

Environmental Economics Spring 2009

Course Description: This course will provide the student with the necessary tools to be an avid consumer of an area of the environmental economics literature and eventually a producer of the literature. Thus, it will provide a summary of recent findings and discuss future research agendas. There is no official text, but weekly readings will be discussed in class. We will focus on empirical work, but at times will discuss theoretical studies.

Office Hours (Rosenwald 205c): W 2pm-4pm

E-Mail: jlist@uchicago.edu

TAs Office Hours (both located in HPC 370 Becker Center):

David Herberich: R 4:50pm-6:30pm

Nick Simmons: M, 1pm-3pm

Class Participation: The course will be conducted as both a teaching and research opportunity for all involved. The major emphasis will be an introduction to the tools of the trade as well as an emphasis on new questions and new research that could be conducted to address these questions.

Course Outline: One caveat is that this is merely a sampling of work that has been done in the area of regulatory federalism, defined broadly. The field is growing fast and I desire to give you a glimpse of some of the manuscripts that have been published.

Grading: You are required to fulfill the following assignments, with grading weights in parentheses. There is no mid-term or final exam, but take-home questions will be given occasionally.

(50) Quizzes and take-home questions: Roughly 6 or so quizzes will be given during the lab hour. I reserve the right to give “surprise” quizzes during regular class time. We will throw out your worst performance of the quizzes and average the remaining quizzes.

Every now and then I will give take home questions. Each of you will be responsible for answering these questions and turning them in at the required time. Handing these in late will be punished severely with point deductions of 5 points per hour late.

(30) Research Presentation: Each of you is expected to assemble a research proposal by the end of the quarter. This proposal begins by providing a literature survey of your area of choice. To begin the presentation you need to convince the class that you are an expert in your chosen area of research.

The proposal then describes a new research question(s) and why it is important, and also includes relevant theory and empirical design. To facilitate feedback, each student is required to present his/her research proposal in a 20-minute time slot near the end of the term. The written proposal is due the day of the final—you should take account of the comments given during your seminar.

(10) Referee Report: At some point during the semester I will give you an unpublished environmental study; you are expected to turn in a referee report within 3 weeks. The

referee report shall include the paper's contribution to the literature, key weaknesses, and recommendations for future improvement. The report should be no longer than 5 pages, with all of your points clearly presented. This is not simply a replication of what the author has written.

(10) *Class participation*: Asking questions, reading the assigned papers, etc., all lead to good scholarship. I am demanding that you are prepared and participate in class.

The following schedule represents a rough guess of the topics that we will cover. But, this is endogenous and I wish to cover any area more thoroughly that you find of interest. Readings will likely be added as we go along. I will also add lab readings to be discussed in during lab time.

Readings

0. Overview of Environmental Federalism

Wallace E. Oates (2001). "A Reconsideration of Environmental Federalism." *Recent Advances in Environmental Economics* J. List and A. de Zeeuw, eds. Cheltenham, U.K.: Edward Elgar Publishing, Ltd. Resources For the Future in its series Discussion Papers number dp-01-54.

List, John A. and Mason, Charles. "Optimal Institutional Arrangements for Pollution Control: Evidence from a Differential Game with Asymmetric Players," *Journal of Environmental Economics and Management* (2001), 42 (3): pp. 277-296.

1. Benefit-Cost Analysis

A. Stated preference versus revealed preference

Background of the methods can be found in several different places. For an applied view, see OECD document on Chalk.

Carson, Richard T., Nicholas E. Flores and Norman F. Meade, "Contingent Valuation: Controversies and Evidence," *Environmental and Resource Economics* 19(2), June 2001: 173 – 210.

Diamond, P. A. and J. A. Hausman (1994). "Contingent Valuation: Is Some Number Better than No Number?" *Journal of Economic Perspectives* 8(4): 45-64.

B. Hypothetical bias

Cummings, Ronald D., Elliott Steve, Harrison, Glenn and James Murphy, "Are Hypothetical Referenda Incentive Compatible?," *Journal of Political Economy*, 1997, 105, 609-621.

Cummings, Ronald G., and Laura O. Taylor (1999) "Unbiased Value Estimates for Environmental Goods: A Cheap Talk Design for the Contingent Valuation Method," *American Economic Review*, 89:3 (June).

List, John A. "Do Explicit Warnings Eliminate the Hypothetical Bias in Elicitation Procedures? Evidence from Field Auctions for Sportscards," *American Economic Review*, December 2001, 91(5): pp. 1498-1507.

List, John A. and Gallet, Craig. "What Experimental Protocol Influence Disparities Between Actual and Hypothetical Stated Values? Evidence from a Meta-Analysis," *Environmental and Resource Economics* (2001), 20 (3): pp. 241-254.

C. Scope bias

Kahneman, D. and J. L. Knetsch (1992), "Valuing Public Goods: The Purchase of Moral Satisfaction." *Journal of Environmental Economics and Management* 22: 57-70.

D. WTA/WTP disparity

Summary: Knetsch, Jack L., Richard H. Thaler, Daniel Kahneman, (1991), "Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias." *Journal of Economic Perspectives*, 5(1): pp. 193-206.

Horowitz, John, and Kenneth McConnell, 2002, "A Review of WTA/WP Studies," *Journal of Environmental Economics and Management*, 44(3): pp. 426-447.

Knetsch, Jack L. "The Endowment Effect and Evidence of Nonreversible Indifference Curves" *American Economic Review*; 79(5), December 1989, 1277-84.

Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler, 1990, "Experimental Tests of the Endowment Effect and the Coase Theorem," *Journal of Political Economy*, 98(6): pp. 1325-48.

List, John A, 2003, "Does Market Experience Eliminate Market Anomalies?" *Quarterly Journal of Economics*, 118(1): 41-71.

2. Decentralized provision of public goods

A. Local provision

Jaffe, A., S. Peterson, P. Portney, and R. Stavins. 1995. "Environmental Regulation and the Competitiveness of US Manufacturing: What Does the Evidence Tell Us?" *Journal of Economic Literature*, 33(1): pp. 132-163.

Henderson, J.V. 1996. "Effects of Air Quality Regulation," *American Economic Review*, 86, 789-813.

List, John A., Millimet, Daniel, Fredriksson, Per, and McHone, Warren. "Effects of Environmental Regulations on Manufacturing Plant Births: Evidence from a Propensity Score Matching Estimator," *Review of Economics and Statistics* (2003), 85: pp. 944-952.

Greenstone, M., 2002, "The Impacts of Environmental Regulations on Industrial Activity: Evidence from the 1970 and 1977 Clean Air Act Amendments and the Census of Manufactures," *Journal of Political Economy*, 110(6): 1175-1219.

List, John A. and Daniel Sturm. "How Elections Matter: Theory and Evidence from Environmental Policy," *Quarterly Journal of Economics*, (2006), November 121(4): 1249-1281.

B. Private provision

Philanthropy

Andreoni, J. (2004). "Philanthropy." In "Handbook of Giving, Reciprocity, and Altruism," L.A. Gerard-Varet, S.C. Kolm, and J.M. Ythier, Editors.

Morgan, John and Martin Sefton. "Funding Public Goods with Lotteries: Experimental Evidence". *Review of Economic Studies*. 67(2000): pp. 785-810.

List John A. and David Lucking-Reiley "The Effects of Seed Money and Refunds on Charitable Giving: Experimental Evidence from a University Capital Campaign," *Journal of Political Economy* (2002), 110(1), pp. 215-233.

Landry, C., A. Lange, J.A. List, M.K. Price, and Nicholas Rupp (2006), "Toward an Understanding of the Economics of Charity: Evidence from a Field Experiment," *Quarterly Journal of Economics*, 121(2): pp. 747-782.

3. Environmental Kuznets Curve

Grossman G. and A. Krueger, 1995. Economic growth and the environment. *Quarterly Journal of Economics*, 3, 53-77.

Bill Harbaugh Arik Levinson, and Dave Wilson (2002), "Reexamining the Empirical Evidence for an Environmental Kuznets Curve," *Review of Economics and Statistics*, 84(3): pp. 541-555.

Arrow, K., Bolin, B., Costanza, R., Dasgupta, P., Folke, C., Holling, C.S., Jansson, B.-O., Levin, S., Mahler, K.-G., Perrings, C., and D. Pimental, 1995. "Economic growth, Carrying Capacity, and the Environment." *Science*, 268, 520-521.

4. Endangered Species

Margolis, Michael, Daniel E. Osgood, and John A. List. "Measuring the Preemption of Regulatory Takings in the US Endangered Species Act: Evidence From a Natural Experiment." Manuscript (2005).

List, John A., Bulte, Erwin, and Shogren, Jay. "'Beggars thy neighbor: Testing for free-riding in state-level endangered species expenditures" *Public Choice* (2002), 111 (3-4): pp. 303-315.

5. Trade and the environment

Arik Levinson and Scott Taylor, 2008, "Unmasking the Pollution Haven Effect," *International Economic Review*, 49(1): pp. 223-254.

6. Climate Change

Olivier Deschenes and Michael Greenstone, 2006, "Climate Change, Mortality, and Adaptation: Evidence from Annual Fluctuations in Weather in the US," November, MIT Center for Energy and Environmental Policy Research, Working Paper #0707.

Stern Review, Part I, Chapter 2: "Economics, Ethics, and Climate Change." 2006. (On Chalk)