

ISABEL HOVDAHL

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Contact Information

Norwegian University of Science and Technology
Department of Economics
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Education

Norwegian University of Science and Technology (NTNU), 2016 to present
Ph.D. Candidate in Economics
Thesis Title: "The economics of climate change: Impacts, mitigation and adaptation"
Expected Completion Date: August 2020

M.Sc., Economics, NTNU, 2016.
B.Sc., Social anthropology, NTNU, 2014.

Affiliations

Visiting PhD student, BI Norwegian Business School Centre for Applied Macroeconomics and Commodity Prices (BI CAMP), 2016-present.

Visiting PhD student, Norwegian Centre for Energy Transition Strategies (NTRANS), 2019-present.

Visiting PhD student, University of Chicago Harris School of Public Policy, 2017.

Research Fields

Primary fields: Environmental economics, climate change
Secondary fields: Econometric modeling, machine learning, technological change

Teaching Experience

2019, '18	Statistics for Economists, Norwegian University of Science and Technology, Lecturer
2019	International Trade, Norwegian University of Science and Technology, Lecturer
2018	Bachelor's Thesis in Economics, Norwegian University of Science and Technology, Teaching Assistant

Fellowships and grants

IAERE Young Environmental Economist Award, 2020

NTNU Teaching fellowship, 2019-2020

NTNU Graduate fellowship, 2016-2019

Research grant, BI CAMP, 2017

Master Thesis collaboration, Norges Bank, 2016

Conference and seminar presentations

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| 2020 | 8th Italian Association of Environmental and Resource Economists Annual Conference (Brescia, Italy) |
| 2019 | University of Chicago EEE PhD Student Workshop (Chicago, US), 24th Annual Conference of European Association of Environmental and Resource Economists (Manchester, UK), 4th Conference on "Econometric Models of Climate Change" (Milan, Italy), University of Reading (Reading, UK), BI Norwegian Business School (Oslo, Norway) |

Research Papers

"Deadly Variation: The Effect of Temperature Variability on Mortality" (**Job market paper**)

Abstract: While economists have focused on the effect of mean temperatures on mortality, climate scientists have emphasized that global warming might not only lead to an increase in mean temperatures, but can potentially also affect temperature variability. This is the first paper to estimate the causal effect of temperature variability on mortality. Using monthly state level data for the US in the period 1969-2004, I offer three main results: (1) Increased monthly temperature variability causes increased mortality, (2) omitting the effect of temperature variability on mortality can severely bias our predictions on the number of temperature-induced fatalities caused by global warming, and (3) adaptation to increased temperature variability is more difficult than adaptation to increased mean temperatures.

"On the use of machine learning for causal inference in climate economics"

CAMP Working Paper Series No 05/2019

Abstract: One of the most important research questions in climate economics is the relationship between temperatures and human mortality. This paper develops a procedure that enables the use of machine learning for selecting the functional form of the causal temperature-mortality relationship. The machine-learning model is compared to a traditional OLS model, and although both models are capturing the causal temperature-mortality relationship, they deliver very different predictions of the effect of climate change on mortality. These differences are mainly caused by different abilities regarding extrapolation and estimation of marginal effects. The procedure developed in this paper can find applications in fields far beyond climate economics.

Miscellaneous

Computing: R, Stata, Python, GIS, \LaTeX

Citizenship: Norway