# DEREK W. BUNN
# Academic Curriculum Vitae
# 2022

**Derek W. Bunn** is a Professor at London Business School. Having read Natural Sciences at Trinity College, Cambridge University, he received at PhD in Economics from London Business School (1975) and was subsequently elected CEGB Fellow in Engineering at Oxford University. Occasionally since then, he has been a visiting professor at Stanford University and elsewhere. Author of over 200 research papers and 10 books in the areas of forecasting, decision analysis and energy economics, including *Analysis for Optimal Decisions, Applied Decision Analysis, Systems Models for Energy Policy* and *Modelling Prices in Competitive Electricity Markets*, he has also been recipient of several professional and industry awards, including the Goodeve Medal of the UK Operational Research Society. Elected international council member of *The Institute of Management Sciences* (1992-1994), he represented the societies' international interests in the merger executive with *ORSA* to create *INFORMS*. More recently he has served as council member of the British Institute of Energy Economists. Chief editor of *Journal of Forecasting* since 1984, formerly chief editor of *Energy Economics*, and founding editor of the *Journal of Energy Markets,* he has also served on the editorial boards of many other journals, including *Management Science*. His work has been extensively cited[1] and translated into many languages. He has been a regular keynote speaker at international research and practitioner conferences.

His work in energy goes back to 1978 when he took up a Fellowship at Oxford University, in engineering economics, endowed by the Central Electricity Generating Board. During that period he worked on electricity demand forecasting, optimal generation scheduling procedures and capacity expansion planning. Since then he has continued to publish and consult with many of the world's major power companies on the topics of electricity re-structuring, strategic evolution, regulation, decarbonisation and market price modelling. He has acted as a special advisor to the House of Commons Select Committee on Energy and Climate Change, consultant to the UK Competition Commission on Electricity Market Abuse, Expert Advisor to the National Audit Office in their review of the electricity industry reforms, peer reviewer on modelling work for the Government and the energy regulator, and Expert Witness in several litigation cases before the High Court and at international Tribunals. He is currently chair of the UK Government's expert panel for capacity markets and an independent panel member of the Balancing and Settlements Code for power trading. He has also organised conferences and taught energy modelling courses to a variety of business and academic audiences worldwide.

At the London Business School, he has created, directed and raised continuing funds for the energy research programme since 1986. As head of the Decision Science subject area from 1984 - 2007, he had responsibility for its academic, research and administrative staff, created and directed the well-funded Decision Technology Centre, and managed a complete turnover of the faculty, facilitating its expansion against competing internal pressures. He has been chair of the Examinations Board for three terms, served on Management Board and has chaired many committees including several delicate ad hoc cases concerning faculty and student abuse. Most recently, he was instrumental initiating the new business analytics degree programme.

*Derek W. Bunn*
*London Business School*
*Sussex Place, Regents Park*
*London NW1 4SA, ENGLAND*
*Tel: [44] (0) 20 7000 8827*
*Email: dbunn@london.edu*

[1] Citation counts (January 2022): Google Scholar 11,366

# DEREK W. BUNN

*Professor of Decision Science, London Business School*
dbunn@london.edu


## DEGREES

| | |
|---|---|
| BA. (1971), MA (1975) | Trinity College, Cambridge University (Natural Sciences). |
| MA. (1978) | Worcester College, Oxford University (by incorporation) |
| MSc. & DIC (1972) | Imperial College, London University (Management Science) |
| PhD (1975) | London Business School, London University |

## ACADEMIC APPOINTMENTS

| | |
|---|---|
| 1972-1977 | Research Fellow/Senior Research Fellow, London Business School |
| 1978-1984 | CEGB Senior Research Fellow in Engineering Science & Fellow of Worcester College, Oxford University |
| 1984- | Lecturer / Senior Lecturer /Associate Professor / Professor (1990-) Decision Sciences, London Business School |

## VISITING ACADEMIC APPOINTMENTS

| | |
|---|---|
| 1975-1976 | Visiting Research Scientist in Systems & Decision Sciences International Institute for Applied Systems Analysis, Vienna |
| 1977-1978 | Visiting Assistant Professor of Decision Sciences, University of Southern California, Los Angeles |
| 1981-1982 | Visiting Associate Professor of Decision Sciences, Graduate School of Business, Stanford University |
| 1988 & 1989 | Visiting Professor of Decision Sciences, Graduate School of Business, Stanford University |
| 2007- | Visiting Professor (honorary), Centre for Environmental Policy, Imperial College London |
| 2014 | Visiting Professor, Centre for Geopolitics, Energy and Resources, Université Paris Dauphine |

## OFFICIAL ACADEMIC ACTIVITIES

At London Business School:

Chair, Examinations Committee, and Chief Examiner (1998-2001; 2010-2014, 2021-). Chair, Decision Sciences Subject Area (1984-2006), Chair, Information Systems Policy Committee (1993-96). Chair, Management Science and Operations Subject Area (2017-18)

University of London Senate (1998-2001); Management Board (1989-2006, 2017-18), Appointments Committee (1990-), Doctoral Committee (1986-1991), MBA Committee (1991-1992), Examinations Boards (1996-2006;2010-);Appeals Committees (2002, 2004), Tenure Review Committees (2003, 2005), Accounting Subject Area Review Committee (2006), RAE Committee (2006-2007). GEMBA Review (2010), Research Awards (2018-19), Research Ethics (2029-20) plus chair and member of many faculty performance and several disciplinary review committees.

Member of the Governing Body of Worcester College, Oxford University (1978-1984).

## EDITORIAL ACTIVITIES

Chief Editor: *Journal of Forecasting (1985-)*

- Reconstituted editorial board 1985
- Edited Three Special Issues: 1985, 1989, 1995

*Energy Economics* (1995-2003)

- Reconstituted editorial board 1995
- Edited Two Special Issues: 1997, 2005
- Honorary Editor (2004 -2006)

*Journal of Energy Markets* (2007-)

- Founding Editor

## EDITORIAL ACTIVITIES

| | |
|---|---|
| Associate Editor | *Management Science* (1990-1998); |
| & Editorial Boards | *Production and Operations Management* (1989-2005) |
| | *European Journal of Operational Research (1985-2010)* |
| | Editor of Special Issue on Decision Technology, 1995 |
| | *International Transactions in Operational Research* (1994-2015) |
| | Guest Editor of Special Issue on Energy, 1996 |
| | *Journal of Behavioural Decision Making* (1987-2001) |
| | *Journal of Multicriteria Decision Making* (1990-97) |
| | *Interfaces* (1983-86); |
| | *Neural Computing & Applications* (1993-99) |
| | *Global Risk Assessment* (1983-86)*;* |
| | *Risk, Decision and Policy* (1995-2003) |
| | *Pesquisa Operational* [Brasil] (1996-); |
| | *OPSEARCH* [India] (2000-) |
| | *Operations Research and Decisions* [Poland] (2010-) |
| | *Economics of Energy & Environmental Policy (2011-2013)* |
| | *Euro Journal on Decision Processes (2012-)* |
| | *Energy Policy* (2014- ). |
| | *OPEC Energy Review* (2015-) |
| | Consulting Editor: Management Science Series, Wiley (1988-2002). |

## EXTERNAL ACADEMIC ACTIVITIES

External examiner to the Universities of Cambridge, Edinburgh, Lancaster, Manchester, Warwick, Amsterdam, Helsinki, Copenhagen, Bergen, Singapore, Cape Town, UNSW, Lausanne, Bologna, Lecce, Dresden, Erasmus, Brunel, Birmingham, Comillas (Madrid), Montpellier, Paris, Queensland, Wroclaw, Vienna, Hull and Kent, plus LSE, IC, QMC, UCL, Birkbeck, CASS in London. University of London Committee of the Boards of Studies in Statistics and Economics. Academic Council of Instituto para el Desarrollo Empresarial de la Argentina. Expert Advisory Panel for UK Energy Research Centre. Accreditation Panel for Kristiana University MSc in FinTech, NTNU Quinquennial MIB programme review. Numerous professorial and tenure panels.

## PROFESSIONAL ACTIVITIES

*The Institute for Operations Research & Management Science [INFORMS]*

Elected International Representative to TIMS Council, 1992-1994; Member of the Merger Committee (with ORSA) for the formation of INFORMS (1993-1994), International Committee Chair, 1993-94, TIMS XXXII Anchorage 1994 Programme Committee; Cluster Chair, Detroit 1994 TIMS/ORSA, Student Award Judge, Seattle, 2007.

*Operational Research Society*:

Blackett Memorial Lecture, 1993; Goodeve Medal, 1994. International Committee, 1993-94.

*British Institute of Energy Economics:*

Council Member 2009-2013; Director, Trustee and Treasurer 2009-2013

*International Federation of Operational Research Societies*

Chair and organiser of the 1995 Symposium on Energy Models for Policy and Planning held at LBS; co-ordinator of the energy stream at IFORS triennial meeting, Vancouver 1996

*Other Conference Programme Committees,*

Neural Networks in the Capital Markets, annual conferences 1993 & 1995 (London), 1994 & 1996 (Pasadena). International Symposium in Forecasting, 1998 Edinburgh Symposium., EnergyMart, Amsterdam 2000, IAEE Zurich, 2004; Electricity Markets 2005, 2006, 2007 (Doctoral Competition Judge), 2008. EURO Conference on OR Models and Methods in the Energy Sector, Portugal 2006. 4th European Congress on Economics and Management of Energy, Porto 2007. London Energy Forum, 2007-2012 (Programme Chair). Renewable Energy Awards Panel at REFF-London 2009, 2011; ATES 2010, 2011; EEM 2011,2012. IAEE 2016 Norway, Energy Finance IPAG Paris 2014-2017; Global OR/OM for Sustainability Barcelona 2015, Beijing 2017; Commodities and Energy Finance Oxford.2017. Paris, 2018, Pittsburg, 2019; Madrid 2020; Chicago 2022..

*Research Networks*:

Co-ordinator of the European Latin American Energy Research Forum sponsored by the EC, Colciencas (Colombia) and CNPQ (Brasil), 1995-98; Member of the Stanford Energy Modelling Forum, 1995-2000. IEEE Committee on Computational Finance and Economics (2008). UK Energy Research Centre (2011-2012).

## TEACHING

Redesigned and delivered numerous degree core courses in statistics and decision models. Teaching evaluations have been consistently well-received at LBS and elsewhere (Dean's commendation for teaching at Stanford Business School, 1981; voted most impressive lecturer by LBS students, 1990). Extensive development of lecture materials, cases, computer workshops, videos and supporting tutorials. Electives in Energy Markets. Decision Technology, Time-series Analysis and Forecasting, Carbon Finance. Doctoral courses in multivariate statistics, time-series analysis, decision theory and quantitative research methodology. Developed and directed short executive courses in Decision Technology, Energy Markets, Carbon Finance and Forecasting.

Seminars and courses to various companies in several countries, e.g. Sandoz (Switzerland), Unilever (UK), Fisons (UK, Bangkok), SNS, SwedenPost, Ministry of Finance and Scandinaviska Enskilda Banken (Stockholm), ISA & Ministry of Energy (Colombia), Edelsur (Argentina), National Power (UK), NERC (Ukraine), McKinsey (New York), Wood-McKenzie (Edinburgh), Enel (Rome), Slovenske Elektrarne (Bratislava, x2), E.ON (Germany, x5), Eskom (SA), EdF (France, x3), GdF (France), KEPRI (S.Korea), GdFSuez (UK), Endesa (Spain), RWE (UK), Eirgrid (Ireland), OXARA (London), FCO (Ljubljana), Moody's (London), as well as research agencies NCAER (India), Riso (Denmark), FEEM (Italy), ECN (Netherlands), EPRI (USA).

Various external short term teaching engagements have included:

| | |
|---|---|
| 1986 & 1987 | Faculty Co-ordinator in Decision Support Systems, International Teachers in Management Programme (ITP). Ecole des Hautes Etudes Commerciales (HEC), Paris. |
| 1987 | Visiting Professor, SDA Bocconi, Milano, |
| 1990-93 | Stockholm School of Economics/Swedish Institute of Management, (senior executive progs) |
| 1990 | PUC, Rio de Janeiro |
| 1990-92 | Decision Systems International: forecasting short courses, given in Monaco and Vienna. |
| 1991-95 | Mentor for decision sciences at Budapest University of Economic Sciences |
| 1994 | Cyprus Institute of Management, Nicosia; |
| 1994-95 | International Center for Monetary and Banking Studies, Geneva |
| 1994-99 | Oxford College of Petroleum and Energy Studies (annual oil markets course at Oxford; also company specific versions at Gubkin Academy [Moscow], Vilnius, Almaty, and Edinburgh) |
| 1998-99 | Instituto para el Desarrollo Empresarial de la Argentina, Buenos Aires |
| 2005 | Dept Economics, National Chengchi University, Taiwan (Herbert Simon Lecture Series). |
| 2009-2012 | Erasmus, Rotterdam Energy Finance advanced course |
| 2011 | NTNU, Norway: energy markets advanced course |

## RESEARCH

Within the past 10years, awards have included, £400,000 from the ESRC, 2008-2010, for Climate Policy Risk and Electricity Investment, £120,000 from UKERC (2011-12) for Optionality in Future Energy Policy and £220,000 from the EC (2012-2014) to support a post doc fellowship. Partner with NTNU in £1.4M energy markets risk project from Norwegian Research Council (2010-2013), with 11 other EU organisations in a €2.9M EC funded programme (2013-2016) for district-level energy efficient infrastructure modelling, together with a further €4.7M (2015-2018) from the EC for a follow-up project on the same topic, and with 4 new enterprises in a £0.75M project funded by InnovateUK looking at digital energy communities (2017-18). Most recently the pilot EPSRC (2017) "System Transition to Digital Energy" award was followed by a larger (£900,000) consortium award on "Digital Aggregators in Local Energy Markets" EPSRC (2018-21).

Previous grants from various government, university and private funds including the Royal Society of London, Science & Engineering Research Council, Foundation for Management Education Economic and Social Research Council, Department of Trade and Industry, British Council, Overseas Development Agency, European Commission.. Initiated the Energy Markets Group at LBS in 1986 and the Decision Technology Centre in 1995, with total research funding exceeding £3m.

Contracted energy research has included work with the U.K. Central Electricity Generating Board, National Power, Southern Electric, Electric Power Research Institute (California), Environmental Resources Ltd, World Energy Council, World Bank, Ministries of Energy of Colombia, Denmark, Netherlands, Kazakhstan, St Clements Services, Energy Intensive Users Group, UK Competition Commission, Scottish Power, Eastern Group, London Electricity, National Grid Company, National Audit Office, BP, GdF, Los Alamos National Laboratory, E.ON, RWE, KEPRI, EFT, IEA, Suez, Vector (NZ), Ontario ISO, BG-Group, OXARA, Point Carbon, EBRD, ENEL, Quarry Battery, Cez, Ofgem, DECC, DEFRA, Baringa, Poyry, Vector (NZ), PG&E, SDG&E, Ernst & Young, Equinor and Centrica. In addition, more general business forecasting projects have been undertaken for Dell, Volvo, BHS, Unilever, Fisons, Tubelines Ltd, BT, SwedenPost, TNT, Royal Mail.

## PUBLIC & PROFESSIONAL ADVISORY

California Public Utilities Commission, PG&E and SDG&E (2018-20) Independent Assessor
Chair Panel of Technical Experts for Electricity Capacity Markets, UK Government (2017-)
Independent member of the Balancing and Settlements Code Panel for the British electricity market (2015-).
Special Advisor to House of Commons Select Committee on Energy and Climate Change 2012
Academic Advisor to the Ofgem Annual Capacity Assessment (2012, 2013, 2014)
OFFER/OFGEM/DECC/BEIS on numerous electricity market matters, regularly, 1993-
Evidence to House of Commons Select Committee on Energy Regulation, 1997, 99; [Hansard 31.1.00]
Competition Commission, on electricity market abuse, 2000
National Audit Office, Expert Advisor, on electricity market reforms, 2002
Board of Actuarial Standards, Expert Advisor, 2007

*Expert Witness for High Court Litigations and international Tribunals*: *instructions from*
Eversheds, Lovells, PinsentMasons, Maclay Murray & Spence, IEF, Weil, and Burges Salmon.

## PHD SUPERVISIONS

1984, N. Paschentis "Stochastic Linear Programming Application to the Economic Dispatching of Electricity"
1990, K. Vlahos "Capacity Planning in the Electricity Supply Industry"
1992, L. Menezes "Diagnostic Tracking and Model Management in Combining Forecasts"
1994, A. Vassilopoulos "Multi-item Short-term Seasonal Forecasting"
1994, P. Ninios "An Object Oriented/DEVS Framework for Strategic Modelling and Industry Simulation"
1995, A. Ku "Modelling Uncertainty in Electricity Capacity Planning" University of London (Economics)
1996, J. Taylor "Predictive Distributions, Quantile regression and the Combination of Forecasts"
1996, I, Dyner "System Dynamics Platforms for Integrated Energy Analysis"
1998, S. Pandelidaki "Multifunctional Sales Response with the Diagnostic Aid of Neural Networks"
1999, C.Day "A Computational approach to Modelling Strategic Behaviour in Electric Power Pools"
2000, J.Bower " Agent-based Analysis of the sources of Market Power in Deregulated Electricity Markets"
2003 Fernando Oliveira "Simulation of Electricity Markets using Agent Based Computational Learning"
2004 Jens Weinmann "Patterns of Institutional Change in the Latin American Electricity Sector"
2005 Augusto Ruperez Micola "Interrelationship Models in Energy Markets"
2005 Nektaria Karakatsani "Modelling the Structural Properties of High Frequency Electricity Prices"
2006 Maria Martoccia, "Market Power and Transmission Networks "
2009 Dipeng Chen "Structural Finite Mixture and Regime-Switching Models for Electricity Price Risk"
2012 Veli Koc "Strategic Interactions in Spot and Forward Electricity Trading"
2013 Celine McInerny "Investment Incentives in Power System Infrastructure"
2016 Heikki Peura "Strategic Considerations in Risk Management and Sustainability"
2018 Ezgi Avci "Surveillance of Complex Auction Markets"
2019 Stefan Kermer "Imbalance Settlement and Statistical Arbitrage"
Supervised over 50 visiting PhDs at LBS, including from Erasmus, Bologna, Padua, Dresden, Trondheim, Lecce, Bergen, Madrid, Cork, Tokyo, Tianjin, Beijing, Vienna, Helsinki, Imperial and elsewhere. Academic PhD Placements include Harvard, Berkeley, LSE, Oxford (x2), IMD, Imperial, Manchester, Warwick (x2), EUI.

## AWARDS FOR PUBLICATIONS

Goodeve Medal for the best paper in *Journal of Operational Research Society*, 1994,
Best Paper in Energy, INFORMS, Montreal Meeting, 1998
EURO Finalist for Best European Applied Paper in Operational Research, 2000
Innovation Award for Research on Economics and Trading, PowerGeneration 2000, Helsinki
Anbar Golden Page Award for editing the Journal of Forecasting (2000)
Prix Academique SYNTEC Conseil en Management 2010 : Categorie Operations, Gestion, Controle/Systeme d'information et Technologies", for a paper published in *Operations Research,* 2008.
European Energy Exchange Excellence Award 2017,
Best Paper, Commodity and Energy Markets Annual Meeting, 2019
Runner-Up, best paper on green energy, Assoc for Information Systems 2019
(*for supervisee, J. Bower*) Best Student Paper Award, US Association for Energy Economics, 2000
(*for supervisee, A. Ruperez Micola*) Best Paper, European Doctoral Research Conference, 2005
(*for supervisee, A. Ruperez Micola*) Hans-Jürgen Ewers Prize for PhD Dissertation, DIW, Berlin 2005
(*for supervisee, A. Ruperez Micola*) INFORMS ENRE Section first place student paper award, 2006
(*for supervisee, Carlo Fezzi)* Best PhD Paper Prize, European Electricity Research 2006, Warsaw
(*for supervisee, Carlo Fezzi)* Best PhD Paper Prize, European Electricity Research 2007, Warsaw
(*for supervisee, Janne Kettunen*) Best PhD Paper Finalist, US Association for Energy Economics, 2008.

## *KEYNOTE AND PLENARY PRESENTATIONS* (Selected from 2017 onwards)

European Energy Markets 2017 Dresden (keynote)
Energy Portfolio Optimization and Price Forecasting Forum 2017 Dusseldorf (Plenary)
Young Finance Scholars Conference, Sussex University 2017 (Keynote)
Digital Energy Transition, Cranfield 2017 (Plenary)
Energy Finance Workshop, Krakow, 2017 (Plenary)
European Electricity Ancillary Services and Balancing Forum, Berlin 2017 (Plenary)
Cross Border Trade and Electricity Balancing Forum, Prague 2018 (Plenary)
EdF Annual Portfolio and Risk Management for Energy Markets, Paris 2018 (Plenary)
6$^{th}$ Portfolio and Risk Management for Energy Markets. Berlin 2019 (Plenary)
7th Grid Integration & Electricity Ancillary Services. 2019 Amsterdam (Plenary)
Energy Finance 2019, Dublin (Plenary)
Mathematics of Energy Systems, Isaac Newton Institute Cambridge 2019 (by invitation only)
Commodity and Energy Markets Annual Meeting, Carnegie Mellon, 2019
International Conference on Computational Finance, A Coruna, 2019
Quantitative Modelling in Commodity Markets. London 2019 (Plenary)
AIEE Energy Symposium on Energy Security 2019, Rome (Keynote)
Dublin Power Summit 2020 (Keynote)
Integration of Renewable Energy in Energy, Asian Development Bank, Tokyo 2020 (virtual)
European Energy Markets 2020 Stockholm (keynote, virtual)
Energy Trading Risk Summit London 2020 (virtual)
Electricity Markets in Transition, Asian Development Bank, Tokyo 2020 (virtual)
AIEE Energy Symposium on Energy Security 2020, Rome (Virtual Plenary)
ICFEE Tokyo 2021 (virtual Keynote)
Cross-Border Energy Trading & Balancing (virtual plenary, 2021)
Cyprus Institute of Marketing, Nicosia, 2022 (invited plenary)

In previous years, presentations at INFORMS, IAEE, ISF, EURO, and occasional presentations at EARIE, EEA, IEEE, EC$^2$, Academy of Management, and other professional society meetings. Various invited seminars at university departments, incl Harvard, Wharton, Princeton, Berkeley, AGSM, Oxford, Cambridge, Erasmus, Stockholm, Helsinki, Bocconi, and many others in N & S America, Europe and SE Asia. Regular invited presenter at many industry conventions plus special talks for individual companies and research agencies.

**MEDIA**

Includes Financial Times, Wall Street Journal, The Independent, The Economist, The Guardian, The Observer, Forbes, International Management, Il Giornale, Dallas Morning News, Suddeutsche Zeitung, The Wall Street Journal Americas, Reuters, Dow-Jones, PowerUK, Utilities Weekly, Utility Europe, European Power Weekly, Chora, Financial Box (Greece), Energetika (Slovenia) and others. Radio for BBC (currently archived at Spoken Word), televised for Bloomberg news, weblectures for FT and Platts

## PUBLICATIONS

### *Books, Monographs and Edited Volumes*

1. Case Studies in Decision Analysis, Penguin, Harmondsworth, 1976. (with P.G. Moore, H. Thomas, and J.M. Hampton).

2. Formal Methods in Policy Formulation, Birkhauser-Verlag, Basel, 1978.

3. The Synthesis of Forecasting Models in Decision Analysis, Birhauser-Verlag, Basel, 1978.

4. Analysis for Optimal Decisions, John Wiley & Sons, 1982

5. Applied Decision Analysis, McGraw-Hill, New York, 1984

6. Comparative Models for Electric Load Forecasting, J. Wiley & Sons, 1985 (edited with E.D.Farmer). (Russian translation, ENERGOIZDAT, 1988)

7. Systems Modelling for Energy Policy (edited with E. Larsen) Wiley 1997

8. Strategic Price Risk in Wholesale Power Markets, RISK Publications 1999

9 Modelling Prices in Competitive Electricity Markets, Wiley, 2004 (Chinese Translation, 2006)

## PUBLICATIONS

*Research Papers*

209 Renewable Power and Electricity Prices: The Impact of Forward Markets (with H. Peura) **Management Science** 2021. (Best Paper, Commodity and Energy Markets Annual Meeting, 2019)

210 Observations on Risk Transmission Across Supply Chains. **Production and Operations Management,** 2021

211 Optimal Transmission Investment with Regulated Incentives based upon Forward Considerations of Firm and Intermittent Resources with Batteries, (with Dina Khastieva, Mohammad Reza Hesamzadeh and Saeed Mohammadi) **IEEE Transactions on Power Systems.** Vol. 36, No. 5, pp. 4420 - 4434, September 2021

212 Pricing Electricity Day-ahead Cap Futures with Multifactor Skew-t Densities (with Takuji Matsumoto and Yuji Yamada). **Quantitative Finance,** 2021

213 Optimal Daily Trading of Battery Operations using Arbitrage Spreads (with E. Abramova) **Energies** 2021

214 Comparative evaluation and policy analysis for recycling retired EV batteries with different collection modes (with Qi Zhang, Yanyan Tang, Hailong Li and Yaoming Li) **Applied Energy** 2021 Volume 303, https://doi.org/10.1016/j.apenergy.2021.117614

215 Using Cross-Impact Analysis for Probabilistic Risk Assessment (with A. Salo, E Tosoni and J. Roponen). **Futures & Foresight Science** 2021

216 Mitigation of the Inefficiency in Imbalance Settlement Designs using Day-Ahead Prices. (with Takuji Matsumoto and Yuji Yamada) **IEEE Transactions on Power Systems** 2022

217 Market Making and Electricity Price Formation in Japan. (with Takashi Kanamura) **Energy Economics** 2022

218 Distribution Locational Marginal Pricing (DLMP) for Unbalanced Three-Phase Networks. (with Saeed Mohammadi and Mohammad Reza Hesamzadeh) **IEEE Transactions on Power Systems,** 2022

219 Optimal Analysis for Facility Configuration and Energy Management on Electric Light Commercial Vehicle Charging. (with Y. Tang, Qi Zhang, Z. Wen and J.N.Martin) **Energy** Vol 246 2022 https://doi.org/10.1016/j.energy.2022.123363

220 Bayesian Estimation of Electricity Price Risk with a Multi-factor Mixture of Densities. (with Li Kang, Stephen Walker and Paul Damien) **Quantitative Finance** 2022

221 Bayesian Predictive Distributions for Imbalance Prices with Time-varying Factor Impacts (with L. Lima and Paul Damien) **IEEE Transactions on Power Systems,** 2022

## PUBLICATIONS

***Research Papers***

193 A Stochastic Latent Moment Model for Electricity Price Formation. (with A Gianfreda) **Operations Research,** Vol 66 (5) 2018. European Energy Exchange Excellence Award 2017

194 Design of Local Services Markets for Pricing DSO-TSO Procurement Co-ordination. (with A.V. Pastor, J.N. Martin and L. Varga) **Proc IEEE PESGM** 2018

195 Enabling Automated Transparency for the Market Participation of ESCOs with Blockchain. (with J.N. Martin) **Proc IEEE PESGM** 2018

196 Analysis of Coal Conversion to Biomass as a Transitional Technology. (with J. Redondo, P. Diaz, J Munoz) **Renewable Energy,** 2018

197 A Trading-based Evaluation of Density Forecasts in a Real-time Electricity Market. (with A. Gianfreda and S. Kermer) **Energies,** 2018

198 Optimal Procurement of Flexibility Services within Electricity Distribution Networks. (with J.N Martin, A. Laur and A. Vicente-Pastor) **European Journal of Operational Research,** 2019

199 Evaluation of Flexibility Markets for Retailer-DSO-TSO Coordination, (with A.V. Pastor, J.N. Martin and L. Varga) **IEEE Transactions on Power Systems.** 2019.

200 Expansion of Investor Base for the Energy Transition. (with C. McInerney) **Energy Policy** 2019

201 The Impact of Renewable Energy Forecast Errors on Imbalance Volumes and Electricity Spot Prices. (with S Goodarzi and N. Perera) **Energy Policy** 2019.

202 Agent-level determinants of price expectation formation in online double-sided auctions. (with E. Avci, W. Ketter and E. van Heck). **Decision Support Systems.** 2019 (Runner-Up, best paper on green energy, Assoc for Information Systems 2019)

203 The Emergence of Smart and Flexible Distribution Systems (with J.N. Martin) in Hesamzadeh, M., et al, **Transmission Network Investment in Liberalized Power Markets**, Springer Berlin, 2020

204 The Impact of Generator Market Power on the Electricity Hedge Market (with Mohammad Reza Hesamzadeh, Ekaterina Moiseeva and Darryl Biggar) **Energy Economics** 2020

202 Forecasting the Intra-day Spread Densities of Electricity Prices (with E. Abramova) **Energies** 2020

203 Analysis of the Fundamental Predictability of Prices in the British Balancing Market (with J. Inekwe) **IEEE Transactions on Power Systems** 2020

204 The Variation in Capacity Remunerations Requirements in European Electricity Markets (with Conor Hickey, Paul Deane, Celine McInerney & Brian Ó Gallachóir) **Energy Journal** 2020

205 Short-Term Electricity Price Forecasting with Recurrent Regimes and Structural Breaks (with : Rodrigo de Marcos, Antonio Bello and Javier Reneses) **Energies** 2020

206 Optimal Dispatch in a Balancing Market with Intermittent Renewable Generation (with P. Shinde, P. Date and M. Hesamzadeh) **IEEE Transactions on Power Systems** Vol. 36, No. 2, pp. 865 - 878, March 2021.

207 Statistical Arbitrage and Information Flow in an Electricity Balancing Market (with S. Kermer) **Energy Journal** 2021

208 Renewable Electricity Technologies and Forward Market Risks (with D. Koolen and W. Ketter) **Energy Journal** 2021.

## PUBLICATIONS

### *Research Papers*

176 Dynamic Pricing of Peak Production (with H Peura) **Operations Research** 2015

177 Measuring the Carbon Delta in Financial Performance (with C. McInerny) in Donovan, C. (ed) *Renewable Energy Finance*. Imperial College Press. 2015. 2nd e 2019.

178 A stakeholder analysis of divergent supply-chain trends for the European onshore and offshore wind installations (with R.. Madlener and C. Wuerstmeyer ). **Energy Policy**. 2015

179 Supporting the Externality of Intermittency in Policies for Renewable Energy (with J. Munoz) **Energy Policy,** 2015

180 The Progressive Inefficiency of Replacing Renewable Obligation Certificates with Contracts-for-Differences in the UK Electricity Market. (with T. Yusupov). **Energy Policy**. 2015

181 Resource Externalities and the Persistence of Heterogeneous Pricing Behaviour in an Energy Commodity Market. (with V. Koc and S. Sapio). **Energy Economics.** 2015

182 Systematic Analysis of the Evolution of Electricity and Carbon Markets under Deep Decarbonisation (with William Blyth , Michail Chronopoulos , Jose Munoz). **Journal of Energy Markets** 2016

183 Modelling the UK Electricity Price Distributions using Quantile Regression (with Lars Ivar Hagfors, Sjur Westgaard, Tiril T Staver; Kristoffersen Eline) **Energy** 2016

184 Optimal Over Installation of Wind Generation Facilities (with C. McInerney) **Energy Economics** 2016

185 Analysis and Forecasting of Electricity Price Risks with Quantile Factor Models (with A. Andresen, D. Chen and S. Westgaard). **The Energy Journal**. 2016

186 Real Options Valuation Applied to Dynamic Transmission Expansion Planning (with S. Lumbreras, A. Ramos, M. Chronopoulos ) **Quantitative Finance** 2016

187 Dynamic Capacity Planning using Strategic Slack Valuation. (with F. Oliveira) **EJOR** 2016

188 Risk-Induced Resource Dependency in Capacity Investments (with J. Kettunen) **EJOR** 2016

189 Weather and Market Specificities in the Regional Transmission of Renewable Energy Price Effects. (with N Figueiredo and P. Pereira da Silva) **Energy** 2016

190 Parametric Density Recalibration of a Fundamental Market Model to Forecast Electricity Prices (with Antonio Bello, Javier Reneses, Antonio Munoz) **Energies** 2016

191 Medium-Term Probabilistic Forecasting of Electricity Prices: a Hybrid Approach. (with Antonio Bello, Javier Reneses, and Antonio Muñoz) **IEEE Trans. on Power Systems**. 2017

192 Fundamental and Financial Influences on the Co-movement of Oil and Gas Prices (with B. Sevi, J. Chevallier and Y. LePen). **The Energy Journal** 2017

## PUBLICATIONS

### *Research Papers*

158 The Efficiency of Network Transmission Rights as Derivatives on Energy Supply Chains**.** (with M. Martoccia). **Journal of Derivatives**, 2010

159 Fundamental and Behavioural Drivers of Electricity Price Volatility (with N. Karakatsani) **Studies in Nonlinear Dynamics and Econometrics**, Vol 4 (4) 2010

160 Forecasting Prices and Volatilities using a Hybrid Fundamental Econometric Model (with V. Gonzalez and J. Contreras) **Proc IEEE PES** 2010

161 Vertical Integration and Market Power: A Model-based Analysis of Restructuring in the Korean Electricity Market (with P.Ochoa, M. Martoccia, H. Kim and N. Sahn) **Energy Policy,** 2010

162 Energy Markets. ***Oxford Forecasting Handbook*** (ed M. Clements and D. Hendry) OUP, 2011

163 Investment Propensities under Carbon Policy Uncertainty (with J. Kettunen and W. Blyth). **The Energy Journal,** 32 (1) , 77 - 118, 2011

164 Interaction of judgmental and statistical forecasting methods - issues and analysis. (with G. Wright) in Fildes and Allen (eds**)** *Forecasting*, SAGE publications, pp 501-518, 2011

165 Price formation and market power in a low carbon electricity system. (with I. Morrow), 8th International Conference on the European Energy Market 2011

166 Co-evolution of policy, market and technical price risks in the EU ETS**.** (with W. Blyth). **Energy Policy,** 2011

167 Forecasting power prices using a hybrid fundamental-econometric model (with J. Contreras, V. Gonzalez). **IEEE Transactions on Power Systems,** 2012

168 Investment Risk and Return under Renewable Decarbonisation of a Power Markets (with Jose Munoz) **Climate Policy,** 2013

169 Determinants of the Premium in Forward Contracts. (with C. Redl) **Journal of Regulatory Economic**s, 2013, 43 (1) 90-111

170 Combining day-ahead forecasts for British electricity prices. (with S. Bordignon, F. Lisi and F. Nan) **Energy Economics,** 2013, 35 (1) 88-103

171 Valuation anomalies for interconnector transmission rights. (with C. McInerney) **Energy Policy** 2013

172 The Forward Premium in Electricity Futures (with D. Chen) **Journal of Empirical Finance,** 2013

173 Optionality and Policymaking in Re-Transforming the British Power Market (with M. Chronopoulos, A. Siddiqui) **Economics of Energy and Environmental Policy** Vol 3 (2) 2014

174 The forecasting performance of a finite mixture regime-switching model for daily electricity prices. (with D. Chen) **Journal of Forecasting** 2014

175 The Forecasting Accuracy of Electricity Price Formation Models (with F. Nan, F. Lisi, S. Bordignon). **Int. Jnl. of Energy and Statistics**, 2(1), 2014

## PUBLICATIONS

### *Research Papers*

141 Cross-holdings, Concentration and Information in Capacity-Constrained Sealed Bid-Offer Auctions (with A. Ruperez Micola) Journal of Economic Behaviour and Organisation 2008

142 Incentives and Co-ordination in Vertically Related Energy Markets, (with A. Ruperez Micola), Journal of Economic Behaviour and Organisation 2008

143 A Vector Error Correction Model of The Interactions Among Gas, Electricity and Carbon Prices. (with C Fezzi) in F. Gulli (ed) Markets for carbon and power pricing in Europe, Edward Elgar 2008.

144 Forecasting Electricity Prices: The Impact of Fundamentals and Time-varying Coefficients

(with Nektaria V. Karakatsani ) Int J. of Forecasting 2008

145 Intra-day and Regime-Switching Dynamics in Electricity Price Formation

(with Nektaria V Karakatsani ) Energy Economics 2008

146 Analyzing the Price-effects of Vertical and Horizontal Market Power with Agent Based Simulation (with M. Martoccia). Proc IEEE PES 2008

147 Computational Modelling of Price Formation in the Electricity Pool of England and Wales (with C. Day) Journal of Economic Dynamics and Control 2008

148 Modelling the Impact of Market Interventions on the Strategic Evolution of Electricity Markets (with F. Oliveira) Operations Research 2008

149 Dynamics in Forward and Spot Electricity Markets. (with Juan J. Sánchez, Efraim Centeno, and Julián Barquín) IEEE Trans on Power Systems 2009

150 Analyzing the Temporal Effects of Ex Ante Mechanism Designs in Power Markets. Proc IEEE PES 2009

151 Market Power in Transmission Auctions. (with Georg Zachmann) Journal of Regulatory Economics 2009

152 Policy interactions, risk and price formation in carbon markets (with W.Blyth, J. Kettunen and T. Wilson) Energy Policy, 2009 Vol 37, pp 5192-5207

153 Structural Interactions of European Carbon Prices. (with C.Fezzi) Journal of Energy Markets 2010

27

154 Analysis of the Nonlinear Response of Electricity Prices to Fundamental and Strategic Factors (with Dipeng Chen) IEEE Trans on Power Systems, 2010

155 Optimization of Electricity Retailer's Contract Portfolio Subject to Risk Preferences. (with J.Kettunen and A. Salo) IEEE Trans on Power Systems, 2010

156 Integration and Shock Transmissions across European Electricity Forward Markets. (with A. Gianfreda) Energy Economics 2010 volume 32, issue 2, pp. 278-291,

157 Structural Analysis of Electricity Demand and Supply Interactions (with C Fezzi) Oxford Bulletin of Economics and Statistics, 2010

## PUBLICATIONS

### *Research Papers*

124 Divestiture of Generation Assets in the England and Wales Electricity Market: A Computational Approach to Modelling Market Power. (with C.Day) Journal of Regulatory Economics, 2001

125 Experimental analysis of the efficiency of uniform-price versus discriminatory auctions in the England and Wales electricity market. (with J. Bower) Journal of Economic Dynamics and Control, 2001

126 Accuracy targets within a quality initiative for improving short-term judgemental sales forecasts. (with J Taylor) International Journal of Forecasting, 2001

127 Agent-based Simulation: Modelling the New Electricity Trading Arrangements of England and Wales. (with F. Oliveira) IEEE Trans on Evolutionary Computation, 2001

128 Load Forecasting via Neural Networks: an investigation on the overfitting problem. *Annals of the V CBRN ( 5th Brazilian Neural Network Conference)*; Rio de Janeiro, RJ, pp 445-449 (Published in April 2001 - In Portuguese, with H. Hippert and R. Souza)

129 Valuation of Electricity Companies in Evolutionary Oligopolistic Markets. *Proc Agent 2002 Conference on Social Agents: Ecology, Exchange and Evolution*, Argonne National Laboratory, University of Chicago, 2003

130 Evaluating Individual Market Power in Electricity Markets via Agent-Based Simulation. (with F. Oliveira) Annals of Operations Research, Vol 121, pp 57-78 2003

131 Analysing the Impact of Electricity Asset Trading on the Evolution of Market Structure. *Proc 3rd European Congress on Economics and Management of Energy*, Estoril, 2004 (with F Oliveira)

132 Large Neural Networks for Electricity Load Forecasting. (with H. Hippert and R. Souza), International Journal of Forecasting, 2005

133 Development of a Multifunctional Sales Response Model with the Diagnostic Aid of Artificial Neural Networks. Journal of Forecasting 2005 (with S. Pantelidaki)

134 Unilateral and Collusive Market Power in the Electricity Pool of England and Wales. Energy Economics. 2005 (with M. Martoccia)

135 Agent-Based Analysis of Technological Diversification and Specialisation in Electricity Markets. European Journal of Operational Research. Special Issue 2006 (with F. Oliveira)

136 Institutional Intent and Strategic Evolution in Electricity Markets, in Miecelski, M. (ed), *Complex Electricity Markets*, Polish Institute of Electricity, Lodz 2006

137 Two Markets and Weak Link (with A. Ruperez Micola) Energy Economics, 2007

138 Investment Risks under Uncertain Climate Change Policy. (with W. Blyth, M. Yang, et al) Energy Policy 2007

139 Evaluating Power Investment Options with Uncertainty in Climate Policy. (With Ming Yang, W. Blyth, R Bradley, C Clarke and T Wilson ) Energy Economics, 2007

140 Investment Incentives in the Korean Electricity Market (with Jung-Yeon Park, Nam-sung Ahn, Yong-Beum Yoon, Kyung-ho Koh), Energy Policy 2007

## PUBLICATIONS

### *Research Papers*

107 Combining Forecast Quantiles Using Quantile Regression: Investigating the Derived Weights, Estimator Bias and Imposing of Constraints, (with James Taylor) Journal of Applied Statistics, Vol 25 (2) 1998

108 The Persistence of Specification Problems in the Distribution of Combined Forecast Errors (with L. Menezes), International. Journal of Forecasting, Vol 14(3) 415-426 1998

109 An Integrated Modelling Approach for Understanding Competitive Electricity Markets (with K Vlahos, P. Ninios) Journal of the Operational Research Society, Vol 49, 187-199, 1998,

110 Understanding Strategic Bidding Behaviour in the Electricity Pool of England and Wales, Proc 4th IAEE European Conference: Energy Markets: What's New? pp 391-396, 1998

111 Agent-based Simulation of Electric Power Pools, (with C. Day) Proc 19th IAEE North American Conference, 1998

112 A Quantile Regression Approach to Generating Prediction Intervals, (With J. Taylor), Management Science, Vol 45 (2) 1999

113 Comparison of Seasonal Estimation Methods in Multi-item Short-term Forecasting, (with A. Vassilopoulos) International. Journal of Forecasting, Vol 15 (4) pp 431-444, 1999

114 Deregulation in Electricity: Understanding Strategic and Regulatory Risk, (with E. Larsen) Journal of the Operational Research Society Vol 50 (4) 1999

115 Reflections on the Progress of Electricity Restructuring, Privatisation and Regulation in the UK during 1988-1998. Proc. CIER XXXIII Meeting: Trends in the Electricity Industry, Keynote address, Cartagena, 1998. Translated into Russian in Pfaffenberger, W., Lychagin, M., and Melamid, L., (eds) Electricity Markets: Problems of Development, Russian Academy of Sciences, Novosibirsk, 1999

116 Improving the Accuracy of Prediction Intervals for Combinations of Forecasts: A Simulation Study. (With J. Taylor) International. Journal of Forecasting, Vol 15, No3 1999

117 Modelling Prices in the Electricity Pool of England and Wales. Proc 12th Forecasting Symposium, Electric Power Research Institute, Palo Alto, California, 1999

118 Understanding Latent Market Power in the Electricity Pool of England and Wales. In Eakin and Faruqui (eds) Pricing Energy for a Competitive Market, Kluwer, 2000

119 Forecasting Loads and Prices in Competitive Power Markets, Proc IEEE, Vol 88, No. 2. 2000

120 Review of Guidelines for Combining Forecasts, (with L. de Menezes and J. Taylor), European Journal of Operational Research, 2000

121 A Model Based Comparison of Strategic Consolidation in the German Electricity Industry. (with J Bower) Proc of 21st USAEE , Philadelphia, 2000, Energy Policy , 29 , pp 987-1005, 2001

122 An ABS investigation of generator market power in the England and Wales Electricity Market Proc of Agent 2000, Argonne National Laboratory (with J. Bower)

123 A Model-based Comparison of Pool and Bilateral Market Mechanisms for Electricity Trading. (with J. Bower) Energy Journal, 2000

## PUBLICATIONS

### *Research Papers*

91. Electricity Restructuring and Market-based Pricing in the UK Electricity Industry during 1990-95, in "The British Privatization Experiment, 5 Years Later: The Winners and Losers", TR-106528, Electric Power Research Institute, Palo Alto, California, 1996

92. NonTraditional Methods of Forecasting, (invited plenary) EURO XIII Glasgow 1994, European Journal of Operational Research, 1996

93. Adjustment of Forecasts with Model Consistent Expectations International Journal of Forecasting, 1996 (with A. Salo)

94. Backpropogation with Discounted Least Squares and its Application to Financial Time-Series Modelling, Neurocomputing (with A.N. Refenes et al), 1996

95. Market-based Pricing and Demand-side Participation in the Electricity Pool of England and Wales. Proc. EPRI Conference on Innovative Approaches to Electricity Pricing, TR-106232, Electric Power Research Institute, Palo Alto, California, 1996.

96. Systems Simulation to Support Integrated Energy Analysis and Liberalised Planning, International Transactions in Operational Research, 1996 (with I Dyner)

97. Analysis of Market Restructuring and Rational Energy Use in Colombia using a Systems Simulation Platform, Proc IAEE 19th International Energy Conference, Budapest, 1996 (with I Dyner)

98. Development of a Systems Simulation Platform to Analyse Market Liberalisation and Integrated Energy Conservation Policies in Colombia., Proc 1996 System Dynamics Conference, Boston (with I. Dyner)

99. Review of the Electricity Pool of England and Wales from a Demand-side Perspective, in MacKerron, G., and Pearson, P., (eds) "The UK Energy Experience: A Model or Warning", Proc British Institute of Energy Economics Conference, Warwick 1995, Imperial College Press, 1996

100. A Re-evaluation of the UK Electricity Re-structuring and Privatisation Process during 1989-1996. Proc of 1996 EULAFER Conference, Rio de Janeiro.

101 An Integrative Modelling Approach for Understanding Competitive Electricity Markets, in Proc of 1996 EULAFER Conference, Rio de Janeiro (with P. Ninios and K. Vlahos).

102 Plataforma de dinamica de sistemas para el apoyo al analisis de politicas en materia de uso racional de energia, in Proc of 1996 EULAFER Conference, Rio de Janeiro (with I Dyner, R. Smith, C Franco and S Montoya)

103. Rischi Strategici e di Regolamentazione,Energia, 18(2) pp 42-51, 1997 (in Italian, with E. Larsen)

104. Systems Modelling for Energy Policy, in Bunn, D.W. and Larsen, E., (ed) Systems Modelling for Energy Policy, J. Wiley, Chichester, 1997

105.. A Systems Simulation Platform to Support Energy Policy in Colombia, in Bunn, D.W. and Larsen, E., (ed) Systems Modelling for Energy Policy, J. Wiley, Chichester, 1997 (with I Dyner)

106. Progress of the UK Electricity Re-structuring and Privatisation Process during 1989-1996, Letras Juridicas Vol 2, No. 1, pp 33-46, 1997

## PUBLICATIONS

### *Research Papers*

77. Blackett Memorial Lecture: "Evaluating the Effects of Privatising Electricity", Journal of the Operational Research Society, 1994

78. The use of Error Feedback Terms in Neural Network Modelling of Financial Time Series, in Proc 1994 Neural Networks in the Capital Markets, Pasadena (with A. N. Burgess)

79 Assessment of the Uncertainty in Future UK Electricity Investment using an Industry Simulation Model, Utilities Policy, Vol 4 (3) 1994, (with E. Larsen)

80. Industry Simulation: Systems Thinking with an Object Oriented/DEVS Technology European Journal of Operational Research, 1994, (with P. Ninios and K. Vlahos)

81. Modelling Electricity Privatization in the UK, Proceedings of the 1994 System Dynamics Conference, Stirling, 1994 (with E. Larsen)

82. Balancing Data and Judgement in Systems Planning, (keynote address) Proc First Colombian Conference on Systems Modelling, Bucaramanga, 1994

83. Decomposition in the Assessment of Judgemental Probability Forecasts Technological Forecasting & Social Change, 1995 Vol 49 pp13-25 (with A. Salo)

84. OO/DEVS: A Platform for Industry Simulation and Strategic Modelling Decision Support Systems, 1995, Vol 15, pp 229-245 (with K. Vlahos and P. Ninios)

85. Electricity Restructuring and Market-based Pricing in the UK Electricity Industry during 1990-1995, Proc 11th International Seminar on Energy Planning, ACIEM, Bogota, 1995

86. Decision Technology and Intelligent Decision Support (editorial) European Journal of Operational Research (with B. Silverman), 1995

87. Neural Networks and Investment Management, in Treleaven, P., and Goonatilake, S., (eds) Intelligent Systems for Finance and Business, Wiley, Chichester, 1995 (with P.Refenes)

88. Neural Networks and Quantitative Finance, in H. Skeete (ed) Handbook of world stock and commodity exchanges, IFR Publishing, London 1995 (with P. Refenes)

89. Strategic Opportunities Across the New UK Electricity and Gas Markets, Proc 18th IAEE International Conference, Washington, DC, International Assoc for Energy Economists, 1995 (with I Dyner and E. Larsen) and also reproduced in Proc of 1996 EULAFER Conference, Rio de Janeiro

90. Progress in Re-Structuring, Privatising and Regulating the UK Electricity Industry during 1990-1995. Pacific and Asian Journal of Energy, 1995, Vol 5 (2) pp 223-234

## PUBLICATIONS

### *Research Papers*

62. Interaction of Judgemental and Statistical Forecasting Methods: Issues and Analysis (with G. Wright) Management Science, Vol 37 (5) pp 501-518, 1991

63. Strategic Simulation of Investment in Electricity Generation, Proc 1991 European Simulation Multiconference, Copenhagen, 1991 (with E. Larsen)

64. Adaptive Forecasting with Individual and Product Line Seasonality, Proc 1991 Int. Assoc. of Business Forecasting Conference, Atlanta, 1991 (with A. Vassilopoulos)

65. Judgmental Inputs to Statistical Forecasting Models, in Wright and Bolger (eds) Expertise in Decision Support, Plenum 1992

66. Specification of the Predictive Distribution for a Combination of Forecasts, (with L. Menezes) in Buhler et al. (ed) Operations Research Proceedings 1990, Springer Verlag, Berlin, 1992.

67. Sensitivity of the Reserve Margin to Factors Influencing Investment Behaviour in the Electricity Market of England and Wales Energy Policy, Vol 21, May, pp 420-429 1992 (with E. Larsen)

68. Modeling the Effects of Regulatory Scenarios on Investment Behaviour in the British Electricity Market. Proc. 23rd Annual Pittsburgh Conference on Modeling and Simulation, 1992 (with E. Larsen)

69. A Model-Referenced Procedure for Supporting Adversarial Decision Processes: Application to Electricity Capacity Planning, Energy Economics, Vol 14 (4) pp242-247, 1992 (with K. Vlahos)

70. Forecasting with Scenarios, (Invited Review), European Journal of Operational Research, Vol 68 (13) pp291-303, 1993, (with A. Salo)

71. Modelling the UK Electricity Contract Market under the Object Oriented/DEVS Framework, in Janssen, J., and Skiades, C.H., Applied Stochastic Models and Data Analysis, World Scientific Publ., 1993, (with P. Ninios and K. Vlahos)

72 OO/DEVS: A Smalltalk Implementation of the DEVS Formalism, Proc 1993 European Simulation Multiconference, Lyon, 1993 (with P. Ninios and K. Vlahos)

73. Diagnostic Tracking and Model Specification in Combined Forecasts of UK Inflation Journal of Forecasting, Vol 12 (7) pp 559-572, 1993, (with L Menezes)

74. Graphical Model Specification within the OO/DEVS Framework, Proc. European Simulation Symposium, Delft 1993, (with P. Ninios, A. Adamson and K. Vlahos)

75 Complementary Modelling Approaches for Analyzing Several Effects of Privatisation on Electricity Investment. Journal of the Operational Research Society, Vol 44 (10) pp 957-971, 1993, (with E. Larsen and K Vlahos). Reproduced in Energetica Vol 10 1994, and Proc of 1996 EULAFER Conference, Rio de Janeiro

76. Using Group Seasonal Indices in Multi-item, Short-term Forecasting International Journal of Forecasting, Vol 9 (4), 1993 (with A. Vassilopoulos)

## PUBLICATIONS

***Research Papers***

49. Forecasting Electric Loads with Multiple Predictors. Energy 1985.

50. Economic and Operational Context of Electric Load Prediction, in Comparative Models for Electric Load Forecasting, J. Wiley & Sons, 1985. (with E.D.Farmer).

51. Review of Short-term Forecasting Methods in the Electric Power Industry, in Comparative Models for Electric Load Forecasting, J. Wiley & Sons, 1985, (with E.D. Farmer).

52. Development of a Stochastic Model for the Economic Dispatch of Electric Power. European Journal of Operational Research, 1986, (with S. Paschentis).

53. Forecasting with Multiple Predictors: Pluralistic Methods in Decision-Support Proc. IEE Colloquium on Load Forecasting, 1986.

54. Risk Analysis, Assessment & Management. European Journal of Operational Research, 1987, (with H. Moskowitz).

55. Expert Use of Forecasts: Bootstrapping & Linear Models, in G. Wright (ed) Judgemental Forecasting, J. Wiley & Sons, 1987.

56. Combining Forecasts (Invited Review) European Journal of Operational Research, 1988.

57. Evaluation of the Nuclear Constraint in a Privatised Electricity Supply Industry (with K. Vlahos) Fiscal Studies, Vol 10 (1), 1989.

58. Combinations of Forecasts: A Model-Building Perspective. ESRC-88-4 U.C. Berkeley. Operations Research Letters, Vol 8 (4), 1989. (with R. M. Oliver)

59. Forecasting with More than One Model. (Editorial) Journal of Forecasting Vol 8 (3) 1989.

60. Uncertainty in Relative Cost Investigation. (with K Vlahos) Special Supplement to Modern Power Systems on "The Prospects for Nuclear Power under Privatisation" June 1989

61. Evaluation of the Long-term Effects on UK Electricity Prices following Privatisation. Fiscal Studies Vol 10 (4), 1989, (with K. Vlahos)

## PUBLICATIONS

***Research Papers***

34. Recursive Estimation of the Observation and Process Noise Covariances in On-line Kalman Filtering. European Journal of Operational Research, 1981.

35. Two Methodologies for the Linear Combination of Forecasts, Journal of the Operational Society, 1981.

36. An Empirical Bayes Formulation of the Credit Granting Decision, Operations Research Letters, 1981.

37. The Development and Implementation of an Interactive On-Line Demand Validation and Prediction Facility. Report RD/L/2096R81, C.E.G.B. Published in shortened version, Proceedings of the Power Systems Computational Conference, Lausanne, 1981 (with A.M. Adatia, A.B. Baker, E.D. Farmer and W.D. Laing).

38. Synthesis or Selection of Forecasting Models: Methods for Small Samples, European Journal of Operations Research, 1982. (With E. Kappos.)

39. Short-term Load Forecasting in the Electricity Supply Industry, Journal of the Operational Research Society, 1982.

40. Linear Programming with Uncertain Parameters: An Applications Review, Computers in Industry, 1982. (With S. Paschentis).

41. Audience Presence during Breaks in Television Programming, Journal of Advertising Research, 1982.

42. Forecasting the Effects of Television Programming on Electricity Loads, Journal of the Operational Research Society, 1983. (With J. Seigal).

43. Television Peaks in Electricity Demand, Energy Economics, 1983. (With J. Seigal.)

44. Economic Dispatch of Electric Power by Stochastic Linear Programming, in Energy Models and Studies (ed. B.Lev), Studies in Management Science, 1983 (With S.N. Paschentis)

45. Small Sample Efficiency of Composite Predictors, Research Report 1495/83, Oxford University Engineering Laboratory.

46. Efficiency of the Independence Assumption in the Combination of Forecasts, Operations Research Letters, 1984 (with I. Topping).

47. On the Economic Dispatch of Electric Power by Online Linear Programming. Proc. 1984 AMSE Conference, Athens, (with S. Paschentis).

48. Statistical Efficiency in the Linear Combination of Forecasts. International Journal of Forecasting, 1985.

**PUBLICATIONS**

## *Research Papers*

17. Forecasting Political Risk, Management Science, 1978. (with M. Mustafaoglu).

18. A Simplification of the Matrix Beta Distribution for Combining Estimators, Journal of the Operational Research Society, 1978.

19. Screening Methods in Policy Analysis, SocioEconomic-Planning Sciences, 1978.

20. Design of a Decomposed Model for the Assessment of a Utility Function of Sulphur Dioxide Air Pollution, Journal of Applied Mathematical Modelling, 1979.

21. Composition of Estimators for Decision-Making, Technological Forecasting and Social Change, 1979.

22. The Use of Subjective Probabilities in the Synthesis of Composite Forecasts. A paper presented at the III Operations Research Symposium Mannheim, 1978, and published in Operations Research Verfahren, 1979.

23. A Perspective on Subjective Probability for Prediction and Decision, Technological Forecasting and Social Change, 1979.

24. The Estimation of Subjective Probability Distributions in Forecasting and Decision-Making, Technological Forecasting & Social Change, 1979.

25. Bayesian Forecasting: Composite or Hierarchical?, MRP 79-6, Oxford Centre for Management Studies, Oxford, 1979.

26. The Suboptimality of Composite Forecasts derived from Posterior Probabilities, European Journal of Operational Research, 1979.

27. The Synthesis of Predictive Models in Marketing Research, Journal of Marketing Research, 16 (2) 1979.

28. Experimental Study of a Bayesian Method for Daily Electricity Load Forecasting, Journal of Applied Mathematical Modelling 1980.

29. On the Calibration of Continuous Subjective Probability Distributions, R and D Management, 1980.

30. On the Use of Composite Predictors in Decision Analysis, European Journal of Operational Research, 1980.

31. A Comparison of Several Adaptive Forecasting Procedures, OMEGA, 1980.

32. Adaptive Forecasting using the Kalman Filter, OMEGA, 1981

33. A Model-Switching Criterion for a Class of Stochastic Linear Programmes. Journal of Applied Mathematical Modelling, 1981. (With S.N. Paschentis).

## PUBLICATIONS

### *Research Papers*

1. A Bayesian Approach to the Linear Synthesis of Forecasts. Operational Research Quarterly, 1975.

2. Anchoring Bias in the Assessment of Subjective Probability. Operational Research Quarterly, 1975.

3. Prior Belief on the Forecast Variable, OMEGA, 1975.

4. J. Sainsbury & the Haul of Contraband Butter: A Case in the Effective Formulation of a Competitive Bidding Strategy. A paper presented at the 1973 CESMAP Conference, Paris, and published by FNEGE in Theorie de la Decision et Applications, Paris, 1975. Also published in Modern Decision Analysis, edited by G. Kaufman and H. Thomas, Penguin, 1977. (with H.Thomas).

5. Assessing Subjective Probability in Decision Analysis. A paper presented at the 1973 NATO Conference, Luxembourg, and published in Theories of Decision in Practice, Edited by D.J. White and K. Bowen, Hodder and Stoughton, 1976. (with H. Thomas).

6. Bayesian Point Estimation on the Bernoulli Parameter. OMEGA, 1976.

7. A Decision Analysis Approach to Unique Situation Competitive Bidding. European Journal of Marketing, 1976. (with H. Thomas).

8. Decision Analysis and Strategic Policy Formulation, Long Range Planning, 1977. (with H. Thomas).

9. Policy Analytic Implications for a Theory of Prediction and Decision. Policy Sciences, 1977.

10. A Comparative Evaluation of the Outperformance and Minimum Variance Procedures for the Linear Synthesis of Forecasts. Opl. Res Q, 1977.

11. The Estimation of a Dirichlet Prior Distribution, OMEGA, 1978.

12. The Development of a Bayesian Sales Forecasting Model, OMEGA, 1978.

13. A Separability of the Joint-Calibration Function in Bayesian Expert Resolution. RR 1264, Oxford University Engineering Laboratory, 1978.

14. The Field of Policy Analysis, in Formal Methods in Policy Formulation, Edited by D.W. Bunn and H.Thomas, Birkhauser, 1978.

15. Problems in the Application of Decision Analytic Methods, in Formal Methods in Policy Formulation, edited by D.W. Bunn and H. Thomas, Birkhauser, 1978.

16. A Decision Analysis Approach to Repetitive Competitive Bidding, European Journal of Marketing, 1978. (with H. Thomas).

## PUBLICATIONS

### *Short Communications, Book Reviews, Editorials etc*

1. Contribution to the discussion of a paper by Newbold and Granger, Jnl.Roy.Statist. Soc, A, 1974.

2. Contribution to the discussion of papers by Tversky and Suppes, Jnl. Roy. Statist. Soc. B. 1974.

3. Review of Multiple Criteria Decision-Making, ed. H. Thiriez & S. Zionts, Springer-Verlag, Berlin, 1976, Journal of the Operational Research Society, 1978.

4. Review of Multiple Criteria Problem Solving, edited by S. Zionts, Springer-Verlag, 1978, Journal of the Operational Research Society, 1979.

5. Review of Planning in the Electricity Supply Board by J. Roach, IPA Dublin, 1978, Journal of the Operational Research Society, 1979.

6. Contribution to the discussion of a paper by Lindley, Tversky and Brown. Journal of the Royal Statistical Society, Series B, 1979.

7. Review of Stochastic Dominance, G.A. Whitmore and M.C. Findlay (eds.), D.C. Heath, Lexington, 1978 in Journal of the Operational Research Society, 1980.

8. Review of The Statistical Implications of the Pre-Test and Stein-Rule Estimators in Econometrics, G.G. Judge and M.E. Bock, North Holland Publishing Co., Amsterdam, 1978, in European Journal of Operational Research. 1980.

9. Outranking Probabilities and the Synthesis of Forecasts: Reply. Journal of the Operational Society, 1980.

10. Outranking Probabilities and the Synthesis of Forecasts: Second Reply. Journal of the Operational Research Society, 1980.

11. Review of Arrow Impossibility Theorems, J.S. Kelly, Academic Press, New York, 1978, in European Journal of Operational Research, 1980.

12. Review of Group Choice, B.G. Mirkin, J. Wiley, New York, 1979, in Journal of the Operational Research Society, 1980.

13. Review of Probabilistic Models in Engineering Sciences, H.J. Larson and B.O. Schubert, J. Wiley, New York, 1979, in European Journal of Operational Research, 1980.

14. Review of Numerical Solution of Highly Nonlinear Problems, W. Forster (ed.), North-Holland, 1980, in Journal of the Operational Research Society, 1980.

15. Review of Operations Research, C. Harvey, North-Holland, 1979, in European Journal of Operational Research, 1980.

16. Forecast Combination: Reply, Journal of the Operational Research Society, 1981.

17. Special Effects in the On-Line Forecasting of Electricity Loads. Extended abstract of a paper presented at the V Symposium on Operations Research, Cologne. Operations Research Verfahren, 1981.

18. Combination of Forecasts: Reply, Journal of the Operational Research Society, 1981.

## PUBLICATIONS

### *Short Communications, Book Reviews, Editorials, etc*

19. Review of Bayesian Methods in Econometrics and Statistics, A. Zellner (ed.), 1980 in European Journal of Operational Research, 1981.

20. On Simulation Studies of Adaptive Forecasts: Reply, OMEGA, 1982.

21. Review of "Optimal Economic Operation of Electric Power System," El Hawary et al, Academic Press, 1979, in Interfaces, 1983.

22. Review of Time Series Analysis: Theory and Practice Vol. 3, O. Anderson (Ed), North Holland 1983. in Journal of the Operational Research Society, 1984.

23. Review of Mathematical Methods in Management, G. Gregory, Wiley, 1983, in JORS 1984.

24. Review of The Modern Forecaster, Levenbach and Cleary, Lifetime Learning, 1984 in Futures, 1984.

25. Review of Constraint Theory, Richards, University Press of America, 1984 in JORS, 1985.

26. Review of Multiple Perspectives for Decision-Making, Linstone, North Holland, 1984 in JORS 1985.

27. Review of Multicriteria Decision-Making (ed. Zeleny), JAI Press, 1985 in JORS 1986.

28. Approaches to Electric Load Forecasting, Journal of Forecasting, Vol. 6(2) 1987.

29. Review of Managerial Decision Analysis, Samson, Irwin 1988 in JORS, 1988

30. Editorial: Journal of Forecasting Vol 8 Supplement 1989

31. Finance and Investment Technology, Global Investment Management Vol 4 (2), pp 30-31, 1994 (with P. Refenes)

32. "Model-based Policy Analysis", editorial for Energy Policy, 25(3), 1997 (with E.Larsen and K. Vlahos)

33. Editorial to the 21st Anniversary Issue, Energy Economics, 22(1) 2000

34. "The Price of Uncertainty" Invited Viewpoint, *Power UK,* March 2005

35. "Risk and Electricity Price Dynamics" Invited Research Summary, *Power UK* November 2006. Reprinted in *Power-in Europe* November 2006

36. "Carbon Policy Risk and Investment" Invited Research Summary *Power UK* November 2008

37. Editorials, *Journal of Energy Markets*, quarterly, 2008 –

38. "Policy Crowding in Carbon Markets" *New Power* January 2010

39. "The Problem with Models" *New Power* April 2011

40. "Market Reforms" GME Annual Report, conference transcript (in Italian) , *GME,* 2011

41. "Markets for Technologies " New Power September 2012