MIT Economics

KARL M. ASPELUND

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Massachusetts Institute of Technology (MIT) Ph.D., Economics, DOCTORAL

Expected completion June 2025 **STUDIES**

ADVISORS

Professor Ben Olken Professor Tobias Salz

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(617) 253-6833 (617) 715-2266

2017 PRIOR Harvard University

EDUCATION Bachelor of Arts in Environmental Science and Public Policy,

magna cum laude with highest honors (GPA 3.91)

United States of America, Iceland **CITIZENSHIP**

LANGUAGES English (native), Icelandic (native), German (reading)

FIELDS Environmental Economics, Public Finance, Industrial Organization

TEACHING Microeconomic Theory and Public Policy (14.03), 2023

Teaching Assistant to Prof. Tobias Salz EXPERIENCE

RELEVANT Research Associate to Profs. Simon Jäger and Benjamin Schoefer, 2018-2019

PRIOR MIT

POSITIONS Pre-Doctoral Fellow, 2017-2018

Education Innovation Laboratory at Harvard University

Research Intern, 2016

Resources for the Future

Research Intern, 2015

OECD Nuclear Energy Agency

Research Assistant to Prof. Laura Anadon, 2014-2016

Harvard Kennedy School and Belfer Center Arctic Initiative

MIT Graduate Conference Travel Grant, \$500 2023 FELLOWSHIPS,

HONORS, AND AWARDS

US NMFS-Sea Grant Fellowship, \$54,166 per year for up to 3 years 2022-

> George and Obie Shultz Fund, \$5,534, \$8,415 2020, 2021

> 2020-

Graduate Fellow, Minda de Gunzburg Center for European Studies at Harvard University

National Science Foundation Graduate Research Fellowship 2019-2022

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Enel Endowment Prize for Best Undergraduate Thesis in
Environmental Economics

Environmental Science and Public Policy Undergraduate Thesis Prize

Phi Beta Kappa

2017

PROFESSIONAL ACTIVITIES

Refereeing: American Economic Review: Insights

Presentations:

NMFS-Sea Grant Fellows Research Symposium, NOAA HQ (2023) North American Association of Fisheries Economists Forum (2023) Academic Workshop for Icelandic Economists Abroad (2023)

Other Activities:

Berkeley-Sloan Summer School in Environmental & Energy Economics (2020)

RESEARCH IN PROGRESS

"Additionality and Adverse Selection: Evidence from Conservation Auctions" (with Anna Russo)

Incentive programs are a popular policy tool in pursuit of environmental goals, but critics argue that a lack of "additionality" — the extent to which participants change behavior — undermines or even reverses their value. We formalize this policy challenge with a framework in which a regulator incentivizing environmental services, either directly or through the trade of offset contracts, faces a selection market if costs are correlated with treatment effects. We develop an empirical framework to test for, quantify, and evaluate policy in the presence of selection and apply it to the US Department of Agriculture's landmark conservation program, the Conservation Reserve Program. Participants bid for conservation contracts in a scoring auction, and we compile a unique dataset linking bids to incentivized outcomes to estimate both unobserved conservation costs and marginal treatment effects. We first examine treatment effects of contracting in a regression discontinuity design around the winning score and document evidence consistent with additionality concerns: only 27% of participants change behavior. We then develop and estimate a joint model of bidding and potential outcomes to evaluate welfare and policy counterfactuals. We document evidence of adverse selection — quantities traded in offset markets would be 25% below efficient levels — and substantial welfare gains of 32-80% from setting differentiated prices across participants. Finally, we present alternative auction designs that could increase welfare by over 90% relative to the status quo.

"Who Gets the Fish? Labor Reallocation and Permit Markets"

Reacting to depleted environmental commons, governments design regulations that reduce extraction from the commons through the exit of firms and workers. A motivation to ease disruptions in local communities—i.e. maintaining jobs—might make a government keep less productive firms in the commons while lessening the cost of transitions in local communities. The tension depends on the assortative matching of firms to workers and the existing frictions in the labor market. I investigate this tension in the Icelandic fisheries, where a comprehensive tradable permit market was put in place and it is possible to link individual fishers both to their vessels' catch and characteristics and to comprehensive tax data that tracks their employment and

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earnings histories even outside of the fisheries. With this unique data, I can investigate the earnings and employment outcomes of crewmembers who exit the fishery after the tradable permit system is imposed, to understand the nature of the outside options available to fishers across a variety of demographic characteristics. I will assess productivity at the firm and worker level to show the degree to which the market-based scheme caused the most productive firms to exit and how that relates to the exit of the most productive workers. Using a simple fixed-effects exercise, I find that the exit induced by introduction into the permit market causes low-productivity workers to exit and their incomes to fall. The correlation between the comparative advantage of workers and the productivity of firms will inform how counterfactual regulations targeting firms of different productivities would impact labor markets.

OTHER RESEARCH

With Michael C. Droste, James H. Stock, and Christopher D. Walker. 2020. "Identification and Estimation of Undetected COVID-19 Cases Using Testing Data from Iceland." NBER Working Paper No. 2752.

With Jan-Horst Keppler. 2018. Chapters 5 and 8. In *Full Costs of Electricity Provision*. OECD: Paris, France.