

## **Recent Advances on Economics and Business Administration**

- **Proceedings of the International Conference on  
Economics and Business Administration (EBA 2015)**

Barcelona, Spain, April 7-9, 2015

- **Proceedings of the International Conference on  
Economics and Statistics (ES 2015)**

Vienna, Austria, March 15-17, 2015

*Edited by*

Nikos E. Mastorakis  
Imre Rudas  
Marina V. Shitikova  
Yuriy S. Shmaliy

# **RECENT ADVANCES on ECONOMICS and BUSINESS ADMINISTRATION**

**Proceedings of the International Conference on Economics and  
Business Administration (EBA 2015)**

**Barcelona, Spain, April 7-9, 2015**

**Proceedings of the International Conference on Economics and  
Statistics (ES 2015)**

**Vienna, Austria, March 15-17, 2015**

# **RECENT ADVANCES on ECONOMICS and BUSINESS ADMINISTRATION**

**Proceedings of the International Conference on Economics and Business Administration (EBA 2015)**

**Barcelona, Spain, April 7-9, 2015**

**Proceedings of the International Conference on Economics and Statistics (ES 2015)**

**Vienna, Austria, March 15-17, 2015**

**Copyright © 2015, by the editors**

All the copyright of the present book belongs to the editors. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the editors.

All papers of the present volume were peer reviewed by no less than two independent reviewers. Acceptance was granted when both reviewers' recommendations were positive.

Series: Business and Economics Series | 19

ISSN: 2227-460X

ISBN: 978-1-61804-293-4

# **RECENT ADVANCES on ECONOMICS and BUSINESS ADMINISTRATION**

**Proceedings of the International Conference on Economics and  
Business Administration (EBA 2015)**

**Barcelona, Spain, April 7-9, 2015**

**Proceedings of the International Conference on Economics and  
Statistics (ES 2015)**

**Vienna, Austria, March 15-17, 2015**



## Organizing Committee

### Editors:

Professor Nikos E. Mastorakis, Technical University of Sofia, Bulgaria

Professor Imre Rudas, Obuda University, Budapest, Hungary

Professor Marina V. Shitikova, Voronezh State University of Architecture and Civil Engineering, Russia

Professor Yuriy S. Shmaliy, Universidad de Guanajuato, Salamanca, Mexico

### Program Committee:

Prof. Gang Yao, University of Illinois at Urbana - Champaign, USA

Prof. Lu Peng, Luisian State University, Baton Rouge, LA, USA

Prof. Pavel Loskot, Swansea University, UK

Prof. Gamal Elnagar, University of South Carolina Upstate, Spartanburg, SC, USA

Prof. Stephen Anco, Department of Mathematics, Brock University, 500 Glenridge Avenue St.

Catharines, ON L2S 3A1, Canada

Prof. Adrian Constantin, Department of Mathematics, Lund University, 22100 Lund, Sweden

Prof. Ying Fan, Department of Management Science, Institute of Policy and Management, Chinese Academy of Sciences, Beijing 100080, China

Prof. Juergen Garloff, University of Applied Sciences/ HTWG Konstanz, Faculty of Computer Science, Postfach 100543, D-78405 Konstanz, Germany

Prof. Y Jiang, William Lee Innovation Center, University of Manchester, Manchester, M60 1QD, UK

Prof. Panos Pardalos, Department of University of Florida, USA

Prof. Shuliang Li, The University of Westminster, London, UK

Prof. Jiri Strouhal, University of Economics Prague, Czech Republic

Prof. Morris Adelman, Prof. of Economics, Emeritus, MIT, USA

Prof. Robert L. Bishop, Prof. of Economics, Emeritus, MIT, USA

Prof. Glenn Loury, Prof. of Economics, Brown University, USA

Prof. Fernando Alvarez, Prof. of Economics, University of Chicago, USA

Prof. Mark J. Perry, Prof. of Finance and Business Economics, University of Michigan-Flint, USA

Prof. Biswa Nath Datta, IEEE Fellow, Distinguished Research Prof., Northern Illinois University, USA

Prof. Jiri Klima, Technical faculty of CZU in Prague, Czech Republic

Prof. Goricanec Darko, University of Maribor, Maribor, Slovenia

Prof. Ze Santos, Rua A, 119. Conj. Jardim Costa do Sol, Brazil

Prof. Ehab Bayoumi, Chalmers University of Technology, Goteborg, Sweden

Prof. Luis Tavares Rua, Cmte Guyubricht, 119. Conj. Jardim Costa do Sol. Atalaia, Brazil

Prof. Igor Kuzle, Faculty of electrical engineering and computing, Zagreb, Croatia

Prof. Maria do Rosario Alves Calado, University of Beira Interior, Portugal

Prof. Gheorghe-Daniel Andreescu, "Politehnica" University of Timisoara, Romania

Prof. Reinhard Neck, Department of Economics, Klagenfurt University, Klagenfurt, Austria

Prof. Aida Bulucea, University of Craiova, Romania

Prof. Zhuo Li, Beijing University Of Technology, Beijing, China

Prof. Pradip Majumdar, Northern Illinois University, Dekalb, Illinois, USA

Prof. Ricardo Gouveia Rodrigues, University of Beira Interior, Portugal

## Additional Reviewers

Francesco Zirilli

Sorinel Oprisan

Xiang Bai

Philippe Dondon

Yamagishi Hiromitsu

Frederic Kuznik

George Barreto

Takuya Yamano

Imre Rudas

Tetsuya Shimamura

M. Javed Khan

Eleazar Jimenez Serrano

Valeri Mladenov

Jon Burley

Andrey Dmitriev

Moran Wang

Jose Flores

Hessam Ghasemnejad

Santoso Wibowo

Kazuhiko Natori

Konstantin Volkov

Kei Eguchi

Abelha Antonio

Tetsuya Yoshida

Matthias Buyle

Deolinda Rasteiro

Masaji Tanaka

Bazil Taha Ahmed

Zhong-Jie Han

James Vance

Angel F. Tenorio

Genqi Xu

João Bastos

Miguel Carriegos

Shinji Osada

Ole Christian Boe

Lesley Farmer

Dmitrijs Serdjuks

Alejandro Fuentes-Penna

Francesco Rotondo

Stavros Ponis

José Carlos Metrôlho

Minhui Yan

Sapienza Università di Roma, Italy

College of Charleston, CA, USA

Huazhong University of Science and Technology, China

Institut polytechnique de Bordeaux, France

Ehime University, Japan

National Institute of Applied Sciences, Lyon, France

Pontificia Universidad Javeriana, Colombia

Kanagawa University, Japan

Obuda University, Budapest, Hungary

Saitama University, Japan

Tuskegee University, AL, USA

Kyushu University, Japan

Technical University of Sofia, Bulgaria

Michigan State University, MI, USA

Russian Academy of Sciences, Russia

Tsinghua University, China

The University of South Dakota, SD, USA

Kingston University London, UK

CQ University, Australia

Toho University, Japan

Kingston University London, UK

Fukuoka Institute of Technology, Japan

Universidade do Minho, Portugal

Hokkaido University, Japan

Artesis Hogeschool Antwerpen, Belgium

Coimbra Institute of Engineering, Portugal

Okayama University of Science, Japan

Universidad Autónoma de Madrid, Spain

Tianjin University, China

The University of Virginia's College at Wise, VA, USA

Universidad Pablo de Olavide, Spain

Tianjin University, China

Instituto Superior de Engenharia do Porto, Portugal

Universidad de Leon, Spain

Gifu University School of Medicine, Japan

Norwegian Military Academy, Norway

California State University Long Beach, CA, USA

Riga Technical University, Latvia

Universidad Autónoma del Estado de Hidalgo, Mexico

Polytechnic of Bari University, Italy

National Technical University of Athens, Greece

Instituto Politécnico de Castelo Branco, Portugal

Shanghai Maritime University, China

## Table of Contents

<a href="#"><u>The Economics of Pharmaceuticals in Central and Eastern Europe: A Focus on Generics, Research, and Development</u></a>	9
<i>Steven J. Szydlowski, Robert Babela</i>	
<a href="#"><u>Modeling the Value at Risk (VaR) of Energy Commodities Futures Using Extreme Value Copulas</u></a>	12
<i>Xue Gong, Songsak Sriboonchitta</i>	
<a href="#"><u>Loss Distributions in Insurance Risk Management</u></a>	17
<i>V. Packová, D. Brebera</i>	
<a href="#"><u>Conditions for Entrepreneurship Development in Creative Industries in Portugal</u></a>	23
<i>José António Porfírio, Tiago Carrilho</i>	
<a href="#"><u>Using RSS in Advertising: Regional Trends and Global Issues</u></a>	30
<i>Alen Šimec, Damir Boras, Sonja Špiranec</i>	
<a href="#"><u>Investments in Technology and Organizational Performance in KSA</u></a>	36
<i>M. Kolay, S. Ahmed, M. Munir, V. Prasad</i>	
<a href="#"><u>Modeling Value at Risk of Agricultural Commodity While Accounting for Seasonality and Weather Using Extreme Value Theory</u></a>	41
<i>Xue Gong, Songsak Sriboonchitta</i>	
<a href="#"><u>Risk Management Analysis for Industrial Projects Performance</u></a>	50
<i>Florina-Cristina Filip, Vladimir Mărăscu-Klein</i>	
<a href="#"><u>Production Cost Reduction Through the Use of Information Systems: The IMMO Model</u></a>	54
<i>Nelson Duarte, Carla Pereira</i>	
<a href="#"><u>Factors Affecting Work Life Balance of Medical Professionals</u></a>	61
<i>P. Varanasi, S. Ahmad</i>	
<a href="#"><u>Return on Investment Analysis (ROI) from “Sabbatical Leave” of Higher Education in Thailand</u></a>	66
<i>Marndarath Suksanga</i>	
<a href="#"><u>Bussines Valuation Using Financial Analysis Techniques</u></a>	72
<i>Luminita Horhota</i>	
<a href="#"><u>Challenges of Strategic Rethinking of Development of Travel Intermediaries in Croatia in Terms of Dynamic Environment</u></a>	77
<i>Iris Mihajlovic</i>	



<a href="#"><u>Methodological Approach to the Synthesis of Rational Variants of Actions for Reconstruction of Compact Built-Up Development Areas</u></a>	84
<i>Sergei I. Matreninskiy, Valeriy Y. Mischenko</i>	
<a href="#"><u>The Contribution of the Averaged Regression Quantiles for Testing Max-Domains of Attractions</u></a>	91
<i>Jan Pícek, Martin Schindler</i>	
<a href="#"><u>Data Processing by Mathematical Models to Support the Decision Adoption</u></a>	95
<i>Cezarina Adina Tofan</i>	
<a href="#"><u>Authors Index</u></a>	99