

## Chrystie T. Burr

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CONTACT INFORMATION	Assistant Professor of Economics Department of Economics The University of Colorado at Boulder Economics Building Rm 11 Boulder, Colorado 80309-0256	Office: +1-303-492-0863   Mobile: +1-520-647-6420   Fax: +1-303-492-8960   E-mail: chrystie.burr@colorado.edu   <a href="http://spot.colorado.edu/~chbu2511">http://spot.colorado.edu/~chbu2511</a>
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EDUCATION **The University of Arizona**, Tucson, AZ

Ph.D., Economics, August 2013

- Thesis Topic: *Essays on Environmental and Political Economics*
- Areas of Study: Environmental and Energy Economics (primary), Industrial Organization, Applied Microeconomics

M.S., Industrial Engineering, December 2007

- Thesis Topic: *Dynamic Cournot Oligopoly with Output Adjustment Costs*
- Areas of Study: Game Theory, Simulation, Optimization

B.S., Physics, August 2003

- Minor in Science Education

AWARDS & FELLOWSHIPS

- CLARK data grant, 2014.
- RASEI Affiliate, 2013-present.
- Summer Research Fellowship, Resources for the Future, 2011
- Institute on Computational Economics Fellow, University of Chicago, 2011
- Fulbright Fellowship finalist, 2011

**The University of Arizona**

- Donald Wells Fellowship for Excellence in Teaching, Spring, 2012
- Institute of Environment Graduate Student Travel Grant, Fall 2010
- Arizona Diversity Scholarship, 2008–2009

STATISTICAL & TECHNICAL SKILLS

Proficient in Matlab, Mathematica, Stata, SAS. R, LaTeX, MS Word, Excel, Power-Point, Access, ArcGIS, Tableau. Competent in handling large data and linking multiple data sets.

LANGUAGE

English (proficient in speaking, reading and writing), Chinese (native language)

EMPIRICAL RESEARCHES

[1] Burr, C. Subsidies and Investments in the Solar Power Market. (Revision requested by the *International Economic Review*)

*Summary:* This paper estimates a forward-looking consumer demand model to study the effect of solar subsidies, using data from the California Solar Initiative program, for 2007-2011. I find that tax credits and program subsidies were jointly responsible for about 80% of solar adoptions. The subsidies were an inefficient use of social resources unless the social harm from carbon emissions exceeded \$124 per ton. I also show that feed-in-tariff produced more efficient outcomes than capacity-based subsidies.

[2] Burr, C. and K. Nosal. Shale Gas Extraction, Neighborhood Choice, and Externalities, 2017.

*Summary: This paper uses data on households choices of neighborhoods and mineral rights leases to measure households aversion to living in a neighborhood with fracking activities. We also estimate the profit flow from leasing royalties. The results have potential implications for optimal regulation of fracking in residential areas.*

- [3] Burr, C. and C. de Bartolomé. The Short Run and Long Run Impact of Fracking on Local Public Finances, 2018.

*Summary: This empirical paper examines the claim that oil and gas revenues create benefits for local schools and governments by increasing the tax base. Using Colorado data from 2007 to 2015, we show that these revenues help county finances but produce no increase in funding for public schools.*

- [4] Burr, C. and L. McKenzie. Sorting or Exposure? Birth Outcomes from Unconventional Oil and Gas Developments: Evidence from Colorado, 2018.

*Summary: This empirical paper uses a unique panel data set assembled from various administrative and proprietary data sources. By properly controlling for mother's exposure to the oil and gas developments and the family's social economic status, we find that oil and gas activities have no impact on infant birth outcomes.*

- [5] Burr, C. and S. Mendez. Evaluating the Impact of Soda Tax, 2018.

*Summary: This paper study the impact of soda tax in Berkeley using the random utility framework. We use the Nielsen scanner data set to study consumer's soda purchasing behavior before and after the soda tax implementation.*

THEORETICAL  
RESEARCHES

- [6] Burr, C., L. Gardini and F. Szidarovszky. Discrete Time Dynamics Oligopolies with Adjustment Constraints. *Journal of Dynamics and Games*, 2(1): 65-87. 2015.

**Summary:** *This paper studies the dynamic price and quantity behavior of a classical  $n$ -firm oligopoly with linear demand and cost functions, given the non-standard but realistic assumption that output adjustments are bounded.*

- [7] Amir, R. and C. Burr. Corruption and Socially Optimal Entry. *Journal of Public Economics*, 123: 30-41. 2015.

**Summary:** *This paper investigates an industry where entry is regulated but its decisions are affected by bribes. This tends to produce monopoly outcomes, but that outcome can be preempted by setting the number of licenses in advance or by establishing two independent licensing authorities.*

- [8] Burr, C., M. Knauff, and M. Maret. On the Prisoner's Dilemma in R&D with Input Spillovers. *Mathematical Social Sciences*, 66(3): 254-261. 2013.

**Summary:** *This paper shows that the standard result that competition in R&D (KMZ model) leads a Prisoners Dilemma extends to another commonly used (AJ) model whenever the spillover effects and R&D costs are low.*

REFEREE  
SERVICES

*Journal of Public Economics, Journal of Economics & Management Strategy, Journal of Applied Econometrics, Journal of Public Economic Theory, Journal of International Tax and Public Finance, Energy Journal.*

CONFERENCE AND  
SEMINAR  
PRESENTATIONS

“Shale Gas Extraction, Neighborhood Choice, and Externalities”. Association of Environmental and Resource Economists annual meeting (2016).

“Subsidies and Investments in the Solar Power Market”. Intersolar annual meeting (2015), Southern Economics annual meeting (2015), Colorado State University (2014), Colorado School of Mines (2014), Georgia Institute of Technology (2013), La Trobe University (2013).

TEACHING  
EXPERIENCE

**The University of Colorado, Boulder, CO**

*Instructor*

- ECON 8757: Graduate Empirical Industrial Organization Fall semester 2016
- ECON 4697: Industrial Organization Spring semester 2014, 2015, 2016, 2018
- ECON 4848: Applied Econometrics Spring and Fall 2014, 2015, 2016, 2017, 2018

*Ph.D. Student Primary Adviser*

Samara Mendez (6th year graduate students)

*Ph.D. Student Dissertation Committees (status and post-graduation placement in parenthesis)*

Richard Peterson

Tyler Mangin

Alex Hill (Clinical Assistant Professor at the Arizona State University)

Xin Zhao (Assistant Professor at University of International Business and Economics)

Yibei Liu (Assistant Professor at Yale NUS College in Singapore)

*Undergraduate Honors Student Primary Adviser*

Patrick Rodriguez (Summa Cum Laude, Chicago Law School)

Benjamin Schefrin

**The University of Arizona, Tucson, AZ**

*Instructor*

- ECON 373: Environmental Economics Spring semester 2011-2012
- ECON 200: Basic Economic Issues Winter session 2010

*Teaching Assistant*

2010 to 2012

- ECON 373: Environmental Economics (Instructor: Paul Portney)
- ECON 460: Industrial Organization (Instructor: Gautam Gowrisankaran)
- ECON 361: Intermediate Microeconomics
- ECON 452: Information Economics and the Internet
- ECON 101: Individuals and Society
- ECON 550: Economics for Managers

*Research Experience and Employment*

2002 to 2010

- Research Assistant for Prof. Fishback, University of Arizona (2010)
- Research Assistant for Arizona Research Institute for Solar Energy, University of Arizona (2009-2010)
- Research Assistant for the Institute of Earth Environment, Chinese Academy of Sciences (2007)
- Research Assistant, NSF-Arizona Accelerator Mass Spectrometry Laboratory, University of Arizona (2002-2004)