

Shuwei Zeng

szeng8@wisc.edu | +1-608-698-0662 | 427 Lorch St. Madison, WI 53706

EDUCATION

University of Wisconsin - Madison	Madison, WI
Ph.D. Candidate in Agricultural and Applied Economics	Expected May 2019
· <i>STEM degree</i>	
Central University of Finance and Economics	Beijing, China
M.S. in Regional Economics	2014
Beijing Information Science and Technology University	Beijing, China
B.S. in Electrical and Computer Engineering	2011
· <i>National scholarship and distinguished graduation award</i>	

RESEARCH INTERESTS

Industrial organization, Applied Microeconomics, Machine Learning	
· Causal inference for policy evaluation	· Productivity and sustainability analysis
· Dynamic pricing	· Time series and forecast analysis

PROFESSIONAL EXPERIENCES

Research Fellow at Credit Union National Association	2018
Causal Inference of Institutional Structures on Mortgage Lending Decisions	
· Employed <i>regression trees</i> and <i>propensity score matching</i> to identify heterogeneous causal effects of profit/non-profit financial institutions in lending decisions towards people of color	
· Increased predictive accuracy in lending decisions by 23.6% compared with logistic regression	
· Managed and estimated 42 million mortgage application data in <i>SQL</i> and <i>R</i>	
Visiting scholar at National University of Ireland Galway	2017
Counterfactual Analysis and Policy Evaluation on Investment Decision and Supply Response	
· Designed and conducted <i>field research</i> on farmers' production and financial behaviors in Galway, Ireland	
· Constructed structural model and utilized <i>dynamic programming</i> in <i>Matlab</i> to identify impacts of anticipating European Union milk quota elimination on investment and supply responses	
· Simulation results indicate Irish dairy farms increased capital investment by 56% and milk supply and 27% three years before the actual elimination of production quota	
Teaching Assistant at University of Wisconsin - Madison	2018
Python Programming in Economic Decision Analysis	
· Provided training in Python and data science to undergraduate students, including data visualization (pandas, matplotlib) and linear optimization (PuLP)	

ACADEMIC PROJECTS

Time Series Analysis and Consumer Demand Estimation on Asymmetric Price Transmission	2016
· Performed <i>vector error correction model</i> (VECM) to test asymmetric price responses in US fluid milk market	
· Estimated consumer demand and calculated market concentration (Herfindahl-Hirschman index) to investigate dynamic price mechanism	
· Results indicate kinked consumer demand and high retailer market power drive retail milk prices to rise faster and to fall slower regarding fluctuation in farm-gate price	
Environmental and Technical Productivity and Impact of Technology Adoption	2017
· First empirical study using Copula method to model correlation between environmental and technical productivity	
· Uncovered impacts of technology adoption and production scale on technical and environmental performance	
· Quantified greenhouse gas emission in U.S. dairy farms using <i>life cycle assessment</i> approach	
Price Forecasting Analysis with VARX Model	2015
· Employed <i>vector autoregression with exogenous explanatory variable</i> (VARX) model forecasting U.S. farm-gate milk price that consolidated fluctuations in butter, cheese and dry whey prices	
· Achieved accuracy with forecast mean square error (FMSE) to actual price ratio ranging in 0.005 - 0.063	

SKILLS

Python, R, Matlab, Stata, SQL, Tableau, ArcGIS, LaTeX

FELLOWSHIPS & AWARDS

Scholarship of Cooperative Leaders and Scholars Institute	2018
Conference Travel Grant, University of Wisconsin - Madison	2018
Graduate Assistantship, University of Wisconsin - Madison	2015-2017
Outstanding Prize in Undergraduate Mathematical Modeling Competition, China	2011
National Scholarship, China	2010

CONFERENCE & SEMINAR PRESENTATIONS

Cooperative Impact Conference, Arlington, VA	2018
Credit Union National Association Brown-Bag Seminar, Madison, WI	2018
Agricultural and Applied Economics Association (AAEA) Annual Meeting, Washington, DC	2018
AAEA Annual Meeting, Chicago, IL	2017
Teagasc Walsh Fellowship seminar, Galway, Ireland	2017
Agricultural Economics Society Annual Meeting, Dublin, Ireland	2017
University of Wisconsin - Madison Applied Economics Workshop, Madison, WI	2016
AAEA Annual Meeting, Boston, MA	2016

SERVICES & ACTIVITIES

Treasurer of Department of Agricultural and Applied Economics, UW - Madison	2017
Selected Paper Session Coordinator at AAEA Annual Meeting	2016
Research Intern at Bank of China Head Office	2012
Financial Intern at BMW Brilliance Co.,Ltd. Beijing Branch	2011
Volunteer in 2008 Beijing Olympic Games	2008