



The Bucharest University of Economic Studies  
Department of Statistics and Econometrics

## *The 6th International Conference on Applied Statistics*

### **Conference Program**

#### **Friday, November 16, 2012**

8.30-9.00 Registration- Room 2013

9.00-10.00 Room 2013  
Opening Ceremony  
Plenary Session

Keynote speaker VEDIDE REZAN USLU: "*Forecasting of Istanbul Stock Market Exchange Based on Fuzzy Time Series Approaches*"

10.00-10.30 Cofee Break – Room 2013

10.30-13.00 Paper presentations

**Section 1: Statistics, Mathematics and Finance Triade - Room 2013**

**Section 2: Macroeconomic and Regional Models - Room 2416**

13.00-14.30 Lunch-Cantina ASE, Cihoschi Building

14.30-17.00 Paper presentations

**Section 3: Statistical Models for Labor Market Analysis and Demography - Room 2416**

**Section 4: Statistical Methods Applied to the Economic Environment –**

**Room 2013**

18.00 Dinner at Barrio Restaurant, 30th Biserica Amzei Street

#### **Saturday, 17 November 2012**

9.00-13.00 Room 2416



## Workshop "TEACHING STATISTICS TODAY"

### Section 1

#### Statistics, Mathematics and Finance Triade

#### Room 2013

Chair: Miruna –MAZURENCU-MARINESCU

Co-Chair: Cagdas Hakan ALADAG

**1. A new genetic algorithm to solve knapsack problems**

Derya TURFAN<sup>1</sup>, Cagdas Hakan ALADAG<sup>2\*</sup>, Ozgur YENIAY<sup>3</sup>

Hacettepe University, Faculty of Science, Department of Statistics, Ankara, Turkey

**2. A Seasonal Fuzzy Time Series Forecasting Method Based on Gustafson-Kessel Fuzzy Clustering**

Faruk ALPASLAN, Ozge CAGCAG<sup>\*</sup>

Department of Statistics, Ondokuz Mayıs University, Samsun, Turkey

**3. TL/EURO and LEU/EURO exchange rates forecasting with artificial neural networks**

Cagdas Hakan ALADAG<sup>a</sup>, Miruna MAZURENCU MARINESCU<sup>b</sup>

<sup>a</sup> Hacettepe University, Faculty of Science, Department of Statistics, Beytepe, 06800, Ankara, Turkey.

<sup>b</sup> Bucharest University of Economic Studies, Department of Statistics and Econometrics

**4. Modelling the impact of R&D expenses on economic growth**

Miruna MAZURENCU-MARINESCU<sup>a</sup>, Daniel Traian PELE<sup>a</sup>, Cristian PĂUN<sup>b</sup>

<sup>a</sup> Bucharest University of Economic Studies, Department of Statistics and Econometrics

<sup>b</sup> Bucharest University of Economic Studies, Department of International Business and Economics

**5. Long-run and short-run relationships between the stock market and the real economy**

Andrei RĂDULESCU

SSIF Broker, Bucharest

Daniel Traian PELE

Bucharest University of Economic Studies, Department of Statistics and Econometrics

**6. LPPL fit to stock market bubbles - computational aspects**



Daniel Traian PELE

Bucharest University of Economic Studies, Department of Statistics and Econometrics

**7. A neural approach to the analysis of the non-banking financial institutions' sector in Romania**

Adrian COSTEA

Bucharest University of Economic Studies, Department of Statistics and Econometrics

**8. From messages to returns**

Mihail Dumitru SACALĂ

Bucharest University of Economic Studies, Department of Statistics and Econometrics

**9. Overconfidence in online messages**

Mihail Dumitru SACALĂ

Bucharest University of Economic Studies, Department of Statistics and Econometrics

**10. A Macro –Econometric Study Of Oil Energy: Opaep Panel's Data Analysis**

Mostefa BELMOKADDEM, Sidi Mohammed Boumediene KHETIB, Mohammed Seghir GUELLIL  
University of Tlemcen, Algeria

**11. Investigation of Export-Import Ratios in Turkey by Using Spline Regressin Models**

Erkan OKTAY<sup>a</sup>, Aşır GENÇ<sup>b</sup>, Ömer ALKAN<sup>a</sup>, Ali Kemal ÇELİK<sup>a</sup>

<sup>a</sup> Atatürk University, Department of Econometrics, Turkey

<sup>b</sup> Selçuk University, Department of Statistics, Turkey

**12. A Novel Review Polarity Classification Approach Using Support Vector Machines**

Arda ALADAG, Turk Telekomunikasyon A.S., Computer Engineer, Ankara, Turkey.

**13. Statistical Analysis of Romanian Insurance Market. A Gross Written Premiums Perspective**

Adriana AnaMaria DAVIDESCU (ALEXANDRU), Vasile Alecsandru STRAT, Rodica Manuela GOGONEA

Bucharest University of Economic Studies, Department of Statistics and Econometrics

**14. A New Fuzzy Time Series Analysis Approach by using Differential Evolution Algorithm and Chronologically-Determined Weights**

Vedide Rezan USLU<sup>a</sup>, Eren BAS<sup>b</sup>, Ufuk YOLCU<sup>b</sup>, Erol EGRIOGLU<sup>a</sup>

<sup>a</sup> Department of Statistics, Ondokuz Mayıs University, Samsun, Turkey

<sup>b</sup> Department of Statistics, Giresun University, Giresun, Turkey

**15. A Comparison Of Binary Logit And Probit Models With A Simulation Study**



Atila GÖKTAŞ<sup>a</sup> , Selen ÇAKMAKYAPAN<sup>b</sup>

<sup>a</sup> Muğla University, Department of Statistic, Turkey

<sup>b</sup> Hacettepe University, Department of Statistic, Turkey



## Section 2

### Macroeconomic and Regional Models

#### Room 2416

Chair: Zizi GOSCHIN

Co-Chair: Monica Ioana POP SILAGHI

- 1. Some Insights about Determinants of Economic Growth in Romania. An Empirical Exercise**  
Monica Ioana POP SILAGHI , Ramona MEDEȘĂLEAN  
Babeș-Bolyai University, Cluj-Napoca , Faculty of Economics and Business Administration
- 2. The Relation Between Short Term and Long Term Equilibrium on a Macroeconomic Level**  
Stelian STANCU  
Alexandra Maria CONSTANTIN  
Bucharest Academy of Economic Studies
- 3. Monetary Policy Transmission Mechanism**  
Ion PÂRȚACHI, Simion MIJA  
The Academy of Economic Studies of Moldova, Republic of Moldova
- 4. Improving the accuracy of inflation rate forecasts based on Dobrescu model**  
Mihaela BRATU (SIMIONESCU)  
Bucharest University of Economic Studies
- 5. The Durable Regional Development Of Romania In European Context**  
Angelica BĂCESCU-CĂRBUNARU, Monica CONDRUZ-BĂCESCU  
Bucharest University of Economic Studies
- 6. Determinants of Energy Intensity in Old and New EU Member States: How Different Are They?**  
Zizi GOSCHIN  
Bucharest University of Economic Studies, Department of Statistics and Econometrics
- 7. Turnover and market value in capital markets from European Union**  
Diana MURESAN, Monica POP SILAGHI  
Babes.-Bolyai University, Cluj-Napoca -Faculty of Economics and Business Administration
- 8. Using some appropriate models to investigate the evolution of the exchange rate**  
Professor Liviu BEGU, Ph.D, Silvia SPĂȚARU, Ph.D Erika MARIN, Ph.D



Bucharest University of Economic Studies, Department of Statistics and Econometrics

### **9. Estimating the size of Romanian shadow economy: a labour approach**

Adriana AnaMaria DAVIDESCU (ALEXANDRU), Ion DOBRE

Bucharest University of Economic Studies

## **Section 3**

### **Statistical Models for Labor Market Analysis and Demography**

#### **Room 2416**

**Chair: Monica ROMAN**

**Co-Chair: Constanța MIHĂESCU**

#### **1. Country Classification Based on Labour Market- Related Characteristics**

Emilia TITAN<sup>1</sup>, Constantin MITRUȚ<sup>1</sup>, Adrian OTOIU<sup>1</sup>, Remus DUMITRESCU<sup>2</sup>, Daniela MANEA<sup>1</sup>

<sup>1</sup> Bucharest University of Economic Studies

<sup>2</sup> University of Bucharest

#### **2. Job Polarization in Romania and European Union**

Gina Cristina DIMIAN,

Bucharest University of Economic Studies, Department of Statistics and Econometrics

#### **3. The Heckman Selection Model Applied In the Analysis of Migrants' Remitting Behaviour**

Prof. Monica ROMAN<sup>1</sup>, Prof. Vergil VOINEAGU<sup>2</sup>

Bucharest University of Economic Studies, Department of Statistics and Econometrics,

<sup>2</sup> National Institute of Statistics, Bucharest

#### **4. Remittances Sent to EU New Member States: Do They Make a Difference for the Household Consumption?**

Zizi GOSCHIN, Bogdan ILEANU

Bucharest University of Economic Studies, Department of Statistics and Econometrics

#### **5. Statistical Methods of Prospecting Information of School Education For Labor Market Strategies**

Alexandru Robert MIHĂILĂ, Nicolae V. MIHĂIȚĂ,

Bucharest University of Economic Studies



## **6. The Natural Movement Analysed with the Econometrical Models**

Irina ORIOL

“Eftimie Murgu” University of Resita, Faculty of Administration

## **7. Some Labour Force Indicators and Fertility. An Analysis on Romania**

Raluca CAPLESCU, Constanța MIHĂESCU, Liviu BEGU

Bucharest University of Economic Studies, Department of Statistics and Econometrics

## **8. Trends of Population Savings in the Western European Union Countries**

Ileana NICULESCU-ARON, Constanța MIHĂESCU

Bucharest University of Economic Studies, Department of Statistics and Econometrics

## **9. Romanian SMEs' IC development, strategy or coincidence?**

Bogdan-Vasile ILEANU

Bucharest University of Economic Studies, Department of Statistics and Econometrics

## **10. The structure of the population by religious affiliation in the historical region of Moldavia in 2011**

Claudiu Herteliu, Tudorel Andrei

Bucharest University of Economic Studies, Department of Statistics and Econometrics

### **Section 4**

#### **Statistical Methods Applied in the Economic Environment**

#### **Room 2013**

**Chair: Nicolae MIHĂIȚĂ**

**Co-Chair: Emilia GOGU**

### **1. Cluster analysis – support for customers segmentation process**

Alina Ioana HĂLĂUCĂ

Universitatea Financiar Bancară, Bucharest

Albu CRIȘAN

Bucharest University of Economic Studies

### **2. Statistical Methods and Tests Of Significance Applied In Online Behavior Consumer Research**

Mădălina NIȚOIU,



Niculae V. MIHĂIȚĂ,  
Bucharest University of Economic Studies, Department of Statistics and Econometrics





**3. The Analysis Of The Foreseen Uncertainties Concerning The Number Of Overnight Stays Between 2012-2013 In The Romanian Regions And The Forthcoming Solutions**

Gabriela ȚIGU<sup>1,\*</sup>, Mihaela BRATU, Camelia DIȚU FURTUNĂ<sup>3</sup>

Department of Tourism and Geography, Faculty of Commerce, Bucharest University of Economic Studies

Faculty of Cybernetics, Statistics and Economical Informatics, Bucharest University of Economic Studies

Faculty of Commerce, Bucharest University of Economic Studies

**4. Analyzing the Structure of Companies' Sector in Romania**

Irina-Maria DRĂGAN

Bucharest University of Economic Studies, Department of Statistics and Econometrics

**5. Quantitative Characterization of The Practice - Internship Developed By Spin Project**

Simona GHIȚĂ, Cristina BOBOC, Mihaela COVRIG

Bucharest University of Economic Studies, Department of Statistics and Econometrics

**6. Quantifying ecosystem services through payment schemes**

Giani GRĂDINARU

Bucharest University of Economic Studies, Department of Statistics and Econometrics

**7. The Problematic of Improving the Statistical Evaluation of Innovation Activities In Accordance With European Standards**

Aurelia ȘUȘU-ȚURCAN, Academy of Sciences of Moldova

**8. Higher Education Challenges in the Global Knowledge Society. Romanian Case**

Mihaela MUREȘAN, Emilia GOGU

"Dimitrie Cantemir" Christian University, Bucharest

**9. Some considerations on the theory of surveys in the actual social and economic context**

Doina Maria SIMION, "Lucian Blaga" University Of Sibiu, Romania,