## Sustaining Animal Agriculture and Environmental Quality in the South: What Happened and Why? Discussion

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German social theorist Ulrich Beck has suggested that the political economy of post-industrial society has shifted away from the competition among relatively well-defined social groups for control of benefit streams resulting from technological and organizational innovations that characterized the roughly 200-year period of industrialization. In its place, we find constantly changing aggregates of individuals engaged in temporary or limited alliances competing to affect the distribution of social, environmental, and economic risks. Beck argues that a complex set of forces has brought about this shift. He mentions many oft noted changes in gender and family roles, in employment patterns, and global interdependencies, but two points are especially relevant to the collection of issues that have been discussed in these four papers.

First is Beck's claim that a public educated from childhood in the sciences has developed a much more sophisticated (and much more skeptical) understanding of the certainty with which the future can be anticipated. People no longer believe that science, government, or patriarchy can either assure future benefits or anticipate the source and magnitude of potential threats. Second is a general recognition of the fact that technological change is not inherently progressive. Not only are there winners and losers from technical change, but most of us both win and lose in the wake of technical change, and in ways that are difficult to anticipate in advance, difficult to reverse, and difficult even to sort out in retrospect so that it could be said definitively that one won or lost. Beck believes that these changes have contributed to a widely shared shift in mentality: those who once would have evaluated political change in light of its effect on their ability to attain social positions presumed to guarantee a lifelong stream of benefits now evaluate both technical and political change in light of their potential to simultaneously affect the likelihood and the burden of responsibility for potential hazards and unwanted events. Beck argues that this shift has not only politicized technical change, but has also altered the policy process for promoting or regulating technical change in fundamental ways.

This is not the place to undertake an assessment of Beck's social theory. Clearly, some of his observations amount to little more than a shift in language-expectations described in terms of risk rather than benefit. What is useful here is to consider how the policy and political environment for animal agriculture may reflect a shift of the sort that Beck notes. The papers presented by Martin and Zering, and by Outlaw, Anderson, and Padberg document how southern animal producers as well as state and local political economies are being affected by changes characteristic of industrialization. Technical changes are being fueled by efficiencies of scale or by market opportunities, and these changes have precipitated political conflicts typical of industrialization: traditional farmers compete with

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better capitalized industrializers or with processors for policies that will ensure future benefit streams. Yet both of these papers note the way in which these battles are affected by a post-industrial policy environment.

Outlaw, Anderson, and Padberg explain why the public's interest in environmental risks of beef production is unlikely to be accommodated as long as it is articulated as a demand for new benefit streams in the form of environmental amenities. Martin and Zering emphasize how industrialization changes the character of environmental risks. One change is a new potential for catastrophic losses. Risk studies have shown that the public is more tolerant of risks associated with many small-scale events, dispersed over time and space, than of single events having high consequences, even when the expected utility associated with the catastrophic risk is comparable to or even lower than the aggregated expected utility of many distinct events (Thompson and Parkinson). A second change is that industrialized firms themselves become motivated by a desire to shed liability risks, and this can lead them both to technological innovations and to support for regulatory policies that redistribute risks to the public sector (Aharoni).

The papers by Abdalla and Shaffer, and by Thurow and Holt address issues in political economy even more directly. Abdalla and Shaffer argue that across the nation, jurisdictional boundary choices are becoming the dominant factors affecting the future of animal agriculture. As they see it, producers of all sizes compete with each other and with local citizen and environmental groups to ensure that favorable polices are in place. Abdalla and Shaffer contend that we must no longer see this competition as an attempt to influence the choice of policy makers in a given federal, state, or local agency, but as a strategic game of pairing a particular interest group's political strengths (determined by such things as scale, responsiveness, or homogeneity) with a particular agency or branch of government, and then pitting these opponents against one another in a contest to see which agency-state or local, Department of Agriculture or Department of Natural Resources, the legislature or the

courts—will win in the protracted struggle to control the dominant police power in a respective locality. These battles are being settled rather differently from state to state, and we may be in for a new round of competition among states based on the vastly different institutional structures that are currently evolving.

The picture that Abdalla and Shaffer describe is, in most respects, consistent with the way that Jefferson, Madison, and others thought that a republic of democratically controlled states would work. However, Abdalla and Shaffer caution that local citizen concerns are often inchoate and poorly articulated, while organized interests will tend to prevail in state regulatory agencies. If there is a flaw in the picture that Abdalla and Shaffer paint, it is their emphasis on preference articulation as the key measure of citizen concern. The notion that preference satisfaction (whether through markets or politics) is the sine qua non of individual choice derives from an approach to welfare economics that was very much the stepchild of industrialization. This tends to make Abdalla and Shaffer frame political competition too much in the industrial mode of a battle over future benefit streams, rather than as a strategic game of risk management. If Beck is right, interest groups and political leaders who continue to think of the political arena in these terms will be increasingly surprised, confused, and frustrated by the influence, resiliency, and agenda of risk politics.

The cases discussed by Thurow and Holt bring this message home in a powerful way. In Okeechobee County, Florida, some of the earliest lessons were learned about how environmental, economic, and political risks are redistributed through centralized decision making. I interpret the support for ex ante policy assessment as an explicit call for riskbased policy, and the difficulties of obtaining data and eliminating uncertainty as a reflection of the sophistication both producers and others have in understanding the strategic dimensions of a risk-based policy process. The Texas case is a clear illustration of the way that environmental, economic, and political risks are distributed not only across social strata, but across space and time, shifting in degree and character as dynamic processes of economic investment and policy innovation interact, leaving an apparently win-win composting technology without political support. In both Florida and Texas, risk politics have already made the conventional assumptions of industrial political economy obsolete.

In closing, I would note only that southern animal agriculture is undergoing a process of industrialization, and as such, the standard devices from a social science tool kit-refined during an age of industrial politics and market transactions-still apply. When called on to evaluate the impact of industrialization on rural communities, economists have been quick to estimate the value of agricultural production to community income streams, and to describe distributive patterns along small versus large farm, or farm versus nonfarm lines. That approach might have been entirely adequate in a world of pure industrial politics. However, if Beck is even partly right, these tools will become increasingly inadequate as competition over policy goals comes to reflect the disaggregated, temporary, and contingent concerns of the risk society. If agricultural economists hope to advise policy makers and their traditional constituency in the future, they will need to reframe information on income and distribution so that it is relevant to risk politics, and will need to augment their traditional advice with a more sophisticated accounting of the extent and distribution of environmental and social risk.

## References

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