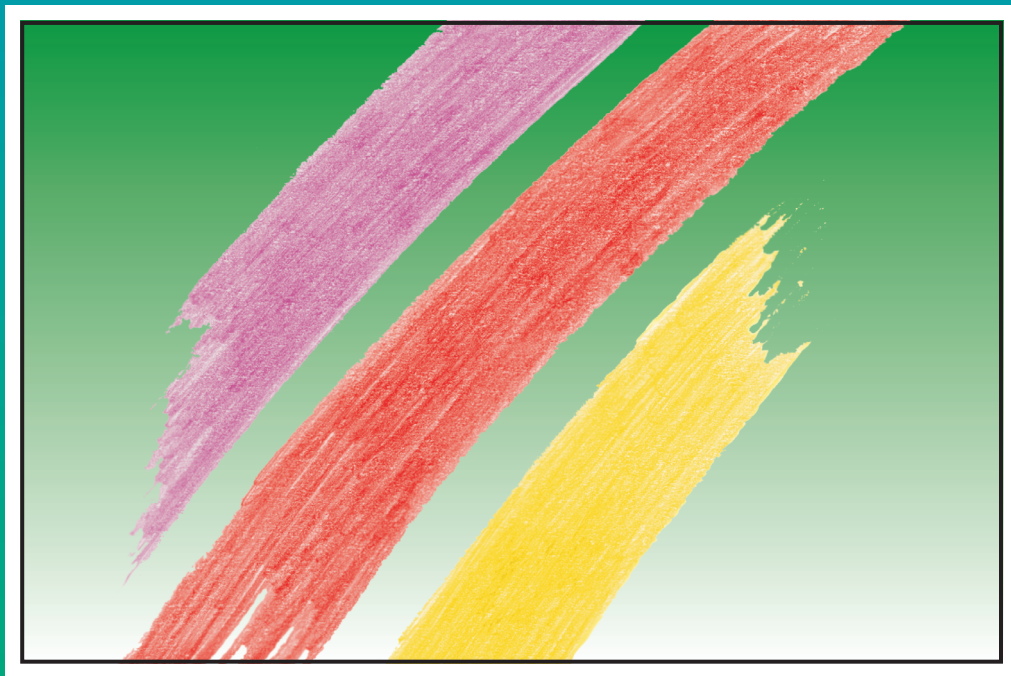
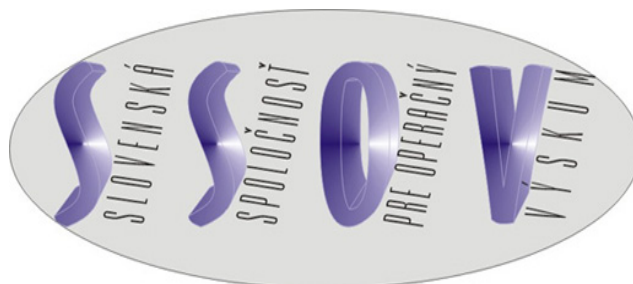


# Quantitative Methods in Economics (Multiple Criteria Decision Making XVIII)



Proceedings of the International Scientific Conference  
25<sup>th</sup> May - 27<sup>th</sup> May 2016  
Vrátna, Slovakia

**The Slovak Society for Operations Research**  
**Department of Operations Research and Econometrics**  
**Faculty of Economic Informatics, University of Economics in Bratislava**



Proceedings of the International Scientific Conference  
**QUANTITATIVE METHODS IN ECONOMICS**  
**Multiple Criteria Decision Making XVIII**

**25th May - 27th May 2016**  
**Vrátna, Slovakia**

**Programme Committee:**

Pekár Juraj, University of Economics, Bratislava, Chair  
Brezina Ivan, University of Economics, Bratislava  
Fendek Michal, University of Economics, Bratislava  
Ferreira Manuel A. M., University Institute of Lisbon  
Fiala Petr, University of Economics, Prague  
Groshek Gerald, University of Redlands  
Jablonský Josef, University of Economics, Prague

Lukáčik Martin, University of Economics, Bratislava  
Mlynarovič Vladimír, Comenius University, Bratislava  
Palúch Stanislav, University of Žilina  
Plevný Miroslav, University of West Bohemia  
Turnovec František, Charles University, Prague  
Vidovič Milorad, University of Belgrade

**Organizing Committee:**

Blaško Michaela  
Furková Andrea  
Gežík Pavel

Lukáčiková Adriana  
Reiff Marian  
Surmanová Kvetoslava

**Referees:**

Bartová Lubica, Slovak University of Agriculture, Nitra  
Benkovič Martin, University of Economics, Bratislava  
Borovička Adam, University of Economics, Prague  
Brezina Ivan, University of Economics, Bratislava  
Čičková Zuzana, University of Economics, Bratislava  
Dlouhý Martin, University of Economics, Prague  
Domonkos Tomáš, University of Economics, Bratislava  
Fábry Ján, University of Economics, Prague  
Fendek Michal, University of Economics, Bratislava  
Fiala Petr, University of Economics, Prague  
Furková Andrea, University of Economics, Bratislava  
Gežík Pavel, University of Economics, Bratislava  
Goga Marián, University of Economics, Bratislava  
Hančlová Jana, VŠB-Technical University, Ostrava  
Horáková Galina, University of Economics, Bratislava  
Chocholatá Michaela, University of Economics, Bratislava  
Ivaničová Zlatica, University of Economics, Bratislava  
Jablonský Josef, University of Economics, Prague  
Janáček Jaroslav, University of Žilina, Žilina

Jánošíková Ľudmila, University of Žilina, Žilina  
König Brian, University of Economics, Bratislava  
Kučera Petr, Czech University of Life Sciences, Prague  
Kuncová Martina, University of Economics, Prague  
Kupkovič Patrik, University of Economics, Bratislava  
Lichner Ivan, Institute of Economic Research SAS  
Lukáčik Martin, University of Economics, Bratislava  
Lukáčiková Adriana, University of Economics, Bratislava  
Mítková Veronika, Comenius University in Bratislava  
Mlynarovič Vladimír, Comenius University in Bratislava  
Palúch Stanislav, University of Žilina, Žilina  
Pekár Juraj, University of Economics, Bratislava  
Peško Štefan, University of Žilina, Žilina  
Radvanský Marek, Institute of Economic Research SAS  
Reiff Marian, University of Economics, Bratislava  
Rublíková Eva, University of Economics, Bratislava  
Surmanová Kvetoslava, University of Economics, Bratislava  
Szomolányi Karol, University of Economics, Bratislava

**25th May - 27th May 2016**

**Vrátna, Slovakia**

Technical Editor: Marian Reiff, Pavel Gežík, University of Economics, Bratislava  
Web Editor: Martin Lukáčik, University of Economics, Bratislava  
Web: <http://www.fhi.sk/en/katedry-fakulty/kove/ssov/papers/>

Publisher: Letra Interactive, s. r. o.  
ISBN 978-80-972328-0-1  
Number of copies: 90