

Jacob LaRiviere

Department of Economics, 0508
University of California, San Diego
9500 Gilman Drive
La Jolla, CA 92093-0508
(858) 531-5170
jlariviere@ucsd.edu
<http://www.econ.ucsd.edu/~jlarivie>

DATE OF BIRTH: 5/20/1981

SEX: M

CITIZENSHIP: USA

EDUCATION:

University of California, Berkeley
B.A. in Economics, 2003

University of California, San Diego
Ph.D. in Economics, 2010

Dissertation Title: *Optimal Policy Structure in Natural Resource and Environmental Economics*
Advisor: Richard Carson

RESEARCH FIELDS:

Primary Fields: Environmental and Natural Resource Economics

Secondary Fields: Industrial Organization, Applied Microeconomics, Microeconomic Theory,
Econometrics

PROFESSIONAL EXPERIENCE:

Fall 2010 Assistant Professor, University of Tennessee, Knoxville

2008-2010 Staff Economist, Pacific Northwest National Laboratory

2005 Graduate Student Fellow, Pacific Northwest National Laboratory

WORKING PAPERS:

Profit Sharing in Natural Resource Industries: Implications and Optimal Management

In renewable resource industries, labor is commonly paid with a share of the harvested resource rather than with a per unit-of-effort wage. Share cropping in agriculture is one well-known example and entitlement of the crew to a share of the revenue from the sale of the catch is almost universal among commercial fishing fleets. This paper shows that sharing arrangements have substantial implications for the industry's profits, optimal resource management, and the resource's ecological state. Effectively, sharing agreements can interact with fluctuations in natural capital to cause inefficient investment levels and skew industry rents toward labor. As a consequence, optimal regulatory policy for such industries must account for the implications of such sharing arrangements. The model demonstrates why management tools like individual transferable quotas in fisheries, have had unexpected ecological benefits in terms of increasing and

Jacob LaRiviere

stabilizing fishery stocks. Finally, the paper provides an illustrative example using the US Pacific albacore fishery.

The Structure of Energy-Related Research Joint Ventures between Government and Industry

Most developed countries fund national laboratories or universities to perform energy-related research in conjunction with private industries. For example, the U.S. Department of Energy's national labs are mandated to perform research in conjunction with U.S. industry aimed at increasing energy efficiency. This paper extends the research joint venture (RJV) literature to cover these government funded energy-related collaborations. It uses a game theoretic framework to explain why a RJV sponsored by a national research lab will tend to have significantly more participants than a private RJV. The analysis shows the composition of RJV members will also tend to be different due to the nature of the RJV projects chosen. The model predicts that regulatory capture is likely to occur from firms with well-established technologies. In essence, the typical government funded RJV rules encourage choosing to work on projects that result in marginal improvements to the products of a set of larger firms with relatively mature technologies. Because such an RJV can influence relative advantage, it can harm firms with emerging technologies that potentially result in considerable energy savings if implemented.

Optimal Pollution Control and Scientific Research with Structural Uncertainty

Joint with Richard Carson

The standard economic theory of pollution control is premised on the manifestly false assumption that all sources of pollution emissions are known. In Los Angeles, the most studied location in the world for air pollution, it was recently discovered that over 10% of several regulated air pollutants were coming from a previously unknown source, large ships in the Los Angeles Harbor. The science of greenhouse gases presents a seemingly endless stream of such discoveries. The fundamental source of the problem is the ability to observe pollution emissions from specific sources, the ability to measure ambient pollution levels, and the ability to use of scientific models to calibrate the observed emissions to observed ambient levels. This paper considers the implications on optimal pollution control when ambient levels of pollution are known but all emission sources are not. The model shows that if the dispersion models are misspecified due to incomplete inventories of emissions, optimal ambient pollution levels can actually increase. In this case, if R&D can increase the set of known emitters, a regulator may actually choose not to spend any resources to do as it can decrease expected welfare.

RESEARCH IN PROGRESS

Biofuel Mandates: Community Level Socioeconomic and Land Use Impacts in the Pacific Northwest

Joint with DM Anderson and Vanessa Bailey

The production of cellulosic biofuels, such as those derived from switchgrasses, are mandated to grow by orders of magnitude as part of a massive energy bill passed by the US Congress in 2008. However, the geographical effects of this mandate are not fully known due in large part to the uncertainty surrounding switchgrass yields. This research examines the efficacy of switchgrass production in the inland Pacific Northwest using simulated price changes caused by the mandate from a Computational General Equilibrium model. Preliminary results include that we do not expect to see any switchgrass production for large swaths of land in the Pacific Northwest.

OTHER WORK:

Contributing author, "The San Diego Foundation Regional Focus 2050 Study: Climate Change Related Impacts in the San Diego Region by 2050." The San Diego Foundation, 2008. San Diego, CA.

Jacob LaRiviere

PROFESSIONAL PRESENTATIONS:

- 2008 European Association of Environmental and Resource Economists 16th Annual Conference, Gothenburg, Sweden. “Fishermen Remuneration Regime Effects on Optimal Fleet Capacity.”
- 2010 World Congress for Environmental and Resource Economists, Montreal, Canada. International Institute for Fisheries Economists and Trade, Montpellier, France.

SEMINAR AND WORKSHOP PRESENTATIONS:

- 2010 Universitat Autònoma de Barcelona, Tufts University, Portland State University, University of Tennessee at Knoxville, University of Oregon, Genomic Science Knowledgebase Workshop.
- 2009 University of South Carolina Moore School of Business, 11th Annual University of Colorado Environmental and Resource Economics Workshop, Pacific Northwest National Laboratory, University of California at San Diego Environmental Economics Lunch Seminar, University of California, San Diego Applied Economics Seminar.
- 2008 Workshop for Technical Change in Renewable Resource Economics, Helsingor, Denmark.

PROFESSIONAL AFFILIATIONS:

AEA, AERE, IIFET, UCSD Center for Environmental Economics.

REFEREE:

Marine Resource Economics.