

STAFF CURRICULUM VITAE

NAME: AGRELL

SURNAME: Per Joakim

DATE OF BIRTH: Stockholm, 13. January, 1967

NATIONALITY: Swedish

LANGUAGES: Speaks English, French, German, Swedish, Russian.

Understands Danish.

MARITAL STATUS: Married, two children

SUMICSID **POSITION:** Senior associate consultant (since 1996)

SUMICSID **LOCATION:** Rue Maurice Liétart 56

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ACADEMIC POSITION: (Full) Professor of operations management

Louvain School of Management

CORE

Université catholique de Louvain

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B - 1348 Louvain-la-Neuve

BELGIUM

LAST UPDATE OF CV: 12 December 2019

EDUCATION

2001 -

2000	Docent (post.doc. habilitation) in production economics, Linköping
	University, Sweden.
1991 – 1995	Ph. D. (tekn. dr.) in production economics, Department of production
	economics, Linköping University, Sweden.
1990 – 1991	M. Sc. in industrial engineering and operations research, Department of
	Industrial Engineering, University of Massachusetts, Amherst, USA.
1987 - 1991	M. Sc. (civ.ing.) in industrial engineering and management, Linköping
	University, Sweden.
1986 - 1987	Russian and East-European studies, Uppsala University, Sweden.
1986 - 1987	Sergeant, Defence Interpreters School (TolkS), Swedish Air Force.

CONSULTING POSITIONS

1996 – Senior Associate Consultant,

SUMICSID GROUP Sweden (1996-2000), Belgium (2001-).

CURRENT ACADEMIC POSITIONS

2018 – **Faculty Dean,** Louvain School of Management (LSM), UC Louvain,

[Full] professor of operations management (chargé de cours à titre définitif 2001-2005, professeur 2005-2010, professeur ordinaire 2010-),

Louvain School of Management (LSM)

Faculty member, Center of Operations Research and Econometrics (CORE) (Assoc fellow 2006-2008, permanent 2009-, co-director 2012-16)

Université catholique de Louvain, Belgium.

EARLIER PERMANENT ACADEMIC POSITIONS

1998 – 2001 Associate professor of managerial economics (*lektor*),

Institute of Food and Resource Economics,

Faculty of Life Sciences, University of Copenhagen, Denmark. [On leave

2000-2001]

1996 – 2000 Assistant professor of production economics (universitetslektor),

Department of production economics, Linköping University, Sweden.

[Partially on leave 1997-2000]

TEMPORARY ACADEMIC POSITIONS

2012 – 2017 Adjunct professor (professor II, 10%), Department of Finance and

Management Science, Norwegian School of Economics (NHH), Bergen,

Norway.

2008 **Visiting professor**, Department of Business Economics, Universitat

Autonoma de Barcelona (UAB), Barcelona, Spain. (On leave from UC

Louvain)

2005 – 2011	Research Associate (10%), Fondazione Eni Enrico Mattei (FEEM),
2003 — 2011	Programme Privatisation, Regulation and Corporate Governance, Brussels.
	Part-time.
2000 - 2001	Visiting researcher, Center of Operations Research and Econometrics
	(CORE),
	Université catholique de Louvain, Belgium. (On leave from Univ of
	Copenhagen)
1997 – 1998	Visiting associate professor of operations research, (gästelektor)
	Department of operations research, University of Copenhagen, Denmark.
1996 – 1997	Visiting professor of management information systems, Department of
	management, University of Georgia, Athens, USA. (On leave from
	Linköping University)
1996	Research Scholar, Methodology of Decision Analysis (MDA) Project and
	Land-Use and Change (LUC),
1995	Young Scholar, Methodology of Decision Analysis (MDA) Project,
	International Institute for Applied Systems Analysis, Laxenburg, Austria.
1991 – 1995	Research assistant, (doktorand)
1989 - 1990	Teaching assistant, (amanuens)
	Department of production economics, Linköping University, Sweden.

RECENT RESEARCH GRANTS AND PROJECTS

2017 - 2020	Kronos Chair in Strategic Sourcing and Procurement, coord (0.5 fte prof.).
2015 - 2016	FDP Pedagogical grant for an interactive scheduling tool, with prof Meskens, UCL.
2014 - 2016	Performance Analysis, Competitiveness and Economic Progress, research project
	ECO2013-46954-C3-2-R for the Ministry of Science and Education, Spain.
	With prof. Grifell-Tatje, UAB Spain.
2013 - 2017	Beyond Incentive Regulation, FNRS FRFC (PDR grant) T.0061.13. With prof.
	Gautier and Perelman, ULg/CORE, 1 PhD student + 1 post-doc.
2013 - 2016	Frontier Analysis under Uncertainty, promotor for FNRS Post-doctoral project
	for Adel HATAMI-MARBINI (post doc).
2012 - 2014	Game Theoretic Approaches in Supply Chain Management, FNRS Aspirant grant to
	Felix SOMMER. With prof. Blome, Chair GSK Biologicals, 1 PhD student.
2010 - 2012	Analysis of Economic Performance, research project ECO2010-21242-C03-01for
	the Ministry of Science and Education, Spain. With prof. Grifell-Tatje, UAB
	Spain, 121,000 € (total).
2010 - 2011	Measuring Productive Efficiency in Electricity Distribution: An Application to Incentive
	Regulation of Swiss Utilities, research project for the Swiss Federal Energy
	Office. With prof. Filippini, ETH Zurich and Institute MecoP, Swiss Italian
	University, Lugano, 160,000 CHF (total).
2010 - 2011	Network Regulation in a Low-Carbon Society, research project for Norwegian
	Energy Association (EnergiNorge), with Peter Bogetoft.
2008 - 2010	SHARC Shared Resource Management, ARC project for the Wallon
	Government. Co-promotor with CORE and FUCaM, 3 PhD students.
2008	Personal research grant from the Catalonian Government, UAB.
2007 - 2008	DIGINN Distributed Generation in the Nordic Energy Market. Nordic Energy
	Research, research project, with Peter Bogetoft. 30k€.
2006	Yardstick regimes in Hospital Reimbursement, research project for the Dutch
	Health Care Agency NZa (CTG/ZAio), Utrecht, NL. With Peter Bogetoft.

2006 – 2009	LogisTIC, logistics project for the Wallon Government, Plan Marshall. Co-
	promotor for the Center of Supply Chain Management, 3 PhD students,
	230 k€/yr.
2004 - 2006	L'Oréal Supply Chain Managment, partnership with competence exchange,
	research and training, 1 PhD student, 100 kEUR/yr.
2005 - 2007	EU 6 th framework project (RELIANCE, CooRdination perspectives of the
	European transmission network research activities to optimise the reLIAbility of power
	supply, usiNg a systemiC approach, involving growing distributed generation and
	renewable energy markEts), subproject Regulation Impact on Research Financing,
	budget 42 k€, work package leader.
2005 - 2007	Structural Efficiency and Reallocations: Measurement and Mechanism Design), SSF
	Denmark, with Peter Bogetoft, Jens Leth Hougaard and Jørgen Tind, total
	budget 130k€, senior researcher.
2003 - 2009	EU 6th framework project (EU-DEEP, The birth of a European Distributed
	Energy Partnership that will help the large-scale implementation of distributed energy
	resources in Europe), subproject Regulation Economics of Distributed Generation,
	total budget 30 MEUR, permanent researcher.
2004 - 2005	Norwegian Research Council, KMB project (Regulation of Energy
	Infrastructure), research project with NVE (Norwegian Energy Authority) and
	Norwegian School of Business, 1 PhD student.
2001 - 2002	FSBR, Supply Chain Coordination and Efficiency, EUR 20,000.
2000 - 2001	Energy Authority, Pricing of central heating in a liberalized energy market –
2000 2001	benchmarking of central heating production, with the Danish Research Agency,
	DKK 268.000 (\$38,000) of DKK 1,234,000 (\$176,000).
	[φ1 / 0,000].

SELECTED CONSULTING PROJECTS

2017 - 19	TCB-18, CEER Electricity and Gas Transmission Benchmarking, European TSO benchmarking for Gas and Electricity, project leader.
2017 – 18	BUNDESNETZAGENTUR (DE) Benchmarking of electricity distribution, EVS3. Modelling, costdriver analysis, model specification, calculations, outlier identification, documentation and support. SUMICSID in cooperation with Swiss Economics.
2016 – 17	BUNDESNETZAGENTUR (DE) Benchmarking of gas transmission, GERNER VII. Modelling, costdriver analysis, model specification, calculations, outlier identification, documentation and support. SUMICSID in cooperation with Swiss Economics.
2016	Croatian Energy Regulator (HERA) (HR) <i>Incentive regulation reform for electricity</i> , Support in regulation design, data specification, benchmarking design.
2016	Dutch Competition Authority (ACM) (NL) <i>Cost estimation GTS</i> , Support in regulatory reviews, public hearings, legal proceedings.
2015	CEER through ACM (EU, NL) Pan-European Gas TSO benchmarking, E2GAS Project lead, workshops, data survey, techno-economic modeling, economic and process analysis, interaction with CEER, 23 TSO.
2015	Flemish Environment Agency (VMM) (BE) Due diligence in cost review for waste water treatment AQUAFIN.
2014	Data analysis, perliminary modeling and analysis. CEER through ACM (EU, NL) Feasibility study for a pan-European Gas TSO benchmarking project, PE2GAS
	Project support, workshops, data survey, techno-economic modeling, economic and process analysis, interaction with CEER.
2014	Energimarknadsinspektionen (SE) Dynamic efficiency estimates using parametric models for latent and random effects, SENDOA
2013	Modelling, model specification, calculations, documentation and support. Energistyrelsen (DK) Efficiency improvement potential for Danish electricity distribution, DANEL
	Modelling, costdriver analysis, model specification, calculations, data validation, documentation and support. SUMICSID in cooperation with Copenhagen Economics.
2013	Authority for Consumers and Markets, ACM (NL) Efficiency analysis of TenneT TSO HV and EHV, STENA II.
	Specific follow-up study for NL conditions from e ³ GRID, including extensive sensitivity analyses. SUMICSID in cooperation with Frontier Economics.
2013 - 14	BUNDESNETZAGENTUR (DE) Benchmarking of electricity DSO, GERNER Modelling, costdriver analysis, model specification, calculations, data validation, outlier identification, documentation and support. SUMICSID in cooperation with Swiss Economics.
2012 – 13	e ³ GRID 2012 (AT, DE, SE, NO, NL, FR, UK, LU, FI, SE, DK, HU, IT, ES, EE, PT, CZ) International Benchmarking of Electricity TSOs
	Teamleader methodology for largest CEER TSO project for regulation,

	team leader for econometric team (23 TSO). SUMICSID in cooperation
	with Frontier Economics and Consentec.
2011 - 12	ENTSO-E (EU) Financial Models for Transmission System Research, THOR
	Research project, involving a workshop at the Florence School of
	Regulation, EUI, and analysis of the future organization and financing of
	transmission system research and development.
2011 - 12	SFOE (CH) DSO Benchmarking Elec, SWISSDEA
	Analysis and development of the efficiency assessment models for energy
	networks (electricity DSO), including (i) econometric analysis of cost drivers
	(ii) DEA model development, (iii) regulatory design advice. First DEA-
	benchmarking in collaboration with VSE (CH), 133 participants.
2011	CREG (BE) DSO Benchmarking Elec and Gas, NEREUS
	Analysis and development of the efficiency assessment models for energy
	networks (electricity and gas), including (i) econometric analysis of cost
	drivers (ii) DEA model development, (iii) software provision, (iv) training of
	key staff, (v) regulatory design advice. Includes all gas and electricity
2011 12	operators.
2011 - 12	EK/NMa (NL) Appeal analysis of incentive regulation rulings, STENA
	Expertise, preparation of analyses and assistance in court for an appeal process of rulings under the Dutch incentive regulation.
2011	EBL (NO) Network regulation models for the low-carbon society
2011	Prospective analysis for the association of new regulatory paradigms for the
	low-carbon society post 2020. Reports and open workshops.
2010 -	BUNDESNETZAGENTUR (DE) Legal appeals of incentive regulation DSO
2010	Support of regulatory authority in the response and proceedings of legal
	appeals of incentive regulation rulings.
2010	ILR (LU) Specific analysis of CEGEDEL NET
	Specific report on the transmission system operator in Luxemburg for the
	national regulator ILR.
2010	SVK (SE) Transmission operator analysis Svenska Kraftnät
	Specific analysis for the transmission grid SVK based on e ³ GRID results.
2009	DERA (DK) Transmission operator analysis Energinet.dk
	Specific analysis for the Danish regulator on the total cost efficiency, and
	regulatory strategy in relation to Energinet.dk transmission system operator.
2009	NGET (UK) Transmission operator analysis National Grid Electricity Transmission
	Specific analysis for the transmission system operator NGET in view of the
2000	tariff review.
2009	EK/NMa (NL) Transmission operator analysis TenneT, STENA
	Specific analysis for the Dutch regulator on the operating expenditure
	efficiency, opening balance capital base, integration of HV assets and
2009	regulatory strategy towards TenneT transmission system operator. e^3GRID Iceland Landsnet cost analysis – e^3GRID
2009	Investigation of the cost efficiency 2006 of Landsnet, Iceland, and in
	particular sensitivity of results with respect to some exogenous factors.
2009	e ³ GRID OFGEM <i>Transmission operator analysis</i> – e ³ GRID
_00)	Analysis of three UK transmission licensees in relation to the e ³ GRID
	benchmarking project, specific report and workshops.
2006 - 2008	Orkustofnun (IS) DSO Benchmarking – ICEDISC
	Analysis and development of the efficiency assessment models for energy
	networks (electricity), including (i) econometric analysis of cost drivers (ii)

2008	DEA model development, (iii) regulatory design advice. First international DSO-DEA model for regulatory use in Europe. CEER / e ³ GRID (AT, SE, NO, NL, SL, UK, LU, FI, SE, DK, IS, HU, LI,
2000	MT, IT, ES, PT, CZ, SK)
	International Benchmarking of Electricity $TSOs - e^3GRID$
	Teamleader methodology for largest CEER TSO project for regulation,
	member of steering group (23 TSO). SUMICSID in cooperation with van
2005	Dijk Management Consultants and Tractebel Engineering Consultants.
2007	Bundesnetzagentur / GERNER IV (DE)
	Benchmarking of Electricity DSO, gas TSO and DSO Project leader. Analysis and development of the efficiency assessment
	models for energy networks (electricity and gas), including (i) econometric
	analysis of cost drivers (ii) DEA and SFA model development, (iii)
	regulatory design advice. Includes all gas and electricity operators (full
	results for DSOs and gas TSOs). With EE2 Dresden.
2007	CREG / RAMIEL (BE)
	Setting the X-factor for Gas and Electricity TSOs
	Expert and project leader for task force responsible for the setting of the revenue cap, in particular the X-factor for the Belgian electricity and gas
	TSOs (Elia and Fluxys) during a period of 5 weeks.
2007	Bundesnetzagentur (DE)
	Capital valuation project
	Consultant and expert in subproject on regulatory asset base determination
	for gas and electricity DSOs, on treatment and classification of economies of scale in DSOs and other issues related to the implementation of the 2006
2007	proposal.
2007	DIGINN (NO-SE)
	Decentralized governation traject
	Decentralized generation project Researcher in larger applied project on Decentralized Energy Resources in
	Researcher in larger applied project on Decentralized Energy Resources in
2007	Researcher in larger applied project on Decentralized Energy Resources in the Integrated Nordic Energy Market, responsible for impact analysis on network regulation, contracting design and unbundling rules. EBL-KS-FSN (NO)
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2007	Researcher in larger applied project on Decentralized Energy Resources in the Integrated Nordic Energy Market, responsible for impact analysis on network regulation, contracting design and unbundling rules. EBL-KS-FSN (NO) Cost Model project Invited expert and workshop organizer concerning the analysis, evaluation and prospecting of alternative cost norm models for electricity distribution
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	Researcher in larger applied project on Decentralized Energy Resources in the Integrated Nordic Energy Market, responsible for impact analysis on network regulation, contracting design and unbundling rules. EBL-KS-FSN (NO) Cost Model project Invited expert and workshop organizer concerning the analysis, evaluation and prospecting of alternative cost norm models for electricity distribution in the Norwegian market, including an assessment of the current Norwegian regulation model and a workshop at UP Comillas in Madrid concerning the MRRSEN model. Bundesnetzagentur (DE) GERNER project Project leader. Analysis and development of the efficiency assessment models for energy networks (electricity and gas), including (i) econometric analysis of cost drivers (ii) DEA and SFA model development, (iii) regulatory design advice and (iv) training seminars at 3 levels. Includes all
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2006	Researcher in larger applied project on Decentralized Energy Resources in the Integrated Nordic Energy Market, responsible for impact analysis on network regulation, contracting design and unbundling rules. EBL-KS-FSN (NO) Cost Model project Invited expert and workshop organizer concerning the analysis, evaluation and prospecting of alternative cost norm models for electricity distribution in the Norwegian market, including an assessment of the current Norwegian regulation model and a workshop at UP Comillas in Madrid concerning the MRRSEN model. Bundesnetzagentur (DE) GERNER project Project leader. Analysis and development of the efficiency assessment models for energy networks (electricity and gas), including (i) econometric analysis of cost drivers (ii) DEA and SFA model development, (iii) regulatory design advice and (iv) training seminars at 3 levels. Includes all gas and electricity operators (full results for DSO and a proposal for TSO regulation) Finland Energy Authority (FI) EMV project Analysis and development of the alternative efficiency assessment models for electricity distribution systems including econometric analysis of cost
2006 2005 - 2006	Researcher in larger applied project on Decentralized Energy Resources in the Integrated Nordic Energy Market, responsible for impact analysis on network regulation, contracting design and unbundling rules. EBL-KS-FSN (NO) Cost Model project Invited expert and workshop organizer concerning the analysis, evaluation and prospecting of alternative cost norm models for electricity distribution in the Norwegian market, including an assessment of the current Norwegian regulation model and a workshop at UP Comillas in Madrid concerning the MRRSEN model. Bundesnetzagentur (DE) GERNER project Project leader. Analysis and development of the efficiency assessment models for energy networks (electricity and gas), including (i) econometric analysis of cost drivers (ii) DEA and SFA model development, (iii) regulatory design advice and (iv) training seminars at 3 levels. Includes all gas and electricity operators (full results for DSO and a proposal for TSO regulation) Finland Energy Authority (FI) EMV project Analysis and development of the alternative efficiency assessment models for electricity distribution systems including econometric analysis of cost drivers for a SFA model and validation of DEA formulations.
2006	Researcher in larger applied project on Decentralized Energy Resources in the Integrated Nordic Energy Market, responsible for impact analysis on network regulation, contracting design and unbundling rules. EBL-KS-FSN (NO) Cost Model project Invited expert and workshop organizer concerning the analysis, evaluation and prospecting of alternative cost norm models for electricity distribution in the Norwegian market, including an assessment of the current Norwegian regulation model and a workshop at UP Comillas in Madrid concerning the MRRSEN model. Bundesnetzagentur (DE) GERNER project Project leader. Analysis and development of the efficiency assessment models for energy networks (electricity and gas), including (i) econometric analysis of cost drivers (ii) DEA and SFA model development, (iii) regulatory design advice and (iv) training seminars at 3 levels. Includes all gas and electricity operators (full results for DSO and a proposal for TSO regulation) Finland Energy Authority (FI) EMV project Analysis and development of the alternative efficiency assessment models for electricity distribution systems including econometric analysis of cost

	pan-Nordic regulation system for electricity distribution systems, including (i) empirical stakeholder analysis, (ii) theory for regulatory harmonization, (iii) new regulatory mechanisms and (iv) multidimensional feasibility studies.
2005	Commissioned by Nordenergi Elia (BE) BELPEX validation Export validation (with prof. Philippe Chavelier, p. Side SA) of the market
	Expert validation (with prof. Philippe Chevalier, n-Side SA) of the market coupling algorithm for the APX-PowerNEXT-BELPEX market.
2004 - 2005	International (NL, A, PT, DK, NO) ECOM+ 2004 project
	Project leader with Peter Bogetoft. Full scale international benchmarking of
	construction, operations and maintenance for transmission system operators, method development, data collection and analysis.
2004	NVE (NO) Norwegian Energy Regulator Efficiency Model Design
	Development, analysis and testing of new DEA and SFA models for DSO
2004	regulation under the new 2007 regulatory reform. Bureau van Dijk (DG TREN)
	Mid-term Evaluation of the TEN-E programme
	Expert evaluator on electricity networks. Performed interviews and analyses
	for ten European countries, regulators and TSOs.
2004	NVE (NO) Norwegian Energy Regulator
	Dynamic Regulation, Efficiency Model Development, Norm Models
	Project leader with Peter Bogetoft on several projects. Suggested dynamic
2002	yardstick elements for the 2007 regulatory revision of electricity distribution.
2003	Dte (NL), the Netherlands Energy Regulator TSO Regulation Strategy
	Advisory sessions on interpretation, limitations and development of the
	ECOM+ results on the actual revenue cap setting in 2003.
2003	International (NL, A, BE, DK, NO)
	ECOM+ project
	Project leader with Peter Bogetoft. Full scale international benchmarking of
	construction, operations and maintenance for transmission system
	operators, method development, data collection and analysis.
2003	International (NL, DK, NO, SE, SF)
	TSO Charter Project
	Project leader with Peter Bogetoft. Developed a comprehensive performance assessment framework for transmission operators, called the
	TSO Charter of Accountability.
2003	NVE (NO) Norwegian Energy Regulator
	Integrated Parallel Energy Network Regulation
	With Peter Bogetoft. Research projects on the regulation of alternative
	electricity distribution technologies, suggesting areas of further study.
2003	NVE (NO) Norwegian Energy Regulator
	Ex-post Energy Regulation
	With Peter Bogetoft. Project to investigate the use of ex post elements for
2002	updating in the electricity distribution regulation.
2003	NVE (NO) Norwegian Energy Regulator
	Technical Norm Models in Regulation Project leader with Peter Rogeroft, Project with empirical and analytical
	Project leader with Peter Bogetoft. Project with empirical and analytical emphasis, exploring the Chilean, Spanish and Swedish technical regulation
	models for prospective use in the Norwegian regulation.
	modelo for prospective doe in the riorwegian regulation.

2001	EMI (SE), Swedish Energy Agency Incentive Regulation
	Project leader with Peter Bogetoft. Exploratory project to strategically
	examine the impact and power of DEA regulatory benchmarking in a light-
2002-3	handed regulation regime. Several follow-up sessions under 2002-2003.
2002-3	EMI (SE), Swedish Energy Agency Training Courses in DE 4 for Population
	Training Courses in DEA for Regulation
	Full training package including pre-assessment, lectures, exercise material,
	coaching, and certification for selected civil servants using the DEA method
	developed in 2000.
2001	EMI (SE), Swedish Energy Agency
	Nordic Open DEA Electricity Distribution Benchmarking
	Representing the Swedish Energy Agency. Project management, data
	collection, validation and support of the Nordic study.
2000	EMI (SE), Swedish Energy Agency
	Design, Validation and Testing of A New Efficiency Measurement Method for
	Electricity Distribution Utilities.
	Project leader with Peter Bogetoft. Published and implemented in the
	authority's monitoring practice.
2000 -	CREG (Belgium), RTE (France)
	Various expert assignments in energy regulation economics

RESEARCH CONTRIBUTIONS

BOOKS AND BOOK CHAPTERS

2016	Agrell P J and P Bogetoft. Endogenous Common Weights as a Collusive Instrument
	in Frontier-Based Regulation. In Aparicio, J., Pastor, J. T. and Lovell, C.A.K.
	(Eds.), Advances in Efficiency and Productivity, Springer (Springer International
	Series in Operations Research and Management Sciences). ISBN: N 978-3-
	319-48459-4), pp. 181-194. RP2818.
2014	Agrell PJ, MFarsi, MFilippini, MKoller, Unobserved Heterogeneous Effects in
	the Cost Efficiency Analysis of Electricity Distribution Systems. In Ramos, S. and H.
	Veiga (Eds.) The Interrelationship Between Financial and Energy Markets, Lecture
	Notes in Energy, 54 , Springer. ISBN: 978-3-642-55381-3, pp. 281-301.
2012	Agrell P J and A Gautier. Rethinking regulatory capture. In J.E Harrington
	and Y. Katsoulacos. (Eds.) Recent Advances in the Analysis of Competition Policy
	and Regulation, Edvard Elgar. ISBN: 978-1781005682, pp. 286-302.
2010	Agrell P J and P Bogetoft. Harmonizing the Nordic Regulation of
	Electricity Distribution. In Rönnqvist, Bjørndal, E.; Bjørndal, M.; Pardalos,
	P.M.; Rönnqvist, M. (Eds.) Energy, Natural Resources and Environmental
	Economics, Springer. ISBN: 978-3-642-12066-4, pp. 293-316.
2006	Syrjänen, M., P. Bogetoft, P.J. Agrell Efficiency benchmarking project B:
	Analogous efficiency measurement model based on Stochastic Frontier Analysis, Final
	Report, EMV Energy Market Authority of Finland, (Gaia OY).
2005	Agrell P J. Preface in Philippart M, C Verstraete et S Wynen. Collaborative
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2010	Infrastructure Regulation Games. Proceedings of CRESSE International Conference	
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2011	Agrell, P J and A Hatami-Marbini Frontier-Based Performance Analysis Models for
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2010	Agrell, P J and P Bogetoft. Network Regulation under Climate Policy Review .
	EUI Working Paper RSCAS 2010/67, Robert Schuman Centre for
	Advanced Studies, European University Institute.
2010	Agrell, PJ and P Bogetoft. Endogenous Generalized Weights under DEA Control.
	LSM Working Paper 2010/02, Louvain School of Management.

CONFERENCE PARTICIPATION

Participation at over 50 international scientific conferences since 2010, presenting papers, chairing sessions, acting as discussant for other papers and giving plenar talks. Scientific committee member for the *International conferences on the European Energy market* (EEM) and the annual *Data Envelopmement Analysis* conference. Principal organizer of the European Workshop of Productivity and Efficiency Analysis in 2005 (250 participants), and EURO DDM IX workshop on decentralized decision making in 2004 and 2008.

INVITED LECTURES

Invited to give talks at the Florence School of Regulation (European University Institute), International Institute for Applied Systems Analysis, University of Georgia, Technical University of Denmark, University of Copenhagen, Copenhagen Business School, Odense University, Helsinki University of Technology, Helsinki School of Economics, Linköping University, University of Lille, University of Liège, CERAS-ENPC, Paris, University Carlos III, Madrid, Universitat Autonoma de Barcelona, University of Oviedo, ETH Zurich/CEPA, Norwegian School of Economics, Symbiosis International University (India), and others.

THESIS SUPERVISION

Supervision of three doctoral students, and numerous B.A. and M.Sc. theses currently at the Université catholique de Louvain and earlier at Linköping University and University of Copenhagen. Faculty opponent for 15 Ph.D, HDR or tekn.lic in FR, DK, SE, NL, ES.

TEACHING EXPERIENCE

Productivity Theory, Production and Supply Chain Management. Taught at undergraduate, graduate, doctoral and executive MBA levels at five universities in Denmark, Belgium, France, Lithuania, Russia and Sweden. Recipent of, and nominee for, teaching prizes.

ACADEMIC SERVICE

Dean of the Faculty Louvain School of Management at UC Louvain (2018-), Chairman of the doctoral commission in economics and management science at UC Louvain (2014-18), Codirector of the *Center for Operations Research and Econometrics* (CORE) 2012-16, chairman for the Executive MBA program 2014-17, member of reviewboards for research programmes, university evaluation commissions (DK, FR, FI), external reviewboards for promotion and tenure, in US, BE, DK, FI, FR, NL and SE.

REFEREE ASSIGNMENTS

Editorial board member of the *International Journal of Production Economics* and others Regular reviewer in (Energy): *Energy Policy, Energy Journal, Applied Energy, Energy Economics*. Referee of scientific papers: 21 different scientific journals, at request.