

All sessions will be held at  
**Salle URBAIN VAES**  
(I.A.G. building)  
place Rabelais, Louvain la Neuve

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**CIM**

Collège Interuniversitaire d'Etudes Doctorales dans les Sciences du Management,  
Bruxelles

**EIASM**

European Institute for Advanced Studies in Management, Brussels

**SMASH**

Séminaire de Mathématiques Appliquées aux Sciences Humaines  
Facultés Universitaires Saint-Louis, Bruxelles

**CIRIEC**

Centre International de Recherches et d'Information  
sur l'Economie Publique, Sociale et Coopérative, Liège

**IAG**

Institut d'Administration et de Gestion  
Université Catholique de Louvain, Louvain-la-Neuve

**CORE**

Center for Operations Research and Econometrics,  
Université Catholique de Louvain, Louvain-la-Neuve

**THIRD EUROPEAN WORKSHOP**

on

**EFFICIENCY AND PRODUCTIVITY MEASUREMENT**

October 21 - 23, 1993

**Scientific Committee**

Finn FØRSUND, Institute of Economics, University of Oslo  
Lennart HJALMARSSON, Department of Economics, University of Göteborg  
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Local organization : Henry TULKENS

**PROGRAM**



**C.O.R.E.**

CENTER FOR OPERATIONS RESEARCH AND ECONOMETRICS  
UNIVERSITÉ CATHOLIQUE DE LOUVAIN  
34, Voie du Roman Pays, B-1348 Louvain-La-Neuve, Belgium

THIRD EUROPEAN WORKSHOP ON EFFICIENCY AND PRODUCTIVITY MEASUREMENT — CORE, U.C.L., Louvain-La-Neuve, October 21-23, 1993  
All sessions will take place in SALLE URBAIN VAES, located in I.A.G. building, Place Rabelais, Louvain la Neuve

Thursday October 21 - 16:30 - 18:30h

*Special opening session on*  
*Efficiency Analysis in Financial Institutions:*  
chair: Laurence WOLSEY, President of CORE

Opening Remarks: Laurence WOLSEY

1. Lawrence SEIFORD, University of Massachusetts:  
"An Envelopment-Analysis Approach to Measuring the Managerial Efficiency of Banks"
2. Harold O. FRIED, Union College and C.A.Knox LOVELL, University of North Carolina at Chapel Hill:  
"Efficient Service Provision in Credit Unions: the Evolution of a Model"  
Discussant: Henry TULKENS, CORE, Université Catholique de Louvain

Friday October 22 — Morning — Chair : C.A.Knox LOVELL, University of North Carolina

9:00-10:30 h *Econometric Issues In Efficiency Analysis*

3. Philippe VANDEN EECKAUT and Pierre WUNSCH, CORE, UCL  
"White Noise vs Inefficiency: Evidence from Mass Transit Data"
4. Beyond PARK, Seoul National University, Robin C.SICKLES, Rice University and Léopold SIMAR, CORE and Institut de Statistique, UCL  
" Stochastic Frontiers: A Semiparametric Approach"  
Discussant: Jacques MAIRESSE, ENSAE, Paris

11:00-12:30h *Specification Issues in Nonparametric Analysis*

5. Léopold SIMAR, CORE and Institut de Statistique, UCL and Alexander TSYBACHOV, Université Paris VI  
"Efficient Estimation of Monotone Boundaries"
6. Sverre KITTELSEN, SNF, Oslo  
"Stepwise DEA: Choosing Variables for Measuring Technical Efficiency in Norwegian Electricity Distribution"
7. Ole OLESEN and Niels C. PETERSEN, University of Odense  
"Incorporating Quality into Data Envelopment Analysis : A Stochastic Dominance Approach"

Friday October 22 — Afternoon — Chair : Robin SICKLES, Rice university

14:30 - 15:30 h *Dominance and Efficiency*

8. Jens HOUGAARD and Mich TVEDE, University of Copenhagen  
"Intertemporal Dominance Analysis"
9. Henry TULKENS, CORE, Université Catholique de Louvain  
"EDA: Frontier Free Efficiency Evaluation"

16:00- 17:00 h *Modeling Issues Common to FDH and DEA*

10. Jesus PASTOR, Universidad de Alicante  
"Translation Invariance in DEA and FDH"
11. Kris KERSTENS, K.U.Brussel and Ph. VANDEN EECKAUT, CORE  
"DEA and FDH Based Technical Efficiency Measurement : Comparing Radial and Nonradial Alternatives"

19:30h Workshop dinner

Saturday October 23 — Morning — Chair : Sergio PERELMAN, Université de Liège.

9:00 - 10:30 h *Efficiency and Performance*

12. Peter BOGETOFT, Copenhagen Business School  
"Incentive Efficient Production Frontiers: an Agency Perspective on DEA"
13. Antreas ATHANASSOPOULOS and Emmanuel THANASSOULIS, Warwick Business School, UK: "Assessing Marginal Impacts of Investments on Organisational Performance"
14. O.EVRARD, B.LEJEUNE and B.THIRY, Université de Liège: "A Hedonic Cost Function for Water Distribution in Belgium: the Effect of Alternative Institutional Forms"

11:00- 12:15 h *Intertemporal Issues*

15. Dag Morten DALEN, SNF, Oslo  
"Testing for Technical Change with Data Envelopment Analysis"
16. Rolf FÄRE and Shawna GROSSKOPF, Southern Illinois University at Carbondale  
"Vintage Models and Efficiency"  
Discussant: Lennart HJALMARSSON, University of Göteborg

Saturday October 23 — Afternoon — Chair : Rolf FÄRE, Southern Illinois University

14:00-17:00 h *On Malmquist Indexes*

17. Emili GRIFELL-TATJÉ, Universitat Autònoma de Barcelona and C.A.Knox LOVELL, University of North Carolina at Chapel Hill  
"New decompositions of the Malmquist Productivity Index"
18. James F. BURGESS, Union College and Paul W. WILSON, University of Texas:  
"Decomposing Hospital Productivity Changes : A Nonparametric Malmquist Approach"

Coffee break

19. Véronique DISTEXHE and Sergio PERELMAN, Université de Liège  
"Technical Efficiency and Productivity Growth in an Era of Deregulation: the Case of Airlines"
20. Subhash RAY and Xiaowen HU, University of Connecticut  
"A Nonparametric Decomposition of the Malmquist Productivity Index: A Study of Airlines Data"  
Discussant: Finn FØRSUND, SNF and University of Oslo

Closing Remarks: Henry TULKENS  
Drinks at CORE

THIRD EUROPEAN WORKSHOP  
ON EFFICIENCY AND PRODUCTIVITY ANALYSIS  
CORE, Université Catholique de Louvain, Louvain-La-Neuve, Belgium  
October 21-23, 1993

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