

GABRIEL A. LOZADA

PERSONAL DATA

Date of Birth: April 7, 1959

Home Address:
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EDUCATION

Ph.D., Economics, Stanford University, 1987
M.A., Economics, Stanford University, 1984
M.S., Engineering-Economic Systems, Stanford University, 1983
B.S., Physics, Louisiana State University (Baton Rouge), 1981
B.A., Economics, Louisiana State University (Baton Rouge), 1981

TEACHING or RESEARCH FIELDS

Resource and Environmental Economics
Microeconomics
Dynamic Economics
Mathematical Economics
Personal Finance

ACADEMIC POSITIONS

Associate Professor, Department of Economics, University of Utah, 1998–present.
Assistant Professor, Department of Economics, University of Utah, 1993–1998.
Assistant Professor, Department of Economics, Texas A&M University, 1987–1993.
Ciriacy-Wantrup Fellow, Energy and Resources Group, University of California at Berkeley, 1991–1992.
Instructor, Department of Economics, Texas A&M University, 1986–1987.
Teaching Assistant, Department of Economics, Stanford University.
 Graduate Microeconomics, Autumn 1984
 Economic Development, Winter 1985
Teaching Assistant, Department of Physics, Louisiana State University, Spring 1981.
Instructor, Freshman Physics Lab (Newtonian Mechanics, Thermodynamics)

PUBLICATIONS

Sole author unless explicitly indicated otherwise.

- “The Hotelling Rule for Entropy-Constrained Economic Growth.” *Ecological Economics*, 2017, vol. 133 issue C, pp. 35–41. <http://dx.doi.org/10.1016/j.ecolecon.2016.10.022>
- “Entropy, Free Energy, Work, and other Thermodynamic Variables in Economics.” *Ecological Economics*, January 2006, vol. 56 no. 1, pp. 71–78.
- “Constructing Age-Dependent Portfolios.” *Journal of Personal Finance*, 2004, vol. 3 no. 4, pp. 59–75.
- “Entropy and the Economic Process.” In Cutler J. Cleveland, ed., **Encyclopedia of Energy**, 2004, Volume 2, 471–478. Amsterdam: Elsevier.
- “Review of Malte Faber, John Proops, and Stefan Speck’s *Capital and Time in Ecological Economics: Neo-Austrian Modelling*.” *Zeitschrift für Nationalökonomie*, 2001, vol. 74 no. 2, pp. 215–220.
- T. Randolph Beard and Gabriel A. Lozada, **Economics, Entropy and the Environment: The Extraordinary Economics of Nicholas Georgescu-Roegen**. 1999. Cheltenham, United Kingdom: Edward Elgar.
- “The Role of Entropy and Energy in Natural Resource Economics.” In J. M. Goudy and Kozo Mayumi, eds., **Bioeconomics and Sustainability: Essays in Honor of Nicholas Georgescu-Roegen**. 1999. Cheltenham, United Kingdom: Edward Elgar.
- “Existence of Equilibria in Exhaustible Resource Industries: Nonconvexities and Discrete Time.” *Journal of Economic Dynamics and Control*, January 1996, pp. 433–444.
- “Resource Depletion, National Income Accounting, and the Value of Optimal Dynamic Programs.” *Resource and Energy Economics*, August 1995, pp. 137–154.
- “Georgescu-Roegen’s Defense of Classical Thermodynamics Revisited.” *Ecological Economics*, July 1995, pp. 31–44.
- “Existence and Characterization of Discrete-Time Equilibria in Extractive Industries.” *Resource and Energy Economics*, September 1993, pp. 249–254.
- “The Conservationist’s Dilemma,” *International Economic Review*, August 1993, pp. 647–662.
- “A Defense of Nicholas Georgescu-Roegen’s Paradigm.” *Ecological Economics*, June 1991, pp. 157–160.
- “Georgescu-Roegen’s Critique of Statistical Mechanics Revisited.” In J. C. Dragan, E. K. Seifert, and M. C. Demetrescu, editors, **Entropy and Bioeconomics: Proceedings of the First International Conference of the European Association for Bioeconomic Studies**, Rome, Italy: Nagard (1993), pp. 389–398.

Leonardo Auernheimer and Gabriel A. Lozada, "On the Treatment of Anticipated Shocks in Models of Optimal Control with Rational Expectations: An Economic Interpretation." *American Economic Review*, March 1990, pp. 157–169.

G. Randolph Rice and Gabriel A. Lozada, "The Effects of Unemployment and Inflation on the Income Distribution: A Regional View." *Atlantic Economic Journal*, July 1983, pp. 12–21.

WORKING PAPERS

Sole author unless explicitly indicated otherwise.

"A Modification of the 4% Rule which is Time-Consistent." <http://content.csbs.utah.edu/~lozada/BackwardInductionDraft.pdf>

"Heirs Do Not Always Do Better When Retirees Eschew Annuities." http://content.csbs.utah.edu/~lozada/annuity_breakeven_HS60_2.pdf (*Mathematica* code only)

"Retirement Saving: Which are the Important Years?" <http://content.csbs.utah.edu/~lozada/ImportantYears.pdf>

"Is Cost-Benefit Analysis Always Complete and Transitive? The Case of a Two-Good, Two-Person Economy." (<http://content.csbs.utah.edu/~lozada/NoCycle.pdf>)

"Asset Location and Taxes: An Equal-Variance Approach." http://content.csbs.utah.edu/~lozada/Asset_Location3.pdf

"Constant-Duration Bond Portfolios' Initial (Rolling) Yield Forecasts Return Best at Twice Duration." <http://content.csbs.utah.edu/~lozada/Research/IniYld.pdf>.

"A Simple Approach to Choice of a Parameter When Stochastic-Decision-Making Errors have Asymmetric Costs." (http://content.csbs.utah.edu/~lozada/Research/SDT_asym.pdf)

"A Rule of Thumb for Hedging the Purchase of a Fixed Immediate Annuity in the Near Future." (<http://content.csbs.utah.edu/~lozada/Research/annu5.pdf>)

SUPERVISION OF THESES AND DISSERTATIONS (chair only)

Future Ph.D. dissertation of:

Rafael Guerrero (on NGO's and municipal solid waste in Peru)

Taeyoung Lee (on credit markets, finance, and the macro economy)

Joyita Roy Chowdhury (on Indian peasants' coping strategies for floods and determinants of their volunteerism)

Hyeon Kim (on water pricing in Utah).

Michael Hogue (on explaining oil & natural gas production decisions at the level of the individual well)

Dallin Johnson's M.S. thesis "Differences in willingness to pay for reduced air pollution by income level: A contingent valuation study conducted in Salt Lake County, Utah," 2017.

Chanté Lundskog's M.S. thesis "The Assessment Of Moose Habitat In Southern Utah," 2017.

Kuo-Liang "Matt" Chang's Ph.D. dissertation "A Sustainable Fishery Management Study: The Yellowfin Tuna Fishery in the Western and Central Pacific Ocean," 2007.

Hyochang "Henry" Lee's Ph.D. dissertation "The Economics and Optimal Management of the Brine Shrimp Resource in the Great Salt Lake," 2006.

Julie Ann Suhr Nelson's Ph.D. dissertation "Framing and Levels of Abstraction in Economic Theory with an Application to Public Land Management," 2002.

Kristina Kushnir's Ph.D. dissertation "Oil Auctions in Russia," 2000.

Shan Huang Cavanaugh's Ph.D. dissertation "Are the Cheapest-to-deliver Ten-Year Treasury Notes Squeezed due to their Futures Trading on the Chicago Board of Trade?" 1999.

Kuo-Liang Chang's M.S. thesis "Land Reform in Taiwan," 1998.

Jerome E. Bennett's M.S. thesis "An Economic Environmental Responsibility: Used Tires," 1998.

RESEARCH FOR THE COMMUNITY

Pro Bono Consultant, Utah Rivers Council, 2010–. Provide guidance on economic models of water use and pricing in the context of water conservation and the removal of the property tax subsidy to water in Utah.

November 2017: Analysis of the Washington County Water Conservancy District's "2017 Regional Water Impact Fee Facilities Plan & Analysis": http://content.csbs.utah.edu/%7Elozada/Research/Analysis_2017RWIFFPA.docx

September 2016: Correction and extension of the Washington County Water Conservancy District's model, http://content.csbs.utah.edu/~lozada/Research/Model_of_WCWCD_7.xlsx. The Economists' September 2016 letter (written by me and Gail Blattenberger) critiquing the Washington County Water Conservancy District's model: <http://content.csbs.utah.edu/~lozada/Research/WCWCD%202016%20Letter10.pdf> The report accompanying that letter: http://content.csbs.utah.edu/~lozada/Research/2016_Sept1_rpt.pdf.

Fall 2015: Lake Powell Pipeline Letter and Economic Analysis, http://content.csbs.utah.edu/~lozada/Research/2015_LPP_Economic_Analysis.pdf. Its associated Excel spreadsheet, http://content.csbs.utah.edu/~lozada/Research/2015%20LPP%20FINAL%20Repayment%20Analysis11_Windows.xlsm.

Witness, Utah State House of Representatives, Revenue and Taxation Standing Committee, March 1, 2013. Spoke on House Bill 98, "Severance Tax Revisions," introduced by Rep. Brian King). I presented my research on the effects of severance tax increases on revenue and oil & gas drilling in Utah. <http://le.utah.gov/~2013/minutes/HREV0301.pdf>

Witness, Utah State House of Representatives Revenue and Taxation Standing Committee, February 15, 2011. Spoke on House Bill 112, "Severance Tax Code Revisions," introduced by Rep. Brian King.

Feb. 15, 2011“ Proposal to hike taxes on oil and gas wells flames out: Natural resources: Dem says bill would bring an additional \$26.5M in severance taxes,” *Salt Lake Tribune* (Lee Davidson).

Feb. 15, 2011“Jacked: Utah gave oil and gas companies \$200 million-plus while the rest of us got squeezed at the pump,” *Salt Lake City Weekly* (Eric S. Peterson).

Consultant, Utah State Tax Review Commission, 2008. Together with a University of Utah PhD student, Michael Hogue, I wrote “The Effect of Proposed 2009 Tax Changes on Utah’s Oil and Gas Industry.”