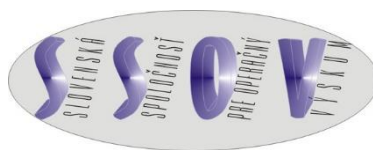


CONFERENCE PROGRAM



QUANTITATIVE METHODS IN ECONOMICS (Multiple Criteria Decision Making XVIII)

25th - 27th May 2016

25th MAY, 2016 (Wednesday)

11:30 – 12:30 *Registration*

13:30 – 15:00

Plenary Session *Chair: Juraj Pekár*

Josef Jablonský RANKING OF DECISION MAKING UNITS IN DEA MODELS WITH NON-CONSTANT RETURNS TO SCALE

Jaroslav Janáček, Marek Kvet FAIRNESS EVALUATION OF THE EMERGENCY SERVICE SYSTEM DESIGN

Miroslav Plevný, Lenka Gladavská ARGUMENTATION-BASED MULTIPLE CRITERIA DECISION PROBLEM WITH QUALITATIVE SCALES AS AN ALTERNATIVE TO QUANTITATIVE MULTIPLE CRITERIA DECISION PROBLEM

Manuel Alberto M. Ferreira, José António Filipe, Manuel Coelho UNEMPLOYMENT PERIOD QUANTITATIVE APPROACH THROUGH INFINITE SERVERS QUEUE SYSTEMS.

15:00 – 15:30 *Coffee break*

15:30 – 17:30

Session A *Chair: Petr Fiala*

Mariola Chrzanowska, Nina Drejerska STATISTICAL COMPARATIVE ANALYSIS OF SOCIOECONOMIC DEVELOPMENT LEVEL OF POLISH BORDER REGIONS (NUTS 3)

Vladimír Mlynarovič LEGISLATIVE CHANGES EFFECTS ON SLOVAK PENSION FUNDS EFFICIENCY

Stanislav Palúch, Štefan Peško, Tomáš Majer AN EXACT SOLUTION OF THE MINIMUM FLEET SIZE PROBLEM WITH FLEXIBLE BUS TRIPS

Jan Fábry OPTIMIZATION IN A MAINTENANCE OF TRAM SWITCHES

Michal Dorda, Dušan Teichmann SIMULATION APPROACH TO FREIGHT TRAIN CLASSIFICATION MODELLING USING QUEUEING SYSTEM SUBJECT TO TWO TYPES OF FAILURES

Petr Fiala MULTI-CRITERIA DYNAMIC PROJECT PORTFOLIO

Session B **Chair:** Jana Hančlová

Ludvík Friebel, Jana Friebelová MODELLING OF MIGRATION BASED ON SOCIOECONOMIC FACTORS

Michał Bernard Pietrzak, Adam P. Balcerzak A SPATIAL SAR MODEL IN EVALUATING INFLUENCE OF ENTREPRENEURSHIP AND INVESTMENTS ON UNEMPLOYMENT IN POLAND

Marek Radvanský, Tomáš Miklošovič, Ivan Lichner MODELING EX-ANTE EFFECTS OF ALTERNATIVE REGIONAL COHESION POLICY IN 2014-2020 PERIOD ON NATIONAL LEVEL – CASE OF SLOVAKIA

Tomáš Domonkos, Brian König, Filip Ostrihoň MIDDLE CLASS IN THE POST COMMUNIST COUNTRIES – CASE OF THE SLOVAK REPUBLIC

Veronika Mičková LIGHTING THE BLACK BOX OF THE COMPUTABLE GENERAL EQUILIBRIUM MODEL DATABASE

Jana Hančlová DYNAMIC STEAM OF EUROPEAN CARBON, ENERGY AND STEEL MARKETS COINTEGRATION

17:40 – 18:30 Meeting of SSOR

18:30 – 22:00 RECEPTION

26th MAY, 2016 (Thursday)

8:30 – 10:00

Session A **Chair:** Michaela Chocholatá

Filip Ostrihoň POSSIBLE COMPLICATIONS WHEN APPLYING SPATIAL SYNTHETIC INSTRUMENTS: CASE OF SLOVAK REGIONS

Adam P. Balcerzak, Michał Bernard Pietrzak QUALITY OF HUMAN CAPITAL IN THE EUROPEAN UNION IN THE YEARS 2004-2013. APPLICATION OF STRUCTURAL EQUATION MODELLING

Ondřej Čížek ESTIMATING THE REACTION FUNCTION OF THE ECB

Adam Pápai LABOR MARKET RIGIDITIES AND MONETARY SWITCH IN A DSGE MODEL: APPLICATION TO THE SLOVAK ECONOMY

Michaela Chocholatá INTERRELATIONSHIPS BETWEEN GERMAN AND BALTIC STOCK MARKETS

Session B **Chair:** Zuzana Čičková

Štefan Peško, Stanislav Palúch, Tomáš Majer A GROUP MATCHING MODEL FOR A VEHICLE SCHEDULING PROBLEM

Marta Janáčková, Alžbeta Szendreyová AN IMPACT OF THE FREQUENT TRAFFIC ACCIDENTS ON THE LOCATION OF THE EMERGENCY MEDICAL SERVICES STATIONS

Veronika Skočdoplová THE ADVANTAGES OF USING GOAL PROGRAMMING FOR TIMETABLING

Milan Horniaček AN ALGORITHM FOR GENERAL INFINITE HORIZON LOT SIZING WITH DETERMINISTIC DEMAND

Juraj Pekár, Ivan Brezina, Zuzana Čičková LOCATION OF ELECTRIC VEHICLE CHARGING STATION IN 2-PHASES

10:00 – 10:30 Coffee break

10:30 – 12:00

Session A **Chair:** Adam Borovička

Milan Svoboda, Pavla Říhová STOCHASTIC MODEL OF SHORT-TIME PRICE DEVELOPMENT OF SHARES AND ITS PROFITABILITY IN ALGORITHMIC TRADING

Petra Danišek Matušková THE IMPACT OF INPUT PARAMETERS ON THE CAPITAL REQUIREMENTS FOR EQUITY PORTFOLIO IN INSURANCE

Michal Švarc PROPENSITY SCORE MATCHING AND ALTERNATIVE APPROACH TO INDIVIDUALS MATCHING FOR COUNTERFACTUAL EVALUATION PURPOSES

Eva Grmanová, Peter Hošták COMPARISON OF SELECTED APPROACHES FOR ASSESSING THE EFFICIENCY OF INSURANCE COMPANIES

Adam Borovička SELECTION OF THE OPEN UNIT TRUSTS FOR INVESTMENT VIA FUZZY MULTICRITERIA EVALUATION METHOD

Session B **Chair:** Karol Szomolanyi

Lubica Bartova, Jaroslava Hurnakova ESTIMATION OF FARM INVESTMENT SUPPORT EFFECTS: A COUNTERFACTUAL APPROACH

Jakub Chalmovianský MEASURING THE NAIRU FOR CZECH AND SLOVAK LABOUR MARKETS: BAYESIAN APPROACH

Ivan Lichner FIRST PILLAR OF SLOVAK PENSION SYSTEM

Marek Zinecker, Adam P. Balcerzak, Tomáš Meluzín, Michał Bernard Pietrzak APPLICATION OF DCC-GARCH MODEL FOR ANALYSIS OF INTERRELATIONS AMONG CAPITAL MARKETS OF POLAND, CZECH REPUBLIC AND GERMANY

Karol Szomolányi, Martin Lukáčik, Adriana Lukáčiková THE EFFECT OF TERMS-OF-TRADE ON SLOVAK BUSINESS CYCLES: A THEORETICAL APPROACH

13:00 – 18:00 Social program – Cableway trip to Chleb

27th May, 2016 (Friday)

8:30 – 10:00

Session A **Chair:** Veronika Miřková

Vlastimil Reichel HOUSE PRICES AND BUSINESS CYCLE IN CZECH ECONOMY: A CROSSCORRELATION APPROACH

Michal Struk, Markéta Matulová, THE APPLICATION OF TWO-STAGE DATA ENVELOPMENT ANALYSIS ON MUNICIPAL SOLID WASTE MANAGEMENT IN THE CZECH REPUBLIC

Nenad Vunjak, Dragan Stojić, Jelena Birovljev, Jovana Ivančević, Jelena Vitomir METHODOLOGY FOR DETERMINING INTEREST RATES - AN INTERNATIONAL TREND

Jana Závacká CAN CONSUMERS' CONFIDENCE CONTRIBUTE TO CYCLIC MOVEMENT OF THE ECONOMIC ACTIVITY?

Petr Zimčik TAX QUOTA VS. WORLD TAX INDEX: PANEL DATA COMPARISON

Session B **Chair:** Martina Kuncová

Vojtěch Graf, Dušan Teichmann, Michal Dorda MATHEMATICAL MODEL FOR CREATION OF FLIGHT TIMETABLE WITH SEVERAL TIME SLOTS IN CONDITIONS OF CHARTER AIRLINE

Ivana Olivková METHODOLOGY OF MULTI-CRITERIA EVALUATION OF VARIANTS OF CHECK-IN SYSTEMS IN PUBLIC TRANSPORT

Dušan Teichmann, Michal Dorda ABOUT AN UNCONVENTIONAL APPLICATION OF ASSIGNMENT PROBLEM

Martina Kuncová, Veronika Hedija, Roman Fiala A COMPARISON OF SPECIALISED AGRICULTURAL COMPANIES PERFORMANCE

Martina Kuncová ANALYSIS OF THE IMPACT OF THE ELECTRICITY TARIFF RATE CHANGE ON THE CUSTOMERS ANNUAL COST AND OPTIMIZATION MODEL APPLICATION

10:00 – 10:30 Coffee break

10:30 – 12:00

Session A **Chair:** Marian Reiff

Marek Kvet, Jaroslav Janáček ACCELERATION OF THE OGRYCZAK'S APPROACH TO LEXICOGRAPHICAL MIN-MAX EMERGENCY SYSTEM DESIGN

Karolína Sůkupová, Osvald Vašíček MULTIPLE CONSTRAINTS APPLIED INTO THE DSGE MODEL: THE CASE OF UNCONVENTIONAL MONETARY EASING IN THE CZECH ECONOMY

Ľudmila Jánošíková, Michal Haviar IMPERIALIST COMPETITIVE ALGORITHM IN COMBINATORIAL OPTIMIZATION

Pavel Holeček, Jana Talašová, Jan Stoklasa FUZZY SYSTEM FOR THE PERFORMANCE EVALUATION OF ACADEMIC STAFF MEMBERS AT UNIVERSITIES – THE CURRENT STATE

Marian Reiff, Kvetoslava Surmanová CLUSTER ANALYSIS OF EU AGRICULTURE

Session B **Chair:** Milan Horniaček

Michal Fendek OPTIMALITY CONDITIONS OF THE CONSUMERS FOR THE NETWORK INDUSTRIES MARKET

Blanka Bazsová PROPOSAL AND EVALUATION OF THE COMPETENCY MODEL OF THE ACADEMIC EMPLOYEE

Juraj Dubovec, Lucia Pančíková OPTIMIZATION OF TRANSPORT OUTPUTS FOR THE SAKE OF PUBLIC INTEREST

Pavel Gežík, Tomáš Domonkos, Andrej Babej MUTUAL DEBT COMPENSATION AS A MINIMIZATION PROBLEM

Ľubica Šimková, Milan Horniaček INNOVATION VERSUS PARASITIC SECURITY

13:00 – 14:30

Session A **Chair:** Martin Lukáčik

Michaela Tichá MULTICRITERIA COALITIONAL GAMES AND BARGAINING THEORY

Sokhibmalik Khomidov INDUSTRY AND ECONOMIC GROWTH: STRUCTURAL CHANGES IN INDUSTRY OF UZBEKISTAN

Renata Majovská, Petr Fiala MODELLING OF DYNAMIC NETWORK SYSTEMS

Daniel Němec, Michal Pavlík PREDICTING INSOLVENCY RISK OF THE CZECH COMPANIES

Jan Pelikán VEHICLE ROUTING PROBLEM WITH PRIVATE AND COMMON CARRIER

Eva Rubliková, Zlatica Ivaničová UNEMPLOYMENT FLOWS AND VACANCIES IN SLOVAKIA

Session B **Chair:** Tomáš Majer

Radek Stolín A BONUS-MALUS SYSTEM BASED ON DEDUCTIBLES

Jan Bartoška, Petr Kučera, Tomáš Šubrt MODIFICATION OF THE EVA BY WORK CONTOUR

Jelena Birovljev, Aleksandra Marcikić, Nenad Vunjak, Otilija Sedlak, Zoran Ćirić THE APPLICATION OF QUEUEING THEORY FOR MODELING HUMAN RESOURCES IN AMBULANCE SERVICE

Đula Borozan, Dubravka Pekanov Starčević USING EXPERT OPINIONS TO QUANTIFY NET NONMEASURABLE EXTERNAL BENEFIT OF CHP PLANTS

Andrea Furková THE INNOVATIVE CLUSTERS IN THE EU: THE SENSITIVITY ANALYSIS OF THE SPATIAL WEIGHT MATRIX CONSTRUCTION

Monika Hadaš-Dyduch MODEL - SPATIAL APPROACH TO PREDICTION OF MINIMUM WAGE