

ANDREW W. STEVENS

Curriculum vitae

UNIVERSITY OF CALIFORNIA – BERKELEY
Department of Agricultural and Resource Economics
PhD Candidate, Graduate Student Researcher

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EDUCATION

UNIVERSITY OF CALIFORNIA – BERKELEY
Ph.D., Agricultural and Resource Economics expected, May 2017
Dissertation: *Agricultural & Environmental Interdependencies:
Microeconomic Evidence from the United States*
Committee: Peter Berck (Chair), Solomon Hsiang, and David Sunding
M.S., Agricultural and Resource Economics 2013

UNIVERSITY OF CHICAGO
A.B. with General Honors, Economics 2012

FIELDS OF CONCENTRATION

Primary: Agricultural Economics, Environmental & Natural Resource Economics
Secondary: Applied Econometrics, Public Economics

PUBLICATIONS

Berck, P., J. Moe-Lange, **A. Stevens**, & S. Villas-Boas (2016). “Measuring Consumer Responses to a Bottled Water Tax Policy.” *American Journal of Agricultural Economics*, 98(4): 981-996. (Lead article; [link](#))

Stevens, A., P. Berck, & S. Villas-Boas (2016). “Taxing Bottled Water as an Environmental Policy.” *Agricultural and Resource Economics Update*, 19(4): 9-11. University of California Giannini Foundation of Agricultural Economics. ([link](#))

WORKING PAPERS

Stevens, A. (2016). *Temperature, Wages, and Agricultural Labor Productivity*. Working Paper. ([link](#))
[JOB MARKET PAPER]

Stevens, A. (2015). *Quinoa Quandary: Cultural Tastes and Nutrition in Peru*. (Revise & Resubmit: *Food Policy*) ([link](#))

Stevens, A. (2015). *Fueling Local Water Pollution: Ethanol Refineries, Land Use, and Nitrate Runoff*. Working Paper. ([link](#))

Hilger, J., E. Hallstein, **A. Stevens**, & S. Villas-Boas (2015). *Measuring Willingness to Pay for Environmental Attributes in Seafood*. Working Paper. ([link](#))

Burlig, F. & **A. Stevens** (2014). *Reap What Your Friends Sow: Church Mergers and Technology Adoption in the Upper Midwest*. Working Paper. ([link](#)) – note: linked draft lists F. Burlig as F. Wilkes

PRESENTATIONS

- 2017 Allied Social Sciences Associations (ASSA) Annual Meeting (Chicago, IL)
- 2016 University of Minnesota Department of Applied Economics; Heartland Environmental & Resource Economics Workshop (Urbana–Champaign, IL); University of California – Berkeley Department of Economics Labor Lunch; All-California Labor Economics Conference (Davis, CA); University of California – Berkeley Department of Agricultural & Resource Economics; Agricultural & Applied Economics Association (AAEA) Annual Meeting (Boston, MA); University of California – Berkeley Center for Teaching & Learning
- 2015 University of Chicago Program on the Global Environment; AAEA Annual Meeting (San Francisco, CA); Association of Environmental & Resource Economists (AERE) Annual Summer Conference (San Diego, CA); Giannini Agricultural & Resource Economics Student Conference (Riverside, CA); East Bay Alliance for a Sustainable Economy (Oakland, CA)
- 2014 University of Minnesota Department of Applied Economics; USDA Economic Research Service (x2); Columbia University Interdisciplinary PhD Workshop in Sustainable Development; Giannini Agricultural & Resource Economics Student Conference (Davis, CA)
- 2012 Evangelical Lutheran Church in America World Hunger (Chicago, IL); University of Chicago Undergraduate Research Symposium
- 2011 Indiana University Hoosier Area Food & Sustainability Symposium; University of Chicago Undergraduate Research Symposium

FELLOWSHIPS, HONORS, AND AWARDS

Graduate Student Teaching Award	2016
Agricultural & Applied Economics Association	
Graduate Student Assessment Fellowship	2015 – 2016
University of California – Berkeley, Center for Teaching & Learning	
Chester O. McCorkle, Jr. Student Scholarship	2015
Agricultural & Applied Economics Association	
Outstanding Graduate Student Instructor Award	2015
University of California – Berkeley	
Student Research Fellowship	2015
University of California Berkeley Food Institute	

University of Chicago T. Kimball Brooker Prize 2012
Food for Thought: the History, Economics, and Politics of Agriculture

RESEARCH AND PROFESSIONAL EXPERIENCE

UNIVERSITY OF CALIFORNIA – BERKELEY
Department of Agricultural & Resource Economics
Graduate Student Researcher 2012 – present

USDA Economic Research Service (ERS) – Washington, DC
Student Trainee (Economics) 2014

Nuveen Investments – Chicago, IL
Consultant, Investment Services 2012

UNIVERSITY OF CHICAGO
Environment, Agriculture, & Food Working Group
Research Assistant, Workshop Coordinator 2010 – 2012

Becker Friedman Institute for Research in Economics
Conference Assistant 2009 – 2012

UNIVERSITY OF MINNESOTA, TWIN CITIES
Department of Applied Economics
Research Assistant 2009

GRANTS

Giannini Foundation Mini-Grant (with Prof. Larry Karp; \$26,306) 2015
Estimating Agricultural Acreage Responses to Input Prices: Groundwater in California

University of California – Berkeley Student Technology Fund (\$5,000) 2015
with the Department of Agricultural & Resource Economics (Janna Conway-Hamilton)

TEACHING EXPERIENCE

Certificate in Teaching and Learning in Higher Education 2015
University of California – Berkeley Graduate Division ([link](#))

Workshop Leader, University of California – Berkeley Teaching Conference for New GSIs 2015 – 2016

UNIVERSITY OF CALIFORNIA – BERKELEY
International & Area Studies (IAS) 106 – *Acting Instructor-Graduate Student (AI-GS)* 2016
Intermediate Microeconomic Theory

Environmental Economics and Policy (EEP) 162 – *Graduate Student Instructor (GSI)* 2014 – 2016
Economics of Water Resources (Upper-division undergraduate course)

Environmental Economics and Policy (EEP) 142 – *Reader* 2013
Industrial Organization with Applications to Agriculture and Natural Resources
(Upper-division undergraduate course)

CALIFORNIA STATE UNIVERSITY, FRESNO
Earth and Environmental Sciences (EES) 270 – *Lecturer* 2015
Water Economics (Online Master’s-level course)

SERVICE

Member – Student Technology Committee Dept. of Agricultural & Resource Economics, University of California – Berkeley	2015 – present
Student Volunteer – Economic Research Service, USDA	2014 – present
Rules Officer – Graduate Assembly, University of California – Berkeley	2016 – 2017
Member – Committee on Courses of Instruction <i>University of California Academic Senate, Berkeley Division</i>	2015 – 2016
Delegate – Graduate Assembly, University of California – Berkeley	2015 – 2016
Member – Organizing Committee <i>Giannini Agricultural & Resource Economics Student Conference (GARESC)</i>	2014 – 2016
Member – University of Chicago Senior Class Gift Committee	2011 – 2012

PROFESSIONAL ENRICHMENT

AAEA Post-Conference Workshop; San Francisco, CA <i>Applying Behavioral and Experimental Economics to Food and Agri-Environmental Issues</i>	2015
Alliance Summer School in Science and Policy; Paris, France <i>Food, Water, and Energy: Interdependencies and Tensions</i>	2015
AERE Workshop: <i>Field Experiments: Design, Methods, and Applications</i> ; San Diego, CA	2015

REFEREE & REVIEW SERVICE

American Journal of Agricultural Economics; Economic Development and Cultural Change; Rhode Island Sea Grant

PROFESSIONAL AFFILIATIONS

American Economic Association (AEA) – member
Agricultural & Applied Economics Association (AAEA) – member
Association of Environmental & Resource Economists (AERE) – member
USDA Economists Group – member

POPULAR PRESS

<i>Taxes on bottled water are better at raising money than reducing litter</i> LSE United States American Politics and Policy Blog (link)	December 6, 2016
Guest Editorial – <i>Consumers Respond to a Tax on Bottled Water</i> Today’s Grocer 58(4), pg. 6 (link)	July, 2016
Interview – Berkeley, CA Podcast, <i>This Is Berkeley</i> (link)	April 27, 2016
Interview – Berkeley, CA KALX 90.7 FM, <i>The Graduates</i> (link)	June 3, 2014

ADDITIONAL INFORMATION

Languages: English (native), French (conversational)
Computer Programs: STATA, L^AT_EX, MATLAB, R, ArcGIS

ABSTRACTS

Temperature, Wages, and Agricultural Labor Productivity [JOB MARKET PAPER]

Agricultural laborers frequently work for piece rate wages – where they are paid per unit of output rather than per unit of time – based on the assumption that these wages incentivize productivity. In this paper, I exploit quasi-experimental variation to estimate the elasticity of labor productivity with respect to piece rate wages by analyzing a high-frequency panel of over 2,000 blueberry pickers on two California farms over three years. To account for endogeneity in the piece rate wage, I use the market price for blueberries as an instrumental variable. I find that picker productivity is very inelastic on average, and I can reject even modest elasticities of up to 0.7. However, this average masks important heterogeneity across outdoor working conditions. Specifically, at temperatures below 60°F, I find that higher piece rate wages *do* induce increases in labor productivity. This is suggestive evidence consistent with a model where at moderate to hot temperatures, workers face binding physiological constraints that prevent them from exerting additional effort in response to higher wages. This insight has important implications for understanding how climate change will affect the agricultural labor sector. (JEL codes: J24, J31, J43, Q12, Q54)

Measuring Consumer Responses to a Bottled Water Tax Policy (2016), with Peter Berck, Jacob Moe-Lange, and Sofia Berto Villas-Boas. *American Journal of Agricultural Economics*, 98(4): 981-996)

Using panel data of retail purchases, we measure the effects of the introduction, and later removal, of a bottled-water tax in the state of Washington. We use a difference-in-differences approach to measure effects of the tax against untreated stores (in comparable control states) and untreated weeks (the pre-period). We further estimate triple-difference specifications comparing bottled water to juice and milk substitute products. Our results show that, when imposed, the tax causes bottled water sales to drop by nearly 6% in our preferred specification. Sales never fully recover, even after the tax removal. In terms of the heterogeneity of this effect, we find larger quantity drops in high tax rate areas and in the lowest and highest quintile income areas. (JEL codes: C23, D12, H20, H23, Q53)

Quinoa Quandary: Cultural Tastes and Nutrition in Peru (Revise & Resubmit, *Food Policy*)

Using a model of household food demand that incorporates regional preferences (tastes) for culturally appropriate food, I investigate whether tastes for quinoa in the Puno region of Peru reduce household nutrition intakes when quinoa prices dramatically increase between 2004 and 2012. Adapting a model of household food demand and utilizing data from a national Peruvian household survey (ENAHO), I am able to deconstruct regional changes in household nutrition over time into several general equilibrium effects; in particular, I isolate the effect of regional tastes for quinoa on nutrition outcomes. This effect is identified by an exogenous spike in quinoa prices driven by international demand for quinoa. While I find evidence that regional tastes for quinoa do exist in the Puno region, these tastes do not have a statistically significant impact on nutrition outcomes. My results suggest that tastes for culturally appropriate food do not meaningfully affect household nutrition if the food in question is a sufficiently small component of a households overall diet. (JEL codes: D12, I12, O15, R22)

Fueling Local Water Pollution: Ethanol Refineries, Land Use, and Nitrate Runoff

Ethanol production in the United States, driven by federal renewable fuel policy, has exploded over the past two decades and has prompted the construction of many ethanol refineries throughout the US Corn Belt. These refineries have introduced a new inelastic demand for corn in the areas where they were built, reducing basis for nearby farmers and effectively subsidizing local corn production. In this paper, I explore whether and to what extent the construction of new ethanol refineries has actually increased local corn acreage. I also explore some environmental effects of this acreage increase. Using a thirteen year panel of over two million field-level observations in Illinois, Indiana, Iowa, and Nebraska, I estimate a net increase of nearly 300,000 acres of corn in 2014 relative to 2002 that can be attributed to the placements of new ethanol refineries. This increase comprises approximately 0.75% of the total 2014 corn acreage within my dataset. Furthermore, this effect is separate from the general equilibrium effect of ethanol policy increasing aggregate demand for corn. Back-of-the-envelope calculations suggest that over 21,000 tons of the nitrogen applied to fields in my sample in 2014 can be attributed to refinery location effects. Essentially all of these observed effects occur only in areas within 30 miles of an ethanol refinery, suggesting that refineries have meaningful localized impacts on land use and environmental quality such as nitrate runoff. (JEL codes: Q15, Q16, Q53)

Reap What Your Friends Sow: Church Mergers and Technology Adoption in the Upper Midwest, with Fiona Burlig

How do social networks impact technology adoption? We present a model of the effects of social network size on information and technology take-up and test its implications using a unique natural experiment in the mid-20th century US Midwest. We find that social network expansions, in the form of mergers between congregations of the American Lutheran Church, led to increased rates of agricultural technology adoption among farmers. In counties that experienced a merger, the number of farms using nitrogen fertilizer increased by over 7% and the total fertilized acreage increased by over 13% relative to counties without a merger. We provide evidence that these effects are driven by increased information sharing between farmers as a result of these congregational mergers. (JEL codes: D83, O33, Q16, Z12)

REFERENCES

Maximilian Auffhammer

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Peter Berck

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