Whispering in the Ears of Princes—Using Experimental Economics to Evaluate Agricultural and Natural Resource Policies: Discussion

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Experimental economics is a tool used by economists to explain or predict the behavior of economic agents under controlled institutional environments. It is a tool that can be used in conjunction with other tools, such as econometric and theoretical analysis, or it can serve as an alternative methodology when other tools of economic analysis are less effective. For example, experiments are particularly useful for testing theoretical explanations of observed economic phenomena when no revealed preference data exist for analysis. It can also be useful in cases where complicated economic interactions that are difficult to disentangle prevent a useful econometric approach.

As with other forms of economic analysis, experimental economics can be used to inform policy makers about the impacts of current and proposed policy alternatives. Kagel and Roth (1995) refer to this as "whispering in the ears of princes." To effectively inform the policy-making process, experiments must possess two qualities. First, the market institution simulated in the experiment, though a simplification of reality, should reflect the real-world market being investigated. Experimental studies that compare outcomes under market institutions with different characteristics are admirable academic endeavors, but policy makers are better served knowing *which* market institutions best reflect reality. Second, results should be reported in a timely way to inform policy decisions. If politicians are faced with several policy alternatives, any analysis that comes after the policy decision is made is less relevant. However, the information gained is still valuable academically and may inform future policy decisions.

The three papers presented in this session represent three different applications of the use of experimental economics to inform policy makers; Parkhurst and Shogren propose a new policy instrument; Bahrs, Kroll, and Sutter analyze a recently enacted policy instrument; and Bastian, Menkhaus, Nagler, and Ballenger analyze a proposed policy instrument that has not been enacted.

Parkhurst and Shogren propose a policy instrument designed to encourage farm operators to retire environmentally sensitive land that is adjacent to other retired parcels. This creates land "corridors" between farms, providing a continuous wildlife habitat for endangered species that connects parcels owned by different farm operations. Under alternative policy scenarios, land is retired without creating the large interfarm tracts of land necessary for wildlife preservation. They use an economic experiment to demonstrate that if the payout structure incorporates bonuses for retiring adjacent parcels of land, then economically and ecologically efficient outcomes are achieved.

Parkhurst and Shogren provide a perfect example of a proposed policy instrument that can lead to more desirable ecological outcomes without sacrificing economic efficiency or depriving farm operators of their choice set. Because the policy is being proposed, the real-world market institution does not yet exist but is presented as a market likely to be observed if the proposed policy were implemented. Their results are necessarily timely because they are proposing a *new* policy design. These findings are available to inform all interested parties as policy makers and their constituents debate

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alternative structures for environmental policy instruments.

Bahrs, Kroll, and Sutter analyze the market for an existing agricultural subsidy in the European Union that can be traded. Their work builds on previous studies that analyze the price and market efficiency of these tradable subsidies under alternative market institutions. In their experiment, the market is characterized by a decentralized bilateral trading scheme, whereas previous studies use centralized posted-bid/ask or eBay-type markets. They find that the bilateral market is less efficient at allocating these subsidies.

Bahrs, Kroll, and Sutter do an excellent job comparing their results using a bilateral negotiation market institution with results under alternative institutions. However, given that the payment is in place and a market for the subsidy exists, their research would be much more valuable to policy makers if they could identify *which* of the experimental markets most closely reflects the real market for these agricultural subsidies. Regardless, their work is timely; it analyzes the impacts of an ongoing policy.

Bastian et al. investigate a proposed decoupled commodity support payment in the form of a buyout program. This proposal was advocated by some to be included in the 2008 Farm Act but did not gain widespread support. The authors find that a lump-sum bond payment has no effect on production but lowers commodity prices. If the bond is made in annual installments, there is a production effect, but it is smaller than for other commodity programs that offer price support subsidies. They conclude that a buyout bond is more efficient and less production distorting than alternative forms of more traditional, coupled support.

Bastian et al. establish a reasonable market institution for analyzing a set of alternative policy instruments, a posted-bid auction that is common to actual commodity markets. However, their results would have been more informative to the policy decision had they been reported at the height of the bond buyout debate, prior to the passing of the 2008 Farm Act. Nevertheless, their analysis does contribute to the academic understanding of how decoupled support programs affect production and is available to inform future policy decisions.

While experimental economics as a tool has the potential to inform policy decisions, its potential is limited by the ability of the researcher to simulate relevant, believable market institutions that reflect real-world market processes. It is also limited by the ability of the researcher to disseminate her/his findings in a manner timely to the decision-making process. However, these shortcomings are applicable to other tools of economic analysis, including theoretical and empirical research. Policy makers are more completely informed with information generated using several different tools of economic analysis. For its part, experimental economics yields results that can be simulated and repeated in a laboratory setting, yielding information that can be critical to the policy-making process.

Reference

Kagel, J.H., and A.E. Roth, eds. 1995. *The Handbook of Experimental Economics*. Princeton NJ: Princeton University Press.