Nadja van 't Hoff

QUANTITATIVE ECONOMICS SECTION · AMSTERDAM SCHOOL OF ECONOMICS · UNIVERSITY OF AMSTERDAM

✉ n.a.l.vanthoff@uva.nl | ⌂ 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** and **development economics** to evaluate policy interventions using observational data.

Academic positions

Assistant Professor (tenure-track)   *Amsterdam, NL*
Econometrics Group, University of Amsterdam   *Sept 2025 - Now*

Assistant Professor (non-tenure-track)   *Odense, DK*
Econometrics and Data Science Group, University of Southern Denmark   *Mar 2024 - Aug 2025*

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*

Publications

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

Working papers

Identifying Causal Effects of Discrete, Ordered and Continuous Treatments using Multiple Instrumental Variables
(Job Market Paper)

Abstract: Inferring causal relationships from observational data is often challenging due to endogeneity. This paper provides new identification results for causal effects of discrete, ordered and continuous treatments using multiple binary instruments. The

key contribution is the identification of a new causal parameter that has a straightforward interpretation with a positive weighting scheme and is applicable in many settings due to a mild monotonicity assumption. This paper further leverages recent advances 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.

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)

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

Work in progress

Shapley Instruments
with Federico Crudu (Università di Siena and CRENoS), Giovanni Mellace (University of Southern Denmark) and Zsolt Sándor (Sapientia Hungarian University of Transylvania)

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)

Behavioral Traits, Substance Abuse, and Life Outcomes: Insights from Mendelian Randomization with UK Biobank Data
with Amy Mason (University of Cambridge) and Giovanni Mellace (University of Southern Denmark)

Teaching experience

Lecturer – Statistics (6 ECTS)   *Amsterdam, NL*
Bachelor students, University of Amsterdam   *Fall 2025*

Teaching assistant – Machine Learning for Econometrics (5 ECTS)   *Amsterdam, NL*
Master students, University of Amsterdam   *Fall 2025*

Co-lecturer – Statistics (10 ECTS)   *Odense, DK*
Bachelor students, University of Southern Denmark   *Spring 2025*

Lecturer – Regression Analysis (10 ECTS)   *Odense, DK*
Bachelor students, University of Southern Denmark   *Fall 2024*

Lecturer – Statistics for Product Development and Innovation (5 ECTS)   *Odense, DK*
Bachelor and Master students, University of Southern Denmark   *Fall 2021 & Fall 2022*

Teaching assistant - Microeconometrics (10 ECTS)   *Odense, DK*
Master students, 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)

2025   Aarhus Workshop in Econometrics (invited)
         Seminar at Siena University (invited)
         Seminar at Tilburg University (invited)

International Association for Applied Econometrics Annual Conference
Italian Congress of Econometrics and Empirical Economics
European Causal Inference Meeting (poster)
Seminar at University of Glasgow

2024   Seminar at University of St. Gallen
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 (invited)

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"
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. January 2024 to June 2025.

Prizes and awards

Prize for the best paper written by young scientists in Theoretical or Applied Microeconometrics (Labour Prize, offered by LABOUR: Review of Labour Economics and Industrial Relations). ICEEE 2025.

Travel grants: (1) William Demant Fonden, (2) Brorson Rejselegat and (3) Torben og Alice Frimodt Fonden. 7500 USD in total obtained in 2021.

Skills

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