

This special volume covers a broad range of subjects of interest from mathematical finance, financial engineering, management, and economics that use operations research approaches and methods. Some of the articles cover the following areas:

- *Pricing and trading of commodities and financial securities*
- *Assessment, evaluation, and control of risk*
- *Market models and their dynamical representation*
- *Robust and stochastic portfolio optimization*
- *Stochastic optimal control of portfolios*
- *Valuation and decision problems in the actuarial sciences and insurance*
- *Valuation and decision problems in electricity market,*
- *Financial problems in environmental and earth sciences*
- *Game theoretical models and their optimization*

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- *Analysis of financial and economic equilibria*
- *Modeling under random regime switches and paradigm changes*

These topics cover a core selection of international research coping with emerging and complex problems. We are very thankful to the *Annals of Operations Research (ANOR)* and the publishing house of *Springer* for the honor of hosting this special volume as a pioneering scientific project. Particular gratitude is conveyed to the Editor-in-Chief of ANOR, **Prof. Endre Boros**, for his interest and confidence in and support of our special volume from the very first moment of the project, to Managing Editor, **Mrs. Katie D'Agosta**, for her continuous advice and guidance and her precious support in every respect, and to **Ms. Anandhi Sankar**, for her helpful service and positive attitude during the reviewing stages. We thank all the authors for their great efforts and readiness to share their newest results with the community, and we hope that their insights will stimulate collaboration and advances on a worldwide stage and of a highest quality.

The *Guest Editors*:

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