Nikolas M. Wölfing

	TVIKOIAS /VI. W OITHING	
	Assistant Professor Mannheim Institute for Sustainable Energy Studies (MISES) University of Mannheim, School of Business	
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EMPLOYMENT	Assistant Professor, University of Mannheim.	Since 3/2019
	PostDoc, double affiliation, <i>ETH Zürich</i> , Center for Environmental Decisions, Chair of Economics, and <i>ZEW Mannheim</i> .	4/2015 - 3/2016
	PostDoc, <i>ZEW Mannheim</i> , Dept. for Environmental & Resource Economics, coordinator for the energy economic research & consulting activities.	11/2013 – 2/2019
	Doctoral Researcher, <i>ZEW Mannheim</i> , Dept. for Environmental & Resource Economics.	11/2007 - 10/2013
Dissertation	Interacting markets in electricity wholesale - forward and spot and the trading, supervised by Katheline Schubert and Pierre Fleckinger. Wholesale markets for electricity are studied with respect to price through, competition, and collusion. The thesis comprises applied resory, and statistical methodology. The jury proposed the work for the of all Parisian universities.	formation, cost pass- earch, economic the-
Education	Doctorate Paris School of Economics & Univ. Paris 1 Panthéon-Sorbonne, Fields: Industrial organisation, energy economics, statistics.	10/2013
	Graduate Courses Cologne International Energy Summer School, EWI-CIES, Instructor: Matti Liski (Aalto U), Richard Green (Imperial C.).	8/2013
	Univ. Mannheim, CDSE, Adv. Econometrics I, II, and III, Instructor: E. Mammen, C. Trenkler, H. Bonin.	10/2009 - 6/2010
	Master Second year: Paris School of Economics & Univ. Paris 1. Program: Quantitative economics / industrial organisation.	9/2006 – 9/2007
	First year: <i>Univ. Paris 1 Panthéon-Sorbonne</i> , Math Dept. Program: Mathematical models in Economics and Finance.	9/2005 - 7/2006
	Undergraduate Studies Universität Potsdam, economics and social sciences.	10/2002 - 8/2005
VISITING POSITIONS	Stanford University, visiting scholar, Graduate School of Business.	4/2018 - 5/2018
	Paris School of Economics, visiting scholar.	10/2012 - 12/2012
	Fudan University Shanghai, visiting scholar, Center for Energy Economics and Strategy Studies.	8/2010 - 10/2010

AWARDS AND SCHOLARSHIPS

EEX Excellence Award

Conferred by the European Energy Exchange for outstanding research on energy and exchange trading, Brussels, 2014.

Best Dissertation Award

for the academic year 2012/2013. Conferred by GEE, the German chapter of the International Association for Energy Economics, Berlin, 2013.

Nominee: Prix d'Excellence de la Sorbonne

Nominated for the joint dissertation award of all Parisian universities, academic year 2013/2014.

Travel grant, Econometric Society

for attendance of the Econometric Society World Congress, Shanghai, 2010.

Best Master Thesis

academic year 2007/2008, conferred by GEE, the German chapter of the International Association for Energy Economics, Berlin, 2008.

DAAD - European Program on Excellence

study grant for the University Paris 1 Panthéon-Sorbonne, 2005/2006.

RESEARCH Papers

Forward trading and collusion in supply functions, ZEW-Discussion Paper, 2019.

<u>Abstract:</u> This paper studies the effect of forward contracts on the stability of collusion among firms, competing in supply functions on the spot market. A forward market can increase the range of discount factors which allow to sustain collusion. On the contrary, collusion is destabilised when a potential deviator sells a significant amount forward. Results do not depend on the type (financial or physical) of contract fulfilment and are robust to different levels of demand uncertainty. As a policy implication, the study finds that liquid and anonymous forward markets are incompatible with collusion.

Household energy prices and inequality: Evidence from German microdata based on the EASI demand system, with Miguel Tovar, *Energy Economics*, Vol. 70, 2018.

<u>Abstract</u>: We study the distributional effects of rising energy costs for households. In contrast to most of the previous literature, our specification differentiates between electricity and heating demand and still models other consumption goods in realistic detail. We use a yet unexplored data-set on household expenditures in Germany and extend the recently developed EASI demand system for the analysis of inequality and welfare at the individual and social level. The EASI system reveals non-linearity of Engel curves which – when neglected – can lead to biased estimates of distributional effects. We find that increases in heating prices are more regressive than those in electricity. Furthermore, current proposals for social tariffs are found to be less effective than targeted compensation schemes.

A randomness test for functional panels, with P. Kokoszka and M. Reimherr, *Journal of Multivariate Analysis*, Vol. 151, 2016.

Abstract: Functional panels are collections of functional time series, and arise often in the study of high frequency multivariate data. We develop a portmanteau style test to determine if the cross-sections of such a panel are independent and identically distributed. Our framework allows the number of functional projections and/or the number of time series to grow with the sample size. A large sample justification is based on a new central limit theorem for random vectors of increasing dimension. With a proper normalization, the limit is standard normal, potentially making this result easily applicable in other FDA context in which projections on a subspace of increasing dimension are used. The test is shown to have correct size and excellent power using simulated panels whose random structure mimics the realistic dependence encountered in real panel data. It is expected to find application in climatology, finance, ecology, economics, and geophysics. We apply it to Southern Pacific sea surface temperature data, precipitation patterns in the South-West United States, and temperature curves in Germany.

Research Papers (cont.)

The effect of regulatory scrutiny: Asymmetric cost pass-through in power whole sale and its end, with F. Mokinski, *Journal of Regulatory Economics*, Vol. 45 (2), 2014.

<u>Abstract</u>: We find an asymmetric pass-through of European emission allowance (EUA) prices to wholesale electricity prices in Germany and show that this asymmetry disappeared in response to a report on investigations by the competition authority. The asymmetric pricing pattern, however, was not detected at the time of the report, nor had it been part of the investigations. Our results therefore provide evidence for the deterring effect of regulatory monitoring on firms which exhibit noncompetitive pricing behavior. We do not find any asymmetric pass-through of EUA prices in recent years. Several robustness checks support our results.

Policy works (w/ coauthors)

Evaluierung von Steuervergünstigungen – Teilbericht A: Energie- und Stromsteuern, report for the German Federal Ministry of Finance, 2019.

Zuteilung für Industrieanlagen im EU-ETS nach 2020, insbesondere Analyse und Weiterentwicklung der Carbon-Leakage-Regelung, report for the German Federal Environment Agency, Mannheim/Berlin, 2019.

ZEW Energiemarktbarometer, biannual expert survey published as "ZEWnews" report, responsible 2009-2019.

Fast-improving energy storage technologies wait for EU market reforms, The Conversation, October 2018.

The future of electric vehicles according to experts in the energy sector, The Conversation, February 2018.

Energy Brexit': What are the consequences on both sides of the Channel?, The Conversation, June, 2017.

Sozialpolitische Konsequenzen der Energiewende in Deutschland, report for the German Federal Ministry of Education and Research, 2016.

Geopolitics Move Back up the Agenda: Turmoil in Ukraine and its Impact on Risk Perceptions Among Energy Experts, IAEE Energy Forum, Second Quarter 2015.

Perspectives on the Future of Unconventional Gas in Europe, IAEE Energy Forum Third Quarter, 2013.

Die Versorgungssicherheit seit 2009: Ein Stimmungsbild, Energiewirtschaftliche Tagesfragen, 4/2013.

Indikatoren für die energiepolitische Zielerreichung, commissioned report, 2012.

Energiepolitische Aspekte der Bioenergienutzung: Nutzungskonkurrenz, Klimaschutz, politische Förderung, report for the German Federal Ministry for the Economy, 2011.

Die Entwicklung der Energiemärkte bis 2030, report for the German Federal Ministry for the Economy, 2010.

Retailmarkt für Strom und Gas: Funktioniert der Wettbewerb?, Energiewirtschaftliche Tagesfragen 1/2 2010.

Invited Talks and Panels

Seminar talks: École des Mines and Univ. Paris Dauphine, Paris, May 2014. University of Basel, June 2014. University of Groningen, February 2016.

Invited Panelist:

- Panel discussion on the energy transition, annual conference of the French Economics Association AFSE, 21. June 2017, Nice, FR.
- Panel discussion with Maroš Sevcovic, European Commission Vice President for the Energy Union, three German Federal MoP, and a company representative, Euractive, 10. November 2016, Berlin.
- Panel discussion with Thomas Bareis, Member of the Federal Parliament, Thomas Müller, CEO of MVV Energy AG, and others. Energy ThinkTank 40, 2. July 2013, Heidelberg.

Expert comittees: Europadialog Baden-Württemberg - Fachforum Umwelt, 6/2018, Ministerium der Justiz und für Europa, Baden-Württemberg; Digitalisierung als Motor der Nachhaltigkeit, 8/2016, Ministerium für Energie und Umwelt, Baden-Württemberg; Expertendialog Energie und Klimapolitik, Hans-Seidel-Stiftung.

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TEACHING

Lecture course: *Advanced Microeconomics for doctoral students in business administration*, Mannheim Graduate School of Business, University of Mannheim, Fall/Winter term 2019.

Seminar course: *The economics of energy markets and sustainable energy systems*, Ruprecht-Karls-Universität Heidelberg, winter semester 2017/2018.

Lecture course & tutorial: *Mikroökonomie* 2 (game theory and industrial organisation), Johannes Gutenberg-Universität Mainz, winter semester 2014/2015.

Supervision: Masters and Bachelors theses at U Mannheim and U Heidelberg.

Conferences

Organisation:

Mannheim Energy Conference, 2018, 2017, 2016, 2015, 2014; PhD Student Workshop, International Association for Energy Economists, German Chapter, 2010.

Presentations:

Bergen Center for Competion Law and Economics (BeCCLE) 2019; International Symposium on Energy and Finance, 2018, 2016; Toulouse Energy Conference, 2017, 2015; International Industrial Organisation Conference, 2017; EAERE, 2017, 2015, 2013, 2009; EARIE, 2014, 2008; Royal Economic Society, 2014; Econometric Society World Congress, 2010; EEA-ESEM, 2009; International Energy Workshop, 2008, 2009.

FUNDING

Selected third party funded research and consulting projects

"Local markets for flexibility - electricity prosumers for balancing services in distribution grids". Funded by the Land Baden-Württemberg, 2018-2020.

"Ex-Post Evaluation of Benefits and Costs of Environmental Regulation". German Federal Environmental Agency, 2018-2020.

"Analysis and further development of direct and indirect carbon leakage regulation". German Federal Environmental Agency, 2015-2018.

"Socio-political Impact of the German Energy Transition". German Federal Ministry of Education and Research, 2013 - 2016.

"Future Infrastructures for Meeting Energy Demands.". Helmholtz-Association, 2011-2016

"Modelling Interdependences between prices for energy and CO_2 emission allowances". Sustainable Business Institute, Oestrich-Winkel, 2011-2012

"Climate policy perspectives on the sectoral level for China and Europe". German Federal Ministry of Education and Research, 2010-2011

"Energieprognose". German Federal Ministry of Economics.

SKILLS AND TRAINING

Software: R, Stata, LaTeX (proficient),

GAMS, Mathematica (intermediate),

Python, GAUSS (basics).

Languages: German (native), English (fluent), French (fluent)

EEX Trading Certificate: course & exam successfully completed.

References

Available upon request.