

## EDITORIAL

The Polish national conference on “Risk and Modeling Preferences” is organized every two years in Ustroń (in the Beskyd Mountains) by the Department of Operations Research, University of Economics in Katowice, Poland. The first conference took place in 1998. The papers presented focus on the analysis of preferences, optimal decision making, mathematical modeling of risk including capital market risk, insurance risk, commercial bank risk, production process risk, and the management of project risk, as well as other applications of risk analysis.

Since 2005 the conference has been accompanied by the International Workshop on Multiple Criteria Decision Making (IWoMCDM). This workshop is devoted to theory and applications in the field of multi-objective mathematical programming, multi-attribute utility theory, MCDA methods, data envelopment analysis, interactive multicriteria methods, fuzzy multicriteria approaches, meta-heuristics, group decision making, and other theoretical and practical MCDM issues. The IWoMCDM papers also discuss many practical problems in the area of economics that can be solved by MCDM methods, as well as problems in construction, ecology, transportation, health care, education and other fields.

About 100 participants usually take part in both events, which gives an opportunity to discuss and solve scientific problems within a circle of professionals or start new cooperation and joint research.

The 9th Conference on Modeling Preferences and Risk and the 5th IWoMCDM took place on March 17–19, 2013. The other academic institutions involved in organizing these meetings were the Upper Silesia Chapter of the Polish Mathematical Society, the Polish Chapter of INFORMS (Institute for Operations Research and Management Science) and the Polish Society of Operational and System Research. The Committee of Statistics and Econometrics, Polish Academy of Science was the patron.

The scientific committee of both conferences, chaired by Tadeusz Trzaskalik, consisted of 28 professors from Poland and abroad. These were: Aleksander Błaszczyk (University of Silesia, Katowice, Poland), Rafael Caballero (University of Malaga,

Spain), Petr Fiala (University of Economics in Prague, Czech Republic), Stefan Grzesiak (Szczecin University, Poland), Josef Jablonsky (University of Economics in Prague, Czech Republic), Ignacy Kaliszewski (Systems Research Institute, Polish Academy of Sciences, Poland), Gregory Kersten (Concordia University, Montreal, Canada), Ewa Konarzewska-Gubała (Wrocław University of Economics, Poland), Donata Kopańska-Bródka (University of Economics in Katowice, Poland), Dorota Kuchta (Wrocław University of Technology, Poland), Jerzy Michnik (University of Economics in Katowice, Poland), Maciej Nowak (University of Economics in Katowice, Poland), Włodzimierz Ogryczak (Warsaw University of Technology, Poland), Jaroslav Ramík (the Silesian University in Opava, Czech Republic), Wanda Ronka-Chmielowiec (Wrocław University of Economics, Poland), Wojciech Sikora (Poznań University of Economics, Poland), Roman Ślowiński (Poznań University of Technology, Poland), Józef Stawicki (Nicolaus Copernicus University, Poland), Włodzimierz Szatkiewicz (University of Economics in Katowice, Poland), Tetsuzo Tanino (Osaka University, Japan), Tadeusz Trzaskalik (University of Economics in Katowice, Poland), Grażyna Trzpiot (University of Economics in Katowice, Poland), Tadeusz Tyszka (Kozminski University, Poland), Gwo Hsiung Tzeng (Kainan University, Taiwan), Leonas Ustinovicius (Vilnius Gediminas Technical University, Lithuania), Tomasz Wachowicz (University of Economics in Katowice, Poland), Lidiya Zadnik Stirn (University of Ljubljana, Slovenia).

Last year, 94 scientists from Poland and abroad took part in both meetings. 86 papers have been presented. They are to be published as scientific papers of the Faculty of Informatics and Communication of University of Economics in Katowice in two volumes, entitled Risk and Modeling Preferences '13 and Risk and Modeling Preferences '14, as well as in Vol. 8 of the journal Multiple Criteria Decision Making, published annually by the University of Economics in Katowice. Selected papers were accepted for publication in the journal Operations Research and Decisions. A short description of these papers is given below.

In the paper *Stochastic generalized transportation problem with discrete distribution of demand* by M. Anholcer, a stochastic formulation of the transportation problem has been presented. Any problem of this type can be transformed either into the form of a convex programming problem with a piecewise linear objective function, or a mixed integer LP problem. The method of solution presented uses ideas applied in the method of stepwise analysis of variables and in the equalization method.

The paper *Multi-period portfolio optimization of power generation assets* by B. Glensk and R. Madlener proposes a methodology for optimizing the operation of power generation assets based on the model introduced by Mulvey et al. in 1997, who suggest the reallocation approach using an analysis of various scenarios. The aim and original contribution of this paper is to apply this methodology to power generation assets, in order to capture the impact of variations in the economic and technical pa-

rameters considered. The results of this study show that the application of a multi-period portfolio selection model can indeed improve the decision-making process.

The paper *A model for optimizing an enterprise's inventory costs. A fuzzy approach* by W. Kosiński, R. Muniak and W.K. Kosiński discusses a problem originating from administrative accounting, namely determining the economic order quantity (EOQ) in a variable, competitive environment with imprecise and vague data. A decision support tool is constructed for when data are fuzzy. The final result manifests the applicability of ordered fuzzy numbers as a tool based on which investors can make investment decisions.

In the paper *Three step procedure for a multiple criteria problem of project portfolio scheduling* by B. Krzeszowska, the following criteria are taken into consideration: minimizing the sum of penalties for delays in the project, minimization of resource overuse and NPV maximization. Non-dominated solutions are identified by applying an evolutionary algorithm for multiple criteria optimization. An interactive procedure is applied to choose the final solution.

The paper *Risks characteristic to Agile project management methodologies and responses to them* by W. Walczak and D. Kuchta) identifies risks that either result from the introduction of an agile methodology to a project or become more significant when such a methodology is in use. If such risks exist, then this would be evidence that explicit risk management is required, even in the case of agile methodologies.

The paper *Solving IRP using location based heuristics* by P. Hanczar, a paper to be published in ORD, 2014, Issue 2, considers inventory routing problems where vendor managed inventory replenishment strategies are implemented in supply chains. This research is based on the location based heuristics proposed by Bramel and Simchi-Levi and developed by Hanczar. The classical formulation is extended using additional constraints, and these additional criteria are discussed.

I hope that wide spread information about the conference on Modeling Preferences and Risk, as well as the International Workshop on MCDM will help us to gather more and more scientists involved in research into risk analysis, optimization and multiple criteria decision making.

Tadeusz Trzaskalik  
Chairman of the Scientific Committee of the Conference