

**EURO Summer Institute XVI
Data Envelopment Analysis: 20 years on
University of Warwick, Coventry, UK.
16-26 August 1998**

INTRODUCTION

The sixteenth European Summer Institute was hosted during the summer of 1998 by the University of Warwick. It was organised by Warwick Business School (WBS) under the auspices of the Association of European Operational Research Societies and with additional financial support from the Operational Research Society, Shell Services International and the Business School.

The theme selected, 'Data Envelopment Analysis: 20 years on', reflected the anniversary of the publication of the seminal paper by Charnes, Cooper and Rhodes whilst looking forward to ask 'what next?' for both the methodology and the young researchers assembled.

The organisation was undertaken by the Operational Research and Systems group of the Business School, which has a significant DEA sub-group, all of whom were involved. It is right to acknowledge here the valuable contribution of the WBS postgraduate research students without whose help it is difficult to imagine the event having taken place. This lively research presence, both staff and student, provided the Institute with a valuable adjunct to the participants and visiting academics in the discussion of the presentations. We should like to thank the visiting experts for giving their time so generously to be session chairs and discussants and to present some of their own work.

It is particularly pleasing to report that ESI XVI is already bearing fruit. Nine papers have so far been submitted to the associated special issue of EJOR with more expected. Furthermore the participants are already themselves organising a follow-up meeting with both academic and social content.

Your attention is drawn to the 'special presentation' included with this report as an appendix. Presented on the last night, at the farewell banquet, we believe it shows that the participants saved their best work till last!

ACADEMIC PROGRAMME

With a broad theme it was no surprise to receive a diverse submission from the national OR societies. In all 22 promising DEA researchers from 16 nations were selected to attend. The presentations (listed below) encompassed all varieties of academic endeavour from theoretical development to case study with the visiting academics adding a valuable historical dimension (with their work not their persons!)

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Discussion Papers

Joseph Coughlan

“Data envelopment analysis in service quality management”

Maria Conceição Silva

“Decomposing school and school type efficiency”

Milan Martić

“An application of DEA comparative analysis and ranking of regions in Serbia with regard to socio-economic development”

Martin Dlouhy

“Efficiency evaluation of the teaching hospital”

Inmaculada Sirvent

“A Monte Carlo evaluation of some tests of model specification in DEA”

Tarja Joro

“Efficiency analysis based on most preferred input-output structure”

Fernanda Farinaccio

“Evaluation of DEA validity as a MCDA/M tool: some problems and issues”

Meryem Fethi

“Ownership, efficiency and productivity growth in an era of liberalisation: the case of European airlines, 1991-1995”

Nicole Adler

“The use of data envelopment analysis in determining choice of airline networks under deregulation”

Katrin Allen

“Generalisation and ecological extension of DEA for environmental performance measurement”

Holger Scheel

“Negative data and undesirable outputs in DEA”

Laurens Cherchye

“Product mixes as objects of choice in nonparametric efficiency measurement”

Gabriel Tavares

“A DEA study of telecommunication services modernisation in OECD countries”

Lifen Wu

“Polyhedrality and bound restrictions in DEA models”

Lorenzo Castelli

“DEA-like models for efficiency evaluation of specialized and interdependent units”

Valter Boljuncic

“Characterization of region of efficiency for extreme efficient DMU”

Thierry Post

“Transconcave Data Envelopment Analysis”

Timo Kuosmanen

“Non-convex Data Envelopment Analysis”

Chrysostomos Gounaris

“Assessing the technical and allocative efficiency of hospital operations in Greece and its resource allocation implications”

Ann-Lise Guisset

“Conceptual, methodological, and empirical insights into the relationship between efficiency, cost and quality of hospital care”

Einar Belsom

“Measuring allocative shifts: A DEA-based Malmquist Index approach”

José Luis Ruiz

“The assessment of influence in DEA”

Session Chairs' Papers

Dr. Val Belton

“Is DEA MCDM: Parallels and Questions”

Dr. Antreas Athanassopoulos

“Exploring synergies between service quality and performance measurement: what can DEA do about it?”

Prof. Robert Dyson

“Pitfalls and Protocols in DEA”

Prof. Jesus Pastor

“New DEA Global Efficiency Measures”

Prof. Larry Seiford

“Data Envelopment Analysis: the historical evolution of the state-of-the-art (1978-1998)”

Prof. Leopold Simar

“Statistical inference in DEA models: The state of the art”

Dr. Emmanuel Thanassoulis

“Weights restrictions in DEA: State of the art and future directions”

SOCIAL PROGRAMME

The instructions to the organisers of an ESI emphasise the importance of the social aspect of the Institute in facilitating the emergence of a research network amongst the promising researchers assembled. We took this message to heart and chose to ‘work hard, play hard’. Starting with a welcome buffet on the day of arrival, swiftly followed by a quiz on the first night, the social programme was intended to strike a balance between ‘culture’ and other forms of fun. So, Warwick Castle, Shakespeare’s ‘Twelfth Night’ and the Tower of London took their place with five-a-side football and a certain propensity to visit that most English of institutions, the ‘pub’. The ESI culminated in a farewell banquet in Coventry’s medieval Guildhall although the final party was reported to go on long afterwards.

Finances

These figures are indicative only as the final balance is awaited from the finance office.

Income

	£
EURO	7850
Operational Research Society	8000
Shell Services International	500
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	16350

Expenditure

Accommodation and catering	11465
Travel	2197
Social activities	1864
Gifts	245
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	15771

Clerical and administrative support was provided by WBS at zero cost.

Appendix

To be attached.