Nadja van 't Hoff

Department of Economics · University of Southern Denmark

+45 93 87 53 58 | navh@sam.sdu.dk | www.nadjavanthoff.com

Research

Primary field: **Econometrics**

Secondary fields: **Causal inference**, **Applied microeconometrics**

My interests are within the field of **microeconometrics**, specifically **causal inference** and **causal machine learning**, especially the methods for identifying and estimating causal effects in case of **many instrumental variables**. I am also interested in the **empirical application** of these methods within **health economics** to evaluate policy interventions using observational data.

Current position

Assistant Professor (non-tenure-track) — *Odense, DK*
University of Southern Denmark — *Mar 2024 - Now*

Education

Ph.D. in Economics — *Odense, DK*
University of Southern Denmark — *Dec 2020 - Feb 2024*
"*Correlation Does Not Imply Causation: Essays in Causal Inference*" under the supervision of Professor Giovanni Mellace
Ph.D. Committee: Toru Kitagawa, Michael Lechner, and Volha Lazuka

Visiting researcher — *Boston, US*
Boston College, host: Arthur Lewbel — *Jan 2022 - Jul 2022*

M.Sc. Econometrics and Management Science — *Rotterdam, NL*
Erasmus University Rotterdam — *Sep 2019 - Nov 2020*

B.Sc. Econometrics and Operations Research — *Amsterdam, NL*
University of Amsterdam — *Sep 2015 - Jan 2019*

University exchange — *Santiago, CL*
Pontificia Universidad Católica de Chile — *Feb 2019 - Jul 2019*

Working papers

Identifying Causal Effects of Nonbinary, Ordered Treatments with Multiple Instrumental Variables
(Job Market Paper)

Abstract: This paper provides new identification results for causal effects of ordered, nonbinary treatments using multiple binary instruments. The key contribution is the identification of a new causal parameter that simplifies the interpretation of causal effects and is applicable in many settings due to a mild monotonicity assumption. This paper further leverages recent advancements in causal machine learning for both estimation and the detection of local violations of the underlying monotonicity assumption. The methodology is applied to estimate the returns to education and assess the impact of having an additional child on female labor market outcomes.

Limited Monotonicity and the Combined Compliers LATE
(R&R Review of Economics and Statistics)
with Arthur Lewbel (Boston College) and Giovanni Mellace (University of Southern Denmark)

Nudging Nutrition: Lessons from the Danish "Fat Tax"
with Christian M. Dahl (University of Southern Denmark), Giovanni Mellace (University of Southern Denmark) and Sinne Smed (University of Copenhagen)

Work in progress

Gender Differences in Healthcare Utilization
with Giovanni Mellace (University of Southern Denmark) and Seetha Menon (University of Southern Denmark)

Heterogeneous Impacts of Microcredit: Insights from Seven Countries Using Generic Machine Learning
with Anna Baiardi (Erasmus University Rotterdam) and Andrea Naghi (Queen Mary University of London)

Optimal Instruments, Realistic Assumptions: Selecting Instruments and Addressing Exclusion Violations in High-Dimensional IV Models
with Giovanni Mellace (University of Southern Denmark)

Behavioral Traits, Substance Abuse, and Life Outcomes: Insights from Mendelian Randomization with UK Biobank Data
with Stephanie von Hinke (University of Bristol), Giovanni Mellace (University of Southern Denmark), and Emil Sorensen (University of Bristol)

Teaching experience

Lecturer – Regression Analysis *Odense, DK*
University of Southern Denmark *Fall 2024*

Lecturer – Statistics for Product Development and Innovation *Odense, DK*
University of Southern Denmark *Fall 2021 & Fall 2022*

Teaching assistant - Microeconometrics *Odense, DK*
University of Southern Denmark *Fall 2020 & Fall 2021*

Academic work experience

Research assistant - Causal machine learning *Rotterdam, NL*
for Andrea Naghi and Anna Baiardi, Erasmus University Rotterdam *Oct 2019 - Nov 2020*

Conference presentations and invited seminars (including scheduled)

2024 Seminar at University of St. Gallen
Danish Digitalization, Data Science and AI Conference (session organizer)
Groningen Workshop on Causal Inference and Machine Learning (invited)
Econometric Society European Meeting
Counterfactual Methods for Policy Impact Evaluation
Aarhus Workshop in Econometrics (invited)
American Causal Inference Conference (poster)
European Causal Inference Meeting (poster)
Royal Economic Society Annual Conference
Seminar at University of Amsterdam

2023 European Winter Meeting of the Econometric Society;
(EC)^2 Conference on "Identification and Inference in Structural Econometric Models" (poster)
Seminar at Lund University
European Association of Labour Economists Conference (poster)
International Association for Applied Econometrics Annual Conference
Siena Workshop on Econometric Theory and Applications
International Workshop on "Machine Learning in Program Evaluation

	High-dimensionality and Visualization Techniques” Italian Congress of Econometrics and Empirical Economics
2022	European Winter Meeting of the Econometric Society Nordic Econometric Meeting

Professional service

Referee service: Empirical Economics

Workshop co-organizer: Women in Economics Denmark Workshop, October 30-31, 2024. Together with Seetha Menon (University of Southern Denmark) and Helena Skyt Nielsen (Aarhus University).

Member of the Equality Committee: Advisory committee of the Faculty of Business and Social Sciences, University of Southern Denmark.

Travel grants

2021	William Demant Fonden	*1500 USD*
2021	Brorson Rejselegat	*3000 USD*
2021	Torben og Alice Frimodt Fonden	*3000 USD*

Skills

Programming	R, Python, HTML, Javascript, SQL
Languages	Dutch (native), German (native), English (fluent), Spanish (basic), French (basic), Danish (basic)

References

Arthur Lewbel
Boston College
lewbel@bc.edu

Andrea Naghi
Queen Mary University of London
a.naghi@qmul.ac.uk

Toru Kitagawa
Brown University
toru_kitagawa@brown.edu

Giovanni Mellace
University of Southern Denmark
giome@sam.sdu.dk