FINAL PROGRAM

TENTH EUROPEAN WORKSHOP
ON
EFFICIENCY AND PRODUCTIVITY ANALYSIS

Lille, June 27-30, 2007

Efficiency and Productivity Analysis: Retrospect and Prospect

Organised by
GAPEM
P. Agrell, K. Kerstens, P. Vanden Eeckaut

Hosted by
IÉSEG School of Management
Lille Economics & Management (CNRS)
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<th>Tuesday June 26</th>
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<td>09:00</td>
<td>Registration</td>
<td>Parallel Session 5A</td>
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<td>Keynote Session 1 (S1)</td>
<td>Sessions YR 1</td>
<td>Sessions YR 2 (S11)</td>
<td>Sessions YR 3 (S16)</td>
<td>Guided visit Museum of Arts</td>
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<td>12:30</td>
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<td>Lunch D2</td>
<td>Session 3</td>
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<td>Session 3</td>
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**Quick Program Overview**

- **Registration:** 09:00 - 10:00
- **Opening Remarks:** 10:30 - 10:45
- **Keynote Session 1 (S1):** 11:00 - 12:30
- **Lunch D1:** 12:30 - 14:00
- **Session 3:** 14:00 - 15:30
- **Coffee Break D1:** 15:30 - 16:00
- **Session 4:** 16:00 - 17:30
- **Coffee Break D2:** 17:30 - 19:00
- **Beer Degustation:** 19:00 - 22:00
- **Conference Dinner:** 22:00 - 23:00
Session 1 Wednesday, June 27, 2007 11:00 - 12:30

Keynote I
Building B - Ground Floor - Room B050

Efficiency and Productivity: Malmquist and More
Fare, Rolf

Comment on: Efficiency and Productivity: Malmquist and More
Oulton, Nicholas

Comment on: Efficiency and Productivity: Malmquist and More
ten Raa, Thijs

Session 2 Wednesday, June 27, 2007 12:00 - 12:00 (next day)

Poster I
Building B - Ground Floor - Room EMF

An Assessment of Efficiency and Productivity Change of Central Administrative Services of UK Universities using Data Envelopment Analysis.
Bakoulas, Konstantinos - Thanassoulis, Emmanuel

Productivity Performance of Regional Electric Cooperatives in the Philippines
Posadas, Ramon - Cabanda, Emilyn

Corruption, Efficiency and Productivity Growth. A Non-Parametric Approach
Salinas-Jimenez, M. Mar - Salinas-Jiménez, Javier

Random vs Fixed Restricted SUR Model: Case Study on a System of Cost and Factor Share Equations
Ouertani, Mohamed Nejib - Ben Jedidia, Lotfi

The Impact of ICT in Malaysia - A Simultaneous Equation Approach
Ramlan, Jorah - Ahmed, Elsadig

Bridging Radial and Non-radial Measures of Efficiency in DEA
Tone, Kaoru - Tsutsui, Miki - Avkiran, Necmi

Estimating Efficiency within the Manufacturing Sector in Kenya during the Structural Reform Period: An Empirical Analysis
Ngu, Dianah Mukwate - Thomi, Walter

The Generalized Distance Function as a Solution to Infeasibility of Super Efficiency Models
Andrew, Johnson - McGinnis, Leon

Analysis of Input Congestion of Chinese Urban Hospitals
Ruizhi, Pang - Li, Yang

Pachkova, Elena

Improving Supply Chain Efficiency – A Strategic Decision-Making Analysis
Pasa, Iulia

Is There a Link between Productivity Growth and Investment Bursts?
Geylani, Pinar - Stefanou, Spiro
Session 3  Wednesday, June 27, 2007  14:00 - 15:30

Session 3 A  Network Industry (De)Regulation
Building A - First Floor - Room A101 J.M KEYNES

Efficiency Measurement and Regulation in U.S. Telecommunications: a Robustness Analysis
Resende, Marcelo

European Railway Deregulation: The Influence of Regulatory and Environmental Conditions on Efficiency
Wetzel, Heike

Wheat, Phillip - Smith, Andrew

A Comparison of Railway Performance in Europe: an Application of Multi-Directional Efficiency Analysis
Holvad, Torben - Hougaard, Jens Leth - Kronborg, Dorte

Session 3 B  University Performance
Building A - Second Floor - Room A201 J. MONNET

Educational Offer Evaluation in Romanian Universities by Efficiency Techniques
Spircu, Tiberiu - Spircu, Liliana - Albu, Crisan

Budget Constrained Productivity of University Production
Räty, Tarmo - Kangasharju, Aki

Assessing the Performance of Spanish University Technology Transfer Offices
Caldera, Aida - Debande, Olivier

Scale, Age, Substitution Effects and their Interactions in Academic Production. A Disaggregated Analysis at Discipline Level
Bonaccorsi, Andrea - Daraio, Cinzia - Simar, Leopold

Session 3 C  Electricity Regulation I
Building A - First Floor - Room A103 M. CROZIER

Evaluating The Regulator: Winners and Lossers in the Spanish Electricity Distribution
Blazquez Gomez, MÃºa Leticia - Grifell-Tatjé, Emili

Divestiture, Vertical Integration and Efficiency: An Exploratory Analysis of Electric Power Distribution
Kwoka, John - Ozturk, Sanem - Pollitt, Michael

Hybrid Frontier Yardstick Regulation for the German Energy Networks
Agrell, Per

Regulatory Benchmarking with Panel Data
Weyman-Jones, Thomas - Bagdadioglu, Necmiddin
Session 3 Wednesday, June 27, 2007  14:00 - 15:30

Session 3 D Health I
Building A - First Floor - Room A121 M.E. PORTER

Membership in Hospital Organizations, Productivity Growth, and Technical Change for Non-profit Hospitals
  Granderson, Gerald - Tauchen, Helen
Resource Utilization in U.S. Hospital Markets
  Valdmanis, Vivian - Ferrier, Gary - Leleu, Herve
Complications! Complications! Complications! : Measuring Efficiency in Healthcare
  Lordan, Grace
Understanding (In)efficiency in Thai Publicly Owned Hospitals
  Asavadachanukorn, Preecha - Yaisawarng, Saowaros - Yaisawarng, Suthathip

Session 3 E Deregulation in Banking
Building A - First Floor - Room A120 E. MALINVAUD

Cost Structure, Ownership Effect and Competition: The Role of Deregulation and Prudential Re-Regulation
  Zhao, Tianshu - Casu, Barbara - Ferrari, Alessandra
Social Banking, Deregulation, and Profitability of Banks: The Indian Case
  Mukherjee, Kankana - Das, Abhiman - Ray, Subhash
**Session 4** Wednesday, June 27, 2007  16:00 - 17:30

**Session 4 A  Health II**
Building A - First Floor - Room A101 J.M KEYNES

Competition and Market Power in Physician Private Practices  
*Gunning, Timothy - Sickles, Robin*

Economies of Scale and Efficiency Measurement in the Swiss Nursing Homes Industry  
*Farsi, Mehdi - Filippini, Massimo - Lunati, Diego*

The Relationship between Physician Quality and Hospital Efficiency  
*Bernet, Patrick - Valdmanis, Vivian - Michael, Rosko*

Motivating Physicians to Improve Their Efficiency: An Evaluation of a Pilot Scheme  
*Staat, Matthias*

**Session 4 B  School Performance**
Building A - Second Floor - Room A201 J. MONNET

The 65 Percent Problem  
*Grosskopf, Shawna - Hayes, Kathy - Taylor, Lori*

Measuring Efficiency of Tunisian School in the Presence of Quasi-Fixed Inputs: A Bootstrap DEA Approach  
*Essid, Hedi - Ouelette, Pierre - Vigeant, Stéphane*

Performance Evaluation of Portuguese Secondary Schools  
*Portela, Maria - Camanho, Ana*

**Session 4 C  Electricity Regulation II**
Building A - First Floor - Room A103 M. CROZIER

Total Factor Productivity and Technical Efficiency Measurement under Factor Nonsubstitution: An Application to US Electric Utilities  
*Genius, Margarita - Tzouvelekas, Vangelis - Stefanou, Spiro*

A Synergy Effect between Electricity and Gas in US Energy Utility Industry: A Combined Use of DEA and DEA-Discriminant Analysis  
*Goto, Mika - Sueyoshi, Toshiyuki*

Do Mergers Really Increase Efficiency? A Cost Efficiency Analysis of Electricity Distributors in the US  
*Hess, Borge*

Productivity Development in the Swedish Electricity Distribution 2001-2005  
*Ek, Arvid Goran*
Session 4 Wednesday, June 27, 2007  16:00 - 17:30

Session 4 D  Agriculture I
Building A - First Floor - Room A121 M.E. PORTER

Technical Efficiency and Technological Gaps for Dairy Farms in Three Southern Cone Countries
Moreira, Victor - Bravo-Ureta, Boris

Productivity Differentials on Dairy Farms in Nordic Countries – The Metafrontier Approach
Sipiläinen, Timo - Kumbhakar, Subal - Kuosmanen, Timo

Efficiency in Turkish Agriculture: A Household Level Analysis
Dudu, Hasan - Çakmak, Erol Hasan - Öcal, Nadir

Farm Heterogeneity and Efficiency in Polish Agriculture: A Stochastic Frontier Analysis
Hockmann, Heinrich - Pieniadz, Agata

Session 4 E  Insurance Applications
Building A - First Floor - Room A120 E. MALINVAUD

The Transition to the Single Market in the German Insurance Industry
Url, Thomas - Mahlberg, Bernhard

Efficiency and Productivity in Thai Non-life Insurance Industry
Yaisawarng, Saowaros - Asavadachanukorn, Preecha - Yaisawarng, Suthathip

Deregulation and Cost Efficiency: The Case of European Insurance
Vencappa, Dev - Fenn, Paul

Session 4 F  Strategic and Industrial Issues in Banking
Building B - Second Floor - Room B253

Benchmarking and Industry Performance
ten Raa, Thijs

Evaluation of Mix-Product Strategies among Different Market Environments: The Case of Retail Banking Industry
Hubrecht, Aude - Leleu, Herve

The Shadow Price of Non Performing Loans in Tunisian Commercial Banks: A Directional Distance Approach
Chaffai, Mohamed - Lassoued, Samia
Session 5 Thursday, June 28, 2007  09:00 - 10:30

Session 5 A Nonparametric Statistical Estimation
   Building A - First Floor - Room A101  J.M KEYNES

   A Smooth Nonparametric Conditional Quantile Frontier Estimator
      Martins-Filho, Carlos - Yao, Feng
   Statistical Inference in Conditional Robust Nonparametric Frontier Models
      Daraio, Cinzia - Simar, Leopold
   Nonparametric Stochastic Frontier: The Multivariate Case with Stochastic Versions of
      FDH/DEA Estimators
      Simar, Leopold - Zelenyuk, Valentin
   Bandwidth Selection Problems for Nonparametric Estimation of Conditional Efficiency
      Scores
      Badin, Luiza - Simar, Leopold

Session 5 B Advances in Production Theory I
   Building A - Second Floor - Room A201  J. MONNET

   Estimating Translated Demand Functions
      Fare, Rolf - Grosskopf, Shawna - Hayes, Kathy - Margaritis, Dimitri
   A "Calculus" for Data Envelopment Analysis
      Chambers, Robert - Fare, Rolf
   Properties of the Directional Distance Function as a Measure of Efficiency
      Russell, R. Robert - Schwarm, William
   The Partial Technical Efficiency Measure of Production
      Li, Sung-ko

Session 5 C Methodological Advances in Banking Performance
   Building A - First Floor - Room A103  M. CROZIER

   Profit and Productivity: Differences Across Organizational Form
      Grifell-Tatjé, Emili - Lovell, C.A.Knox
   Stochastic Frontiers with Bounded Inefficiency
      Qian, Junhui - Sickles, Robin
   Quality Adjusted Inputs, Outputs and Productivity Change in Indian Banking: A Hedonic
      Approach
      Das, Abhiman - Kumbhakar, Subal
   Foreign Ownership and Efficiency: The Case of Ukrainian Banking
      Dushkevych, Natalya
Session 5 Thursday, June 28, 2007  09:00 - 10:30

Session 5 D Agriculture II
Building A - First Floor - Room A121 M.E. PORTER

Efficiency and Productivity Analysis for the Crop Farms under the Various CAP Reforms:
Empirical Studies for Germany, Greece, the Netherlands and Sweden
   Zhu, Xueqin - Oude Lansink, Alfons - Van der Vlist, Arno
Agglomeration Externalities and Technical Efficiency in Pig Production
   Larue, Solène - Latruffe, Laure
A Comparison of SFA and DEA Scale Efficiency Estimates with Cross Section Data
   Karagiannis, Giannis
Technology Adoption in French Agriculture and the Role of Financial Constraints
   Blancard, Stephane - Briec, Walter - Boussemart, Jean-Philippe - Kerstens, Kristiaan

Session 5 E Electricity Regulation III
Building A - First Floor - Room A120 E. MALINVAUD

Incorporating Quality of Service in a Benchmarking Model: An Application to French Electricity Distribution Operators
   Plagnet, Marie-Anne - Crespo, Héléne - Perelman, Sergio - Romano, Elliot - Coelli, Tim
Efficiency Effects of Integrating Quality of Service in Incentive Regulation: Experience from Norwegian Electricity Distribution
   Growitsch, Christian - Jamasb, Tooraj
Regulation of Distribution Companies – DEA with Separable Costs
   Bjørndal, Endre - Bjørndal, Mette
Incorporating Environmental Factors in the Regulatory Benchmarking Model for Electricity Distribution Companies in Norway.
   Grammeltvedt, Thor Erik - Hansen, Wiljar - Langset, Tore - Wiull, Stig Olav
Session 6 Thursday, June 28, 2007  11:00 - 12:30

Session 6 A  Semi-Parametric Approaches (YR)
Building A - First Floor - Room A101 J.M KEYNES

How to Expand Capacity of Tunisian's Local Hospital in the Network Schema of Public Hospitals and Global Budgeting System: A Semi-Parametric Approach
Chokri, Arfa - Leleu, Herve - Mohamed, Goaied

Dealing with Environmental Variables in Efficiency Analysis of Transition Banking: A Comparison of Semi-Parametric and Non-Parametric Approaches
Karligash, Kenjegaliieva - Weyman-Jones, Thomas - Simper, Richard

Semiparametric Estimation of Stochastic Frontiers under Regularity Conditions: A Single-Index Approach
Kortelainen, Mika

Session 6 B  Efficiency & Productivity in Manufacturing (YR)
Building A - Second Floor - Room A201 J. MONNET

Convergence at the Industrial Level: Evidence from the OECD
Wu, Xiaoyu - Russell, R. Robert

Ngui, Dianah Mukwate - Becker, Claudia

Technical Change, Competitiveness and Poverty Reduction in the Ghanaian Apparel Industry
Ayitey, Donatus Kosi

Session 6 C  Health (YR)
Building A - First Floor - Room A103 M. CROZIER

Measuring Efficiency in Healthcare: An Application to Out of Hours Primary Care Services on the Island of Ireland
Lordan, Grace

Evaluating the Performance of Public Health Units Using DEA
Lavado, Rouselle

Session 6 D  Agriculture (YR)
Building A - First Floor - Room A121 M.E. PORTER

Productivity Growth in Agriculture: Regional Evidence from Romania
Aldea, Anamaria - Vidican, Georgeta

A Comparison of Stochastic Frontier Approaches to Estimating Inefficiency and Total Factor Productivity: An Application to Irish Dairy Farming
Carroll, James - Newman, Carol - Thorne, Fiona

Distinguishing Technologies and Measuring Performance in Farm Production: The Case of Pennsylvania Dairy
Emvalomatis, Grigorios - Stefanou, Spiro
Session 7 Thursday, June 28, 2007  12:00 - 12:00 (next day)

Poster II
Building B - Ground Floor - Room EMF

The Cell as an Economic Unit: Comparing the Efficiency of Metabolic Networks
  Castelli, Lorenzo - Pesenti, Raffaele - Segrè, Daniel - Silli, Maddalena
On the Use of Ratios in DEA
  Emrouznejad, Ali
Training Effects on Productivity and Wages Considering the Average Human Capital of Workers in the Production Function
  Dumas, Audrey
Economic Growth and Foreign Direct Investment Inflows: A Stochastic Frontier Analysis
  Villano, Renato - Dollery, Brian - Wijeweera, Albert
The Efficiency of US Gas Transmission Operators: Lessons for Regulators
  Jamasb, Tooraj - Pollitt, Michael - Triebs, Thomas
Accounting for Environmental Differences in Estimating Productivity Change in the Australian Wool Industry
  Villano, Renato - Fleming, Euan - Fleming, Pauline
Exploring Production-Theoretical Insights for Economic-Environmental Trade-Off Analysis
  Van Meensel, Jef - Lauwers, Ludwig
Comparing Statistical Properties of Frontier Estimates When Some Outputs Are Undesirable
  Salnykov, Mykhaylo
Total Factor Productivity of Ukraine: First Decade
  Demchuk, Pavlo
Accounting for Undesirable Outputs and Non-Discretionary Inputs in the Olive Oil Industry Efficiency Analysis
  Dios-Palomares, Rafaela - Prieto Gijarro, Ángel M. - Martínez-Paz, José Miguel
How Did Mandated Quality Investments Influence the Productivity and Profitability of English and Welsh Water Companies?
  Maziotis, Alexandros - Saal, David - Thanassoulis, Emmanuel

Session 8 Thursday, June 28, 2007  14:00 - 15:30

Keynote II
Building B - Ground Floor - Room B050

DEA - The Mathematical Programming Approach to Efficiency Analysis
  Thanassoulis, Emmanuel
Comment on: DEA - The Mathematical Programming Approach to Efficiency Analysis
  Tind, Jørgen
Comment on: DEA - The Mathematical Programming Approach to Efficiency Analysis
  Wilson, Paul
Session 9 Thursday, June 28, 2007  16:00 - 17:30

Session 9 A Advances in Production Theory II
Building A - First Floor - Room A101 J.M KEYNES

Quantile Estimation of Production Profile
Huang, Cliff - Fu, Tsu-tan - Yang, Yung-Lieh
Cost Allocation and Convex Envelopment
Hougaard, Jens Leth - Tind, Jørgen
The Estimation of Dual Cost Functions for Stochastic Technologies
Chambers, Robert
Stochastic Nonparametric Envelopment of Panel Data with Fixed and Random Effects
Kuosmanen, Timo

Session 9 B Nonparametric Specification Issues
Building A - Second Floor - Room A201 J. MONNET

Nonparametric Efficiency Analysis under Economies of Scope
De Rock, Bram - Cherchye, Laurens - Vermeulen, Frederic
Dynamic Measures of Economies of Scope
Oude Lansink, Alfons - Silva, Elvira - Stefanou, Spiro
Nonparametric Test of Congestion
Cavaignac, Laurent - Peypoch, Nicolas - Barros, Carlos
The Validity of Input Aggregation in DEA Models: A Statistical Test
Ray, Subhash - Mukherjee, Kankana

Session 9 C Banking Applications
Building A - First Floor - Room A103 M. CROZIER

The Contribution of Product Mix versus Efficiency and Technical Change in the U.S. Banking
Gabriel, Asaftei
South East Asian Banking after the Crisis: A Non-Parametric Analysis of the Impact of Environmental Factors
Mohd Khan, Shazida - Casu, Barbara
Consolidation and Innovation in U.S. Banking: A Dynamic Reallocation Approach
Bos, Jaap - Kolari, James W.
Session 9 Thursday, June 28, 2007  16:00 - 17:30

Session 9 D  Transport
Building A - First Floor - Room A121 M.E. PORTER

Introducing Regulation in the Measurement of Efficiency, with an Application to the Canadian Air Carriers Industry
  Ouelette, Pierre - Petit, Patrick - Vigeant, Stéphane
Efficiency Measurement of Road Maintenance
  Ozbek, Mehmet Egemen - De la Garza, Jesus M. - Triantis, Konstantinos
Cost Efficiency and Economics of German Public Bus Operators - A Parametric Approach
  von Hirschhausen, Christian - Wilhelm, Axel - Nieswand, Maria - Geissler, Marika

Session 9 E  Water Utilities
Building A - First Floor - Room A120 E. MALINVAUD

Designing Incentives in Local Public Utilities, an International Comparison in the Drinking Water Sector
  De Witte, Kristof - Marques, Rui Cunha
Cost Efficiency of Slovenian Water Distribution Utilities: an Application of Stochastic Frontier Panel Data Methods
  Zoric, Jelena - Filippini, Massimo - Hrovatin, Nevenka
The Impact of OFWAT Incentives on Company Performance
  Portela, Maria - Thanassoulis, Emmanuel - Horncastle, Alan - Maugg, Tobias
Taking Into Account Environmental Variables in Frontier Models, a Metafrontier Approach to the Drinking Water Sector
  De Witte, Kristof - Marques, Rui Cunha

Session 9 F  Asian and Middle East Banking
Building B - Second Floor - Room B253

The Impact of Operational Risk toward the Efficiency of Banking: A Comparison of Taiwan’s and China’s Banking Industries
  Cheng, Cheng-ping - Chen, Bih-Shiow
The Efficiency Productivity of Jordanian Banking Sector in the Presence of Negative Output
  Emrouznejad, Ali - Anouze, Abdel Latef
On Measuring the Efficiency of Banks in Taiwan: A Stochastic Metafrontier Analysis
  Sun, Chia-Hung
A Comparison Between DEA and SFA Method in Japanese Banking Industry
  Le, T.P.
Session 10  Friday, June 29, 2007  09:00 - 10:30

Session 10 A  Banking: Industry Analysis
Building A - First Floor - Room A101 J.M KEYNES

Robust Non-parametric Quantile Estimation of Efficiency and Productivity Change in U.S. Commercial Banking, 1985--2004
Wilson, Paul - Wheelock, David

Measuring Market Power and Efficiency in Latin American Banking
Garza-Garcia, Jesus G. - Girardone, Claudia - Chortareas, Georgios

Consolidation in the European Banking Industry: How Effective is it?
Lozano-Vivas, Ana - Kumbhakar, Subal - Fethi, Meryem Duygun - Shaban, Mohamed

Efficiency in Islamic and Conventional Banking: An International Comparison
Abdul Majid, Mariani - Saal, David

Session 10 B  Agriculture III
Building A - Second Floor - Room A201 J. MONNET

Farming Type and Performance: A Comparison of Conventional and Organic Dairy Production in the United States
Mosheim, Roberto

Using Production Theoretic Concepts to Construct Soil Quality Indicators
Hailu, Atakelty - Chambers, Robert

Estimating the Organizational Cost of Managing the Farm
Tauer, Loren

The Decomposition of Cost Efficiency for the Italian Wine Industry: Co-Operatives vs Investor-Owned Firms
Maietta, Ornella Wanda - Perali, Federico

Session 10 C  Exploring Sources of Manufacturing Efficiency and Productivity
Building A - First Floor - Room A103 M. CROZIER

Cost Efficiency of Electronic Firms in China
Xuejie, Bai - Hu, Jin-Li

Analysis of Technical Efficiency of Manufacturing Firms in Spain
Arias, Carlos - Álvarez, Antonio

Drivers of Productivity Differentials between Southern and Northern Manufacturing in Italy: Technical Inefficiencies or Allocative Distortions?
Petraglia, Carmelo - Erberta, Fabrizio

Do Infrastructure and Banking Efficiency Boost Productivity? Evidence from Italian Manufacturing Firms
Mastromarco, Camilla - Zago, Angelo - Aiello, Francesco
Session 10  Friday, June 29, 2007  09:00 - 10:30

Session 10 D  Engineering Applications of Efficiency Analysis
Building A - First Floor - Room A121 M.E. PORTER

Developing Berth Planning System of Hyundai-Steel Dang-jin Port : Focused on Port Productivity
Young Yeon, Hwang

Benchmarking Performance in Warehouse Operations
Andrew, Johnson - McGinnis, Leon

Software Production Efficiency Measurement without Software Size Parameters Using DEA
Paradi, Joseph - McEachern, Christopher

Real-Time Efficiency/Performance Evaluation: Iterative Aerospace Scheduler Algorithm Optimization for Multi-Payload Next Generation Commercial Satellite Imagers
Eichensehr, Phil - Triantis, Konstantinos

Session 10 E  Parametric Panel Production Analysis
Building A - First Floor - Room A120 E. MALINVAUD

Estimating Panel Stochastic Frontier Models with Fixed Effects by Model Transformation
Wang, Hung-Jen - Ho, Chia-Wen

Measuring and Decomposing Productivity Changes with Unbalanced Panel Data
Karagiannis, Giannis

On the Sensitivity of US Electric Utilities’ Efficiency Estimates – A Distance Function Approach
Hess, Borge - Growitsch, Christian

Session 10 F  Round Table
Building B - Second Floor - Room B253

Reforming Railways: Theoretical Insights and Practical Lessons
McMahon, Paul (UK Office of Rail Regulation) - Bouf, Dominique (Laboratoire d’Economie des Transports) - Rivera Trujillo, César (Instituto Mexicano del Transporte) - Holvad, Torben (European Railway Agency)
Session 11 Friday, June 29, 2007  11:00 - 12:30

**Session 11 A Methodological Advances in Efficiency & Productivity I (YR)**
Building A - First Floor - Room A101 J.M KEYNES

*del Corral, Julio - Álvarez, Antonio - Alejandro, Fernández*

Improving Statistical Inference on Malmquist Productivity Indices.
*Curi, Claudia - Daraio, Cinzia - Mancuso, Paolo - Simar, Leopold*

Dynamical Analysis of Malmquist Productivity Index.
*Daskovska, Alexandra - Simar, Leopold - Van Bellegem, Sebastien*

**Session 11 B Transport (YR)**
Building A - Second Floor - Room A201 J. MONNET

Measuring the Technical Efficiency of Railways in North America Before and After Privatization.
*Rivera-Trujillo, Cesar - Mendoza-Diaz, Alberto*

Next Stop: Increased Efficiency? - A Non-parametric Efficiency Analysis of German Public Transport Companies
*Cullmann, Astrid*

**Session 11 C Applications of Efficiency Analysis (YR)**
Building A - First Floor - Room A103 M. CROZIER

German Higher Education Institutions and Efficiency - Empirical Evidence from a Data Envelopment Analysis Accounting for Heterogeneity
*Olivares, Maria*

Technical Efficiency under Risk Aversion and Interconnection between Uncertainty Components: Assessment from Olive-Growing Farms in Tunisia
*Ben Jemaa, Mohamed Mekki*
Session 12 Friday, June 29, 2007  12:00 - 12:00 (next day)

Poster III
Building B - Ground Floor - Room EMF

A Critique of the Minimax Approach to Efficiency Measurement.
   Tofallis, Chris
Stochastic Nonparametric Envelopment of Data: Cross-Sectional Frontier Estimation
   under Regularity Conditions
   Kortelainen, Mika - Kuosmanen, Timo
Innovations in the US Textile Industry: The Nonwoven Sector
   Christoffersen, Susan - Datta, Anusua
Technical Efficiency and Market Competitiveness in Electric Utility Industry
   Nemoto, Jiro - Goto, Mika
The Productive Performance of Public Health Care Centres in Cienfuegos, Cuba.
   Garcia Fariñas, Anai
Measuring Health System Efficiency in the OECD Countries
   Karagiannis, Roxani - Velentzas, Kostas
Social and Financial Performances in Microfinance Industry. Empirical Evidence from the
   Application of DEA and a Multivariate Analysis to 28 Peruvian Microfinance Institutions.
   Cornée, Simon - Thenet, Gervais
On the Reliability of Approximating Shadow Prices by the VRS Piecewise Linear Frontier
   Li, Sung-ko - Sun, Jingchun
A Study of the Efficiency of Malaysian Anchor Banks: A DEA Analysis Approach
   Yoong Hon, Lee - Cheah, Eng Tuck - Lin Yu, Koay
Effects of FDI Flows on Aggregate Productive Efficiency: An Application on a Panel of the
   OECD Countries
   Kodjo-Komina, Kodjo - Kinda, Tidiane
Transportation Procurement Support Using Data Envelopment Analysis
   Brusset, Xavier - Agrell, Per - Bogetoft, Peter
Sustainable Value Analysis with Best Practice Benchmarks: A Nonparametric Frontier
   Approach
   Kuosmanen, Natalia - Kuosmanen, Timo

Session 13 Friday, June 29, 2007  14:00 - 15:30

Keynote III
Building B - Ground Floor - Room B050

The Econometric Approach to Efficiency Analysis
   Greene, William
Comment on: The Econometric Approach to Efficiency Analysis
   Sevestre, Patrick
Comment on: The Econometric Approach to Efficiency Analysis
   Simar, Leopold
Session 14 Friday, June 29, 2007  16:00 - 17:30

Session 14 A  Methodological Aspects in Nonparametric Analysis
Building A - First Floor - Room A101 J.M KEYNES

Target and Technical Efficiency in DEA - Controlling for Environmental Characteristics
Oløsen, Ole B. - Petersen, Niels Christian

Computation Algorithms for DEA Models with Weight Restrictions
Podinovski, Victor

Alternative Approaches to Include Exogenous Variables in Efficiency Analysis: A
Comparison Using Monte Carlo Experimentation
Cordero-Ferrera, J. M. - Pedraja Chaparro, F. - Santín González, D.

Separation of Uncontrollable Factors and Time Shift Effects from DEA Scores: Multi-Stage
Data Adjustment Model Using DEA and Tobit with DMU Dummies
Tsutsui, Miki - Tone, Kaoru

Session 14 B  Eco-Efficiency
Building A - Second Floor - Room A201 J. MONNET

Incorporating both the Undesirable Output and the Uncontrollable Variables in DEA: The
Performance of Chinese Coal-fired Power Plants
Yang, Hongliang - Pollitt, Michael

Electric Utilities, Environmental Externalities and Cost Measured Productivity Growth
Prior, Diego - Granderson, Gerald

Production-Theoretical Underpinnings of Eco-Efficiency: Marrying Diverse Methodological
Approaches
Lauwers, Ludwig - Meul, Marijke - Van Meensel, Jef - Van Passel, Steven

Eco-Efficiency as a New Principle for the Allowance Allocation Mechanism in Emission
Trading
Luptacik, Mikulas

Session 14 C  Socio-Economic and Environmental Performances
Building A - First Floor - Room A103 M. CROZIER

A DEA Model as a Generalized Human Development Index
Estellita Lins, Marcos - Moreira da Silva, Angela Cristina - Carvalho Pereira, Bárbara

Ranking Corporations Based On Their Social and Environmental Performance
Constantin, Belu

Doing Bad to Do Better? Slack Patterns, Financial Performance and the Link to Corporate
Social Responsibility
Asmild, Mette - Chapple, Wendy - Hougaard, Jens Leth
Session 14 Friday, June 29, 2007  16:00 - 17:30

Session 14 D  Human Resources, Regulation, Incentives and Productivity
Building A - First Floor - Room A121 M.E. PORTER

Productivity And Downsizing: Who Gets Fired? Evidence from One Consumer-Goods Industry in Russia
   Rinaldi, Gustavo
Secure Relative Performance Pay
   Nielsen, Kurt
Application of Efficiency Measurement in the Analysis of Entrepreneurial Processes
   Tajnikar, Maks - Pusnik, Ksenja
Price Cap Regulation with Imperfect Information
   Lay, Helen - Weeks, Melvyn

Session 14 E  Marketing Performance
Building A - First Floor - Room A120 E. MALINVAUD

Comparison of Two Alternative Store Formats using a Malmquist-Type Index
   Vaz, Clara - Camanho, Ana
Total Factor Productivity and the Role of Location & Ownership: Evidence from the UK Retail Sector
   Anon Higon, Dolores
Session 15 Saturday, June 29, 2007  09:00 - 10:30

Session 15 A  Parametric Frontier Applications  
Building A - First Floor - Room A101 J.M KEYNES

Profit Efficiency in Social Labor Services  
Blank, Jos - Koot, Patrick
What Does the Distribution of Efficiency Look Like? A Nonparametric Deconvolution Approach  
Parmeter, Christopher - Horrace, William
Foreign Capital, Human Capital and Efficiency: A Stochastic Frontier Analysis for Developing Countries  
Mastromarco, Camilla - Ghosh, Sucharita
Productivity Differentials or Different Production Technologies?  
Bos, Jaap - Economidou, Claire - Koetter, Michael - Kolari, James W.

Session 15 B  Public Sector Contributions to Productivity  
Building A - Second Floor - Room A201 J. MONNET

Research Efficiency in Public Centers: The Case of the Spanish Food Technology Program  
Zofio Prieto, Jose Luis - Zabala Iturriagagoitia, Jon Mikel - Jiménez Sáez, Fernando
Testing for Substitutability between Factors of Production with an Application to University Administration  
Ferrari, Alessandra - Casu, Barbara - Thanassoulis, Emmanuel - Despic, Ozren
Productivity, Spillovers and Human Capital  
Sena, Vania

Session 15 C  Innovative DEA Applications  
Building A - First Floor - Room A103 M. CROZIER

Co-plot: A Useful Tool to Detect Outliers in DEA  
Mahlberg, Bernhard - Raveh, Adi
Analyzing the Structure of Inefficiency  
Asmild, Mette - Bogetoft, Peter - Hougaard, Jens Leth
The Effect of Age on the Performance of Professional Golfers  
Fried, Harold - Tauer, Loren
What Can we Learn from the Application of Frontier Analysis to Sporting Performance  
Simpson, Gary
Session 15 Saturday, June 29, 2007  09:00 - 10:30

Session 15 D  IT and Productivity
Building A - First Floor - Room A121 M.E. PORTER

IT Productivity and Productivity Paradox: A Semiparametric Smooth Coefficient Estimation
Chen, Jong-Rong - Huang, Cliff - Liu, Ting-Kun

Does IT-Outsourcing Increase Firm Success? A Firm-level Investigation for Germany
Ohnemus, Joerg

InnovatioN, InvesTment and ImiTation: How Information and Communication Technology Affected European Productivity Performance
Los, Bart - Timmer, Marcel

Session 15 E  Portfolio Performance
Building A - First Floor - Room A120 E. MALINVAUD

Portfolio Selection with Higher-Order L-Moments: A Robust Non-Parametric Mean-Variance-Skewness-Kurtosis Efficient Frontier
Jurczenko, Emmanuel - Maillet, Bertrand - Merlin, Paul - Yanou, Ghislain

Geometric Representation of the Mean-Variance-Skewness Portfolio Frontier: A Shortage Function Approach
Kerstens, Kristiaan - Van de Woestyne, Ignace - Mounir, Amine

Session 15 F  Round Table
Building B - Second Floor - Room B253

Efficiency Consultation in Engineering: Is it Worth the Investment?
Lay, Helen (Indepen Consulting) -
Walden, John B. (NOAA/NEFSC) -
Johnson, Andrew (Texas A&M University) -
Triantis, Kostas (Virginia Tech)
Session 16  Saturday, June 29, 2007  11:00 - 12:30

Session 16 A  Public Utilities & Regulation (YR)
Building A - First Floor - Room A101  J.M KEYNES

Incorporating the Price of Quality into Benchmarking UK Electricity Distribution
Yu, William - Jamasb, Tooraj - Pollitt, Michael

Predicting Efficiency Differentials for Operators under Multiple Regulators
Lorenz, Mathias - Agrell, Per

Spatial-Temporal Dimensions of Efficiency Among Electric Cooperatives in the Philippines
Lavado, Rouselle - Barrios, Ernie

Efficiency and Effectiveness in Water Distribution: A Challenge for African Companies
Tarsim, Achraf - Estache, Antonio – Perelman, Sergio – Saal, David

Session 16 B  Macro Economic and Environmental Issues (YR)
Building A - Second Floor - Room A201  J. MONNET

Regional Dimension of the Impact of Foreign Direct Investment on the Host Economy: A Case of Ukraine
Kravtsova, Victoria

Efficiency and Export Activities of Vietnamese Small and Medium Enterprises: Does Export Matter?
Nguyen Dinh, C. - Simpson, G. - Thanassouliés, E. - Nguyen Ngoc, A.

The Impact of ICT-use on Efficiency and Productivity
Bin, Wang - Hailin, Liao

Estimation of Environmental Efficiencies and Shadow Prices of Pollutants: Stochastic Frontier Analysis Approach
Salnykov, Mykhaylo

Session 16 C  Financial Sector (YR)
Building A - First Floor - Room A103  M. CROZIER

Cost and Revenue Efficiency in the German Life Insurance Industry: Direct versus Agent-based Insurers
Trigo Gamarra, Lucinda - Growitsch, Christian

Parametric Estimation of Merger Related Efficiency Gains
Gourlay, Adrian - Ravishankar, Geetha - Weyman-Jones, Thomas

Does the Entry Mode of Foreign Banks Matter for Bank Efficiency? Evidence from Czech Republic, Hungary and Poland
Vo Thi, Ngoc Anh - Vencappa, Dev

Session 16 D  Methodological Advances in Efficiency & Productivity (YR)
Building A - First Floor - Room A121  M.E. PORTER

State-Space Models, Technological Change and Initial Conditions
Severgnini, Battista

Stochastic Frontier Model with Discrete Valued Dependent Variables
Fe-Rodríguez, Eduardo