

NATALIE R. LODUCA

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EDUCATION

PhD	Agricultural, Food, and Resource Economics, Michigan State University Advisor: Dr. Scott Swinton	exp. 2024
MS	Agricultural Economics, Purdue University Advisor: Dr. Carson Reeling	2020
BS	Managerial Economics, University of California, Davis Minor in Statistics	2016

JOB MARKET PAPER

“Farmers’ Risk Preferences in General versus Contextual Lottery Experiments” with Scott M. Swinton. In progress.

Understanding farmers’ risk attitudes is critical to predicting their decisions about climate change adaptation. This research empirically estimates the risk aversion of Michigan corn-soybean farmers based on general lottery choices that we compare to lottery choices presented in a crop farming context. We find that in the context of agricultural investment decisions and in general lottery gambles, participants have decreasing absolute risk aversion. This means that as wealth increases individuals are willing to take on more risk. However, for general lottery gambles, participants are willing to invest a higher proportion of wealth in risky assets as wealth increases while the opposite is true in the context of agricultural investments. These findings provide evidence that results from contextual experiments can differ from results in a general context due to participants’ prior knowledge and experiences.

SELECTED ONGOING PROJECTS

“How Scale and Scope of Ecosystem Markets Impact Permit Trading: Evidence from Partial Equilibrium Modeling in the Chesapeake Bay Watershed” with Iman Haqiqi, Jing Liu, and Carson J. Reeling. In progress.

This paper uses the Simplified International Model of agricultural Prices, Land use and the Environment, on a Grid model (SIMPLE_G), a national-scale partial equilibrium model of agricultural production, to analyze the effects of market-based pollution abatement policies on the behavior of agricultural producers in the Chesapeake Bay Watershed. We simulate how permit trading affects producers’ input use decisions and pollution emissions by modifying the supply nest structure of the model to include water quality, habitat, and carbon permits as an additional output from agricultural production. This allows us to explore the consequences of regional-scale stacking policies or how the scope of the market affects pollution abatement and input use.

RESEARCH EXPERIENCE

Research Assistant , Michigan State University, East Lansing, MI Advisor: Dr. Scott Swinton	2020-present
Intern , U.S. Department of Agriculture Economic Research Service, Remote Advisor: Dr. Sun Ling Wang	2023
Research Assistant , Purdue University, West Lafayette, IN Advisor: Dr. Carson Reeling	2018–2020

HONORS AND AWARDS

KBS-LTER Graduate Research Fellowship Kellogg Biological Station, Michigan State University	2022
Agricultural Economics' Outstanding Thesis Purdue University	2021
Agricultural Research Graduate Diversity Research Fellowship Purdue University	2018-2019

INVITED PRESENTATIONS

Agricultural & Applied Economics Association Annual Meeting, Washington, D.C.	2023
NSF Long-Term Ecological Research All-Scientist Meeting, Monterey, CA	2022
Agricultural & Applied Economics Association Annual Meeting, Virtual	2020
US-China Young Professional Forum, West Lafayette, IN	2019
Agricultural & Applied Economics Association Annual Meeting, Atlanta, GA	2019

PROFESSIONAL SERVICE

Graduate Student Representative , Committee on Women in Agricultural Economics Agricultural & Applied Economics Association	2021 – 2023
Social Media Team , Committee on Women in Agricultural Economics Agricultural & Applied Economics Association	2020 – 2023
Award Committee , Department of Agricultural Economics Purdue University	2019-2020

PROGRAMS

Stata, R studio, GAMS, ArcGIS

REFERENCES

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