



***11th International Conference
on Data Envelopment Analysis (DEA2013)***

CONFERENCE PROGRAM



DEA2013: CONFERENCE PROGRAM

THURSDAY (27 June 2013)	
08:30-19:00	Registration
08:30-10:30	Tutorial 1: Health Care Applications in DEA (Tepe 2) Yasar A. Ozcan, Virginia Commonwealth University, USA
10:30-12:30	Tutorial 2: Economic Foundation of DEA (Tepe 3) Subhash Ray, University of Connecticut, USA
14:00-15:30	Tutorial 3a: DEA and Banking Sector (Tepe 2) Rajiv Banker, Temple University, USA Joseph Paradi, University of Toronto, Canada
15:30-17:00	Tutorial 3b: DEA Software and Banking (Tepe 2) Ali Emrouznejad, Aston University, UK
14:00-16:00	Tutorial 4: Sensitivity Analysis and Network DEA (Tepe 3) Necmi Avkiran, The University of Queensland, Australia Kostas Triantis, National Science Foundation, USA
18:00-20:00	Welcome Reception (KONUKEVİ)

FRIDAY (28 June 2013)	
08:00-17:00	Registration
09:30-10:30	Opening ceremony (ATATÜRK CONGRESS CENTER)
10:30-11:00	Coffee Break
11:00-12:30	Session 1
12:30-14:00	Lunch
14:00-15:30	Session 2
15:30-16:00	Coffee Break
16:00-17:30	Session 3
20:00-23:30	Gala Dinner (KARADENİZ RESTAURANT)

SATURDAY (29 June 2013)	
08:00-17:00	Registration
08:30-10:00	Session 4
10:00-10:30	Coffee Break
10:30-12:00	Session 5
12:00-13:30	Lunch
13:30-17:00	City Tour
17:00-19:00	Dinner hosted by Municipality of Canik

SUNDAY (30 June 2013)	
08:30-10:00	Session 6
10:00-10:30	Coffee Break
10:30-12:00	Session 7
12:00-13:30	Lunch
13:30-20:00	Social Trip (to Amasya)

SESSION I (Banking&Finance)		FRIDAY (28 June 2013)- 11:00-12:30
TEPE 1		
Chairman: Nurhan Davutyan		
Submission Number	Authors	Title
61	Hamdani Hanen, Emrouznejad Ali, Louhichi Awatef and Ouertani Mohamed Nejib	Technical efficiency determinants within a Dual Banking System
224	Indra Widiarto, Ali Emrouznejad and Omneya Abdelsalam	Social and Financial Efficiency in NGO-based Islamic Microfinance
142	Grigorios Asimakopoulos and Michail Xanthopoulos	Efficiency in the European banking sector: peripheral versus core economies
12	Alejandra Trejo and Angelica María Vazquez Rojas	Economic efficiency and productivity in the Mexican metropolitan system, 1998-2008
175	Nurhan Davutyan and Canan Yildirim	Competitiveness in Turkish Banking: 2002-2011

SESSION I (Theory&Modelling)		FRIDAY (28 June 2013)- 11:00-12:30
TEPE 2		
Chairman: Subhash Ray		
Submission Number	Authors	Title
169	Saeideh Fallah-Fini, Jesus de La Garza and Jennifer Rogers	Safety Performance of Heavy and Light Industrial Projects Based on Zero Accidents Techniques
81	Erhan Berk	Evaluation of Efficiencies of Soccer Clubs in Turkish Super League by Data Envelopment Analysis
185	Hilal Atasoy and Rajiv Banker	Asymmetric Cost Behavior and DEA Efficiency Scores
98	Gregory Koronakos, Dimitris K. Despotis and Dimitris Sotiros	A novel DEA approach to assess individual and overall efficiencies in two-stage processes
78	Vladimir Krivonozhko, Finn Førsund and Andrey Lychev	Identifying suspicious efficient units in DEA models

SESSION I (Health) FRIDAY (28 June 2013)- 11:00-12:30		
TEPE 3		
Chairman: Angela Testi		
Submission Number	Authors	Title
83	Lindomar Pegorini, Adriano Provezano and Marcelo Braga	Evaluating the performance of public health care services provision: an analysis of the municipalities of Mato Grosso state, Brazil
25	Trishit Bandyopadhyay and Fernando Roxas	Improving efficiency of electricity distribution units through Benchmarking and Merger- a case study employing data envelopment analysis
102	Luis Eduardo Madeiro Guedes, Maria Stella Castro Lobo, Angela Cristina Moreira Da Silva and Marcos Estellita Lins	Performance assessment and quality of cardiac procedures in Rio de Janeiro through DEA
79	Yasar A Ozcan and Jeffrey S Legg	Performance Measurement for Radiology Providers: A National Study
263	Angela Testi, Naleef Fareed, Elena Tanfani and Yasar A Ozcan	A DEA model to assess the family doctor performance for the diabetes mellitus clinical pathway

SESSION I (Public Sector) FRIDAY (28 June 2013)- 11:00-12:30		
TEPE 4		
Chairman: Fethi Amri		
Submission Number	Authors	Title
93	Sait Başkaya and Matthias Klumpp	International Data Envelopment Analysis in Higher Education: How Do Institutional Factors Influence University Efficiency?
85	Maxim Kotsemir	National innovation systems efficiency analysis with DEA: issues of sample content and the set of variables
210	Ahmet Çalık, Eren Gümüş and Nimet Yapıcı Pehlivan	Malmquist Productivity Analysis For Tourism Industry in Turkey, 2000-2011
42	Cenk İçöz and Harun Sönmez	Determining the Efficiencies of European Football Leagues by Data Envelopment Analysis.
230	Fethi Amri and Rim Mouelhi	Impact of Competition on Total Factor Productivity, Efficiency and Technical Change: Evidence from Tunisian Manufacturing Firms

SESSION I (Dynamic Network & DEA) FRIDAY (28 June 2013)- 11:00-12:30

TEPE 5

Chairman: Necmi Avkiran

Submission Number	Authors	Title
272	Abdullah Aldamak and Saeed Zolfaghari	An Improved Ranking for Decision Making Units using Optimistic and Pessimistic Approaches
130	Thanasis Bouzidis and Giannis Karagiannis	Network DEA and Output Interdependency in Soccer
195	Hirofumi Fukuyama, Atsuo Hashimoto and Kaoru Tone	Measuring Dynamic-Network Inefficiency with an Application to Regional Economies
156	Kostas Triantis, Saeideh Fallah-Fini, Hazhir Rahmandad and Chema de La Garza	Measuring Dynamic Efficiency of Highway Maintenance Operations
9	Necmi Avkiran and Alan McCrystal	An Intertemporal Analysis Of Productivity in Residential Aged Care Networks Using Dynamic Network DEA

SESSION II (Keynote Speech and Panel Discussion) FRIDAY (28 June 2013)

TEPE 1

Time	Chair	Title
14:00-15:30	Ali Emrouznejad	Research on Health & DEA
	Keynote Speaker	
	Yasar Ozcan	
	Panelists	
	Finn Forsund Subbhash Ray	

SESSION II (Theory&Modelling) FRIDAY (28 June 2013)- 14:00-15:30

TEPE 2

Chairman: Mehmet Ali Cengiz

Submission Number	Authors	Title
28	Heinz Ahn and Nadia Vazquez Novoa	DEA Scores as A Debiasing Tool to Prevent The “Decoy Effect”
37	Heinz Ahn and Ludmila Neumann	Evaluating relative effectiveness under predetermined targets
56	Majid Hashemipour, Sahand Daneshvar and Mohammad Hashem Davoodi Semiromi	On the Use of Modified Data Envelopment Analysis Models for Product Line Selection
46	Kostas Triantis, Fran Dougherty and Nathan Ambler	A Complex Adaptive Systems Approach for Productive Efficiency Analysis
39	Mehmet Ali Cengiz, Talat Şenel, Yüksel Terzi and Naci Murat	A Bayesian Computation for Stochastic Frontier Analysis

SESSION II (Transportation)		FRIDAY (28 June 2013)- 14:00-15:30
TEPE 3		
Chairman: Ihsan Alp		
Submission Number	Authors	Title
116	Viverita Viverita and Ratih Dyah Kusumastuti	Operational Efficiency and Productivity Growth of Indonesian Airports
100	Eleutherios Katarelos, Andreas Kakouris and Anastasios Pantelidis	Assessment of Efficiency of Greek Airports
40	H.Hasan Örkücü, Ersen Aktas and Sinem Tuğba Şahin Tekin	The Performance Investigation Trade Service, Construction and Manufacturing Sectors in Turkey by the Data Envelopment Analysis
38	Samet Güner and Erman Coşkun	Efficiency Measurement of Passenger Ports with Data Envelopment Analysis and Utilizing Malmquist Productivity Index
196	İhsan Alp and Harun Kınacı	Transportation Performance Assessment Based on Energy And Environmental of Turkey and the European Countries

SESSION II (Public Sector)		FRIDAY (28 June 2013)- 14:00-15:30
TEPE 4		
Chairman: Ibrahim H. Osman		
Submission Number	Authors	Title
29	Murat Atan, Mehmet Özcan, Yalçın Arslantürk	Spatial Relations Based on Regional Efficiency on Nuts II in Determining Hunger and Poverty Threshold: Turkey Case
50	Guo-Liang Yang, Lu Zhao and Wen-Bin Liu	Estimating Directional Returns To Scale Of Basic Research Institutes In Chinese Academy Of Sciences
164	Roxani Karagiannis	Regional productivity differences of public hospitals in Greece
54	Diogo Ferreira and Rui Marques	Measuring the congestion of portuguese internment services
280	Ibrahim H. Osman, Abdel Latef Anouze, Nitham M. Hindi and Zahir Irani	I-MEET Framework for the Evaluation of e-Government Services from Engaging Stakeholders' Perspectives

SESSION III (Keynote Speech and Panel Discussion) FRIDAY (28 June 2013)		
TEPE 1		
Time	Chair	Title
16:00-17:30	Shawna Grosskopf	Research on Education & DEA
	Keynote Speaker	
	Emanuel Thanassoulis	
	Panelists	
	Necmi Avkır, Karagiannis Giannis	

SESSION III (Theory&Modelling)		FRIDAY (28 June 2013)- 16:00-17:30
TEPE 2		
Chairman: Mohammad Reza Alirezaee		
Submission Number	Authors	Title
107	Hasan Bal, Mehmet Unsal and H. Hasan Orkcü	An Alternative Approach for Data Envelopment Analysis Cross Efficiency Evaluation
108	Mehmet Unsal, Hasan Bal, H.Hasan Örkücü and Resat Kasap	Incidence of Inefficiency and Bayesian Approaches
73	Sahand Daneshvar, Gökhan Izbirak and Iman Roozbeh	A Modified Data Envelopment Analysis Method For Priority Determination and Group Decision Making in The Analytic Hierarchy Process
58	Rajiv D. Banker, Karlo Kotarac and Luka Neralic	Sensitivity and stability in stochastic data envelopment analysis
148	Mohammad Reza Alirezaee and Masoumeh Rajabi Tanha	The Balance of Decision Making Units (DMUs) Regarding the Imposed Strategies

SESSION III (Health)		FRIDAY (28 June 2013)- 16:00-17:30
TEPE 3		
Chairman: Serpil Erol		
Submission Number	Authors	Title
105	Zahra Kalantary and Adel Azar	A Robust data envelopment analysis model for ranking, Case study: Hospitals of Tehran
152	N. Özgür Doğan	Measuring the Efficiency of Primary Healthcare Organizations in the Cappadocia Region using Data Envelopment Analysis
157	H.Hasan Örkücü and Mustafa İsa Dogan	OECD Countries Socio-Economic Performances by the Goal Programming Data Envelopment Analysis Models
248	Komal Aqeel Safdar, Ali Emrouznejad and Prasanta Kumar Dey	Better Queue Management Using DEA: An Application in a Large Public Hospital
276	Babak Daneshvar Rouyendegh, Gül Didem Batur, Ender Sir and Serpil Erol	The DEA and Fuzzy AHP Approach to Health-Care Organizations' Performances

SESSION III (Energy&Environment) FRIDAY (28 June 2013)- 16:00-17:30		
TEPE 4		
Chairman: Ana Lopes		
Submission Number	Authors	Title
19	Adnan Sozen and Amin Mirzapour	Select Best Location of Solar Plants by an Integrated Hierarchical DEA Approach in Turkey Cities
111	Alpagut Yavuz and Sinan Demirci	An Empirical Analysis of the Efficiencies of Turkish Iron and Steel Companies during the Global Financial Crisis
145	Debadrita Dhara, Shilpa Sethia, Puneet Chitkara, Anish De and Sanchit Kumar	Indian Power Distribution Sector: Performance Analysis and Way Ahead
231	Sepideh Kaffash	Effect of Oil Price Shocks on Banks' Performance
244	Tiago Soares, Ana Lopes, Angélica Baptista and Rajiv Banker	DEA Application in Brazilian Energy Transmission Sector

SESSION IV (Education) SATURDAY (29 June 2013)- 08:30-10:00		
TEPE 1		
Chairman: Hasan BAL		
Submission Number	Authors	Title
159	Ahmad Battal, Subhi Jarwaan and Ali Alshayea	Total Productivity Growth in the Faculties of Anbar University using Malmquist Productivity Index
117	Nur Azlina Abd Aziz, Roziah Mohd Janor and Rasidah Mahdi	Efficiency Analysis Of Academic Departments Within A University: A DEA Window Analysis Approach
209	Shokoofeh Banihashemi and Masoud Sanei	Portfolio performance evaluation using DEA and quantities of linear regression
75	Ayhan Gölcükcü and Hasan Bal	Customer Efficiency Versus Firm Efficiency: A Banking Example
123	Mohammad-Reza Alirezaee	A New Generalized DEA Model to Align a Predefined Index

SESSION IV(Theory&Modelling)		SATURDAY (29 June 2013)- 08:30-10:00
TEPE 2		
Chairman: Shawna Grosskopf		
Submission Number	Authors	Title
226	Adel Hatamimarbini, Farhad Hosseinzadeh Lotfi, Per J. Agrell, Kobra Gholami and Zahra Ghelej Beigi	Centralized Resource Reduction and Target Setting Under DEA Control
171	Jafar Pourmahmoud Gazijahni and Elnaz Babazadeh	Ranking Design Requirements in Quality Function Deployment With A New Data Envelopment Analysis Method
172	Elnaz Babazadeh and Jafar Pourmahmoud	A New Grouped Data Envelopment Analysis Method For Priority Determination in Quality Function Deployment
77	Emine Demet Mecit and İhsan Alp	A New Constrained Data Envelopment Analysis Approach with Correlation Coefficients for Balanced Weight Distribution
132	Rolf Färe, Shawna Grosskopf, Tommy Lundgren, Per-Olov Marklund and Wenchao Zhou	CBA with DEA: Measuring Expense Effectiveness

SESSION IV (Health)		SATURDAY (29 June 2013)- 08:30-10:00
TEPE 3		
Chairman: Lei Chen		
Submission Number	Authors	Title
49	Olena Kalinichenko, Carla A Amado and Sérgio P Santos	Exploring the potential of Data Envelopment Analysis for performance-related-pay in health care provision
141	Aliye Ahu Akgün, Handan Türkoğlu and İlker Akgün	Quality of Life Performance of Rural Areas: Case of Bursa
247	Magdalena Ziolo	Public Sector Efficiency and the Performance Paradox
97	Vladimir Krivonozhko, Alexander Piskunov and Andrey Lychev	On comparison of OECD Better Life Index and the DEA approach
88	Lei Chen and Subhash C. Ray	Marginal Production Cost of General Dental Practices in Colorado: An Application of Data Envelopment Analysis
64	José Francisco Moreira Pessanha, Alexandre Marinho, Luiz Da Costa Laurencel and Marcelo Rubens Dos Santos Do Amaral	Implementing Dea Models in the R Program

SESSION IV (Energy&Environment) SATURDAY (29 June 2013)- 08:30-10:00		
TEPE 4		
Chairman: Joshua Ignatius		
Submission Number	Authors	Title
94	İhsan Alp and Zülal Türkoğlu	Candidate Countries and the European Union Countries of the European Union Environmental Performance Measurement
153	Forough Shadman Lahiji, Khalid Abdul Rahim and Behrouz Arabi	Applying DEA-MBP to Environmental and Cost Benchmarking in Electricity Generation: a case study of Iran steam power utilities
243	Kazim Baris Atici and Victor V. Podinovski	Elasticity Measurement on DEA Frontiers with Production Trade-offs
20	Adnan Sozen and Amin Mirzapour	Integrated DEA Approach for Location Optimization of Wind Plants
277	Joshua Ignatius, Mohammareza Ghasemi and Ali Emrouznejad	Carbon Efficiency Evaluation Under Imprecise and Asymmetric Information

SESSION V (Keynote Speech and Panel Discussion) SATURDAY (29 June 2013)		
TEPE 1		
Time	Panelists	Title
10:30-12:00	R. Banker (Chair), R. Fare, L. Seiford, V. Podinovski, K. Triantis	DEA: Past, Present and Future of DEA

SESSION VI (Agriculture) SUNDAY (30 June 2013)- 08:30-10:00		
TEPE 1		
Chairman: Yüksel Bek		
Submission Number	Authors	Title
95	Mehmet Bozoglu and Nevra Alhas Eroglu	The Effects of the Support Policies on the Agricultural Efficiency and Total Factor Productivity in Turkey
146	Yiorgos Gadanakis, Richard Bennett and Julian Park	Assessing Sustainable intensification of Agricultural Systems Using a Farm Eco-Efficiency Index: A Data Envelopment Analysis Approach
266	Irina Solovyeva and Ernst-August Nuppenau	DEA-Efficiency of Traditional Farming with Consideration of Grassland Biodiversity: the Case of the Ukrainian Carpathians
76	Mehmet Ali Cengiz	Assessing Convergence of MCMC Algorithms for Stochastic Frontier Analysis
149	Aysegul Yilmaz and Kursat Capraz	Comparison of Free Zones in Turkey by Means of DEA

SESSION VI(Theory&Modelling)		SUNDAY (30 June 2013)- 08:30-10:00
TEPE 2		
Chairman: Finn Førsund		
Submission Number	Authors	Title
239	Dariush Khezrimotlagh, Parviz Mohsenpour, Shaharuddin Salleh and Zahra Mohsenpour	A Review on Arash Method in Data Envelopment Analysis
222	Celal Taşdoğan and Ümit K. Seyfettinoğlu	Measuring “Sustainable Value” by Stochastic Frontier Analysis: A Comparative Study for Turkey
240	Dariush Khezrimotlagh, Parviz Mohsenpour, Shaharuddin Salleh and Zahra Mohsenpour	Decision Making Units with Integer Values in Data Envelopment Analysis
177	Madjid Zerafat-Angiz-L, Mohd Kamal Mohd Nawawi, Razamin Ramli, Maznah Mat Kasim, Haslinda Ibrahim and Ruzelan Khalid	Fuzzy Data Envelopment Analysis: A Primal-Dual Approach
45	Subhash Ray	Productivity Change over Time and the Dynamics of Cost Competitiveness: A Nonparametric Analysis of U.S. Manufacturing Data

SESSION VI (Education)		SUNDAY (30 June 2013)- 08:30-10:00
TEPE 3		
Chairman: Giannis Karagiannis		
Submission Number	Authors	Title
200	Pegah Haji Mirza Hossein Khoshnevis, Per J Agrell and Adel Hatami-Marbini	Measuring and Modelling Productivity in Education: State-of-the-Art and Research Frontiers
82	Alexandre Marinho and Fernando Gonçalves Castanheira Junior	Assessing the efficiency and the effectiveness of public expenditures on security in Brazilian states
104	Mrinal Dasgupta and Deepankar Sinha	Relevance of Data Envelopment Analysis to the Estimation of Productive Efficiency in the Indian Port Industry
143	Giannis Karagiannis and Stelios Katranidis	Evaluating Research Performance in Greek University Departments of Economics Using DEA
250	Mahnaz Maghbouli and Alireza Amirteimoori	Incorporating Both Undesirable Outputs and Non Discretionary Factors in DEA

SESSION VI (Energy&Enviroment) SUNDAY (30 June 2013)- 08:30-10:00		
TEPE 4		
Chairman: Osman Zaim		
Submission Number	Authors	Title
278	Oday Jarjies and Ihsan Alp	Using the Data Envelopment Analysis CCR Model to Measure Technical Efficiency of Oil Refineries
15	Helali Kamel and Helali Kalai Maha	Non-parametric measures of capacity utilization in Tunisia: A dual approach
137	Johannes Morfeldt and Semida Silveira	Capturing Energy Efficiency in Iron and Steel Production- an Empirical Analysis Using DEA and MPI
86	Osman Zaim and Işıl Tellalbaş	Overcoming the Shortcomings of the Partial Productivity Measure: A Directional Distance Technology Function Approach
18	Helali Kamel and Kalai Maha	Estimation of the cost efficiency frontier in Tunisia: stochastic frontier approach versus Bayesian approach

SESSION VI (Other Applications) SUNDAY (30 June 2013)- 08:30-10:00		
TEPE 5		
Chairman: Serpil Erol		
Submission Number	Authors	Title
134	Esra Kurt Tekez and Fatma Aslan	Efficiency- Based Performance Evaluation Using Data Envelopment Analysis
151	Berenice Dupeux and Jeroen Buysse	Inverse efficiency simulation
212	Ahmet Tilfarligil and Nurettin İbrahimoglu	The Examination on Relative Efficiencies of High Schools in Gaziantep By Data Envelopment Analysis (DEA)
162	Yücel Özkara and Mehmet Atak	Regional Efficiency Measurement of Turkish Manufacturing Industry
127	Hasan Bal, Vadud Najjari and Salih Çelebioğlu	Stochastic frontier models and copulas
284	Fernanda Rocha, Mariana Rodrigues de Almeida and Daniel Aloise	A survey of Dynamic DEA models

SESSION VII (Banking&Finance)		SUNDAY (30 June 2013)- 10:30-12:00
TEPE 1		
Chairman: Francisco Vargas		
Submission Number	Authors	Title
14	Shu-Chin Huang	The characteristics of growing banks during the financial crisis of 2007-2012
22	Ning Zhu, Bing Wang and Zhiqian Yu	Shadow Price of Non-performing Loans in Chinese Commercial Banks under Different Risk Preferences
186	Muhammad Auwalu Haruna and Malami Muhammad Maishanu	Two-Stage Analysis of Banking Efficiency in Nigeria
261	Mahmut Karayel	Scoring the World Banking Sector Since the Financial Crisis
41	Francisco Vargas, Luis Rentería, Gang Cheng, Panagiotis Zervopoulos and Arnulfo Castellanos	Deregulation, productivity and profit in Mexican banking

SESSION VII(Theory&Modelling)		SUNDAY (30 June 2013)- 10:30-12:00
TEPE 2		
Chairman: Victor Podinovski		
Submission Number	Authors	Title
229	Atefeh Masoumzadeh, Alireza Amirteimoori and Mehdi Toloo	On finding the best performer in data envelopment analysis
166	Placido Moreno and Sebastian Lozano	Dynamic Network DEA: an application to the provision of public services
89	Ayhan Gölcükcü and Hasan Bal	Data Envelopment Analysis Database (DEABASE)
262	Mahmut Karayel	Enterprise Performance Optimization Software
242	Victor Podinovski and Wenjuan Zhang	Improving the Discriminating Power of DEA Models: Applications of Production Trade-Offs and Hybrid Returns-To-Scale Models

SESSION VII (Other Applications)		SUNDAY (30 June 2013)- 10:30-12:00
TEPE 3		
Chairman: Paul Rouse		
Submission Number	Authors	Title
235	Fuh-Hwa Liu	Assess a set of centralized operation units with a common set of weights for the multiple performance indices
131	Mette Asmild and Jens Leth Hougaard	Technological superiority
62	Mozhgan Mansouri Kaleibar and Sahand Daneshvar	Modified Cross Efficiency and its Application in Stock Exchange
275	Abdel Latef Anouze	Evaluating and predicting bank performance: A hybrid approach of tree-based ensemble methods and data envelopment analysis
283	Oday Jarjies, Hulya Bayrak and Kubra Durukan	Using of fractional factorial design (r k-p) in DEA to selection
118	Paul Rouse, Lorenzo Lucianetti and Catherine Yung	Implementations of the Balanced Scorecard and their impact on organisation efficiency

SESSION VII (Theory & Modelling)		SUNDAY (30 June 2013)- 10:30-12:00
TEPE 4		
Chairman: Emmanuel Thanassoulis		
Submission Number	Authors	Title
63	Sahand Daneshvar and Gokhan Izbirak	Computing the Biennial Malmquist Index Using Modified Variable Returns to Scale DEA Model
90	Susila Munisamy and Behrouz Arabi	Eco-efficiency Change and Technological Gap in Power Plants: Using A Slack-Based Measure for the Malmquist Luenberger Meta-Frontier Productivity Index
99	Giannis Karagiannis and Suzanna M. Paleologou	Directional Distance Functions and Construction of Composite Fiscal Performance Indicators
155	Behrouz Arabi, Susila Munisamy, Ali Emrouznejad and Foroogh Shadman Lahiji	A Materials Balance Principle Enabled Malmquist Luenberger Approach using a Slack-Based Model
96	Rashed Khanjani Shiraza, Emmanuel Thanassoulis, Nikolaos Maniadakis and Khalil Paryab	A Cost Malmquist Productivity Index Capturing Group Performance

SESSION VII (Theory&Modelling)		SUNDAY (30 June 2013)- 10:30-12:00
TEPE 5		
Chairman: Reşat KASAP		
Submission Number	Authors	Title
180	Irmak Acarlar and Harun Kınacı	On Detecting Influential Observations in DEA
184	Pooya Haghani, Majid Hashemipour and Sahand Daneshvar	Selection of Product Design Using Modified Data Envelopment Analysis Models
189	Harun Kınacı, Vadoud Najjari and Irmak Acarlar	A New Approach for the Secondary Goal in DEA
211	Ahmet Çalık and Nimet Yapıcı Pehlivan	Measurement of Investment Efficiency of Regions in Turkey Via Fuzzy Analytical Hierarchy Process/Data Envelopment Analysis
52	Pedro Carvalho and Rui Marques	Computing economies of vertical integration, economies of scope and economies of scale using partial frontier nonparametric methods

POSTER SESSION - SUNDAY (30 June 2013)- 08:30-12:30		
LOBBY		
Submission Number	Authors	Title
43	H.Hasan Örkücü and Sercan Karatas	The Performance Investigation of a Public Bank Branches in Turkey by the Data Envelopment Analysis
136	Solmaz Eini and Hasan Bal	Turkey And The European Union Countries Educational Performance
190	Sahand Daneshvar and Mehrdad Alirezamohammadi	Ranking All Units Based on Modified Constant Returns to Scale Data Envelopment Analysis Model
205	Volkan Soner Özsoy and İhsan Alp	Turkish Decision Support System for Performance Analysis With C Programming Language
234	Jaber Alyami, Stephen Ramsden and Paul Wilson	Estimating Efficiency and Productivity Growth of the Flour Mills of the Grain Silos and Flour Mills Organisation
236	Burak Eren Çetintaş, Merve Sağlam, Esra Lafci, Gizem Erkan and Hasan Bal	A New Model Based on Mean Absolute Deviation for Efficiency Evaluation of Turkish Electric Distribution Companies
249	Nevin Koc, Kadir Onur Dağdeviren and Hasan Bal	Electricity Efficiency of Turkish Cities and Electric Supply Industry
251	H. Hasan Örkücü and Onur Dönmezcelik	Investigation of Electrical Energy Efficiency of Turkey by the Data Envelopment Analysis
255	Min Dai	The Study of Environmental Performance in Dongguan's Pulp and Paper Industry
256	Hamit Alper Durak, Esra Öztürk and Hasan Bal	Ranking of Turkish Airports Using Moora and DEA
259	Verena Flitsch	Efficiency Measurement of Port Hinterland Transport with a Combined Ahp-DEA-Model
260	Melih Gunes	Efficiency of R&D Expenses by Using Data Envelopment Analysis (DEA)
268	Ferdane Burcu Karayazılı	Measuring The Productivity of Telecommunication: A Comparison for the Countries of Eu and Turkey
281	Ayhan Gölcükcü, Mehmet Unsal and Hasan Bal	Statistical Summary of DEA 2013
60	Talat Şenel, Serpil Gümüş Tekin, Erol Terzi and Nurettin Savaş	Integer DEA Models and an Application
274	Ahmet Öztel and Mehmet Said Köse	A Comparison of DEA and MCDM Method: a Case Study.

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