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Changing Structure and Competition in Food and Agricultural Markets

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The U.S. Departments of Justice and Agriculture (DOJ, USDA) have signaled a renewed interest in the competitiveness of food and agricultural markets, and have organized a series of public workshops held across the country to stimulate discussion of the economic and legal issues. A main concern is whether producers are harmed by ongoing changes in the structure of agricultural and food markets, including consolidation in farm inputs, processing, and food retailing, as well as increased coordination along the vertical supply chain. As Secretary of Agriculture Vilsack put it in his opening statements to the workshop held in Iowa in March of this year, "…the central question is, are the farmers and ranchers of this country currently getting a fair shake?"

The agricultural economics profession is in a unique position to inform this discussion, building on a vibrant body of economic research and in-depth knowledge of important institutions. The set of papers in this theme draws on these resources to explore some of the economic aspects of competition in agricultural and food markets. The papers are organized to address these issues in markets where the DOJ/USDA have focused their interest: seed markets, livestock markets, dairy markets, and food retailing.

In the first paper on the biotech seed industry, Kyle Stiegert, Guanming Shi, and Jean Paul Chavas summarize work from a series of studies that examines pricing of biotech seed. A first finding is that bundling—combining multiple biotech traits in a single seed—tends to lower the price of the traits to the farmer, suggesting that economic efficiencies associated with concentration may attenuate the effects of market power. However, they also find evidence that vertical integration—production of biotech traits and germplasm under the control of a single firm—tends to raise seed prices relative to licensing agreements, raising concern that recent acquisitions that have lead to vertical integration are enhancing the market power of biotech firms at the expense of farmers. GianCarlo Moschini notes that the dominant positions of certain firms in the market for biotech traits arise from intellectual property rights (IPR) in the form of patents, and that IPR protection is necessary to induce technological innovation that benefits society. Thus, in this case, IPR law is at odds with antitrust law, and the line between legitimate exercise of IPR rights and antitrust violations is a blurry one.

Two papers on livestock markets review key structural changes that have taken place and discuss the implications for market performance. Clem Ward reviews the recent changes in the structure of the beef packing industry: a dramatic shift towards larger and fewer plants, as well as larger and fewer firms, and a shift away from cash market transactions in favor of forward contracts and other alternative marketing arrangements. Ward notes that these changes have been driven at least in part by economic efficiencies, a fact borne out by a large body of research. Of course, these changes also raise concerns of potential market power, but Ward points out that the agricultural economic research on this score is mixed; a typical finding is that beef packing is characterized by but either oligopsony—a few dominant buyers—or oligopoly—a few dominant sellers—pricing, but that the departure from perfectly competitive pricing is small. John Lawrence reviews similar changes in the structure of hog markets, including increased size of hog farms, increased concentration in packing, and a move towards alternative marketing agreements. Lawrence highlights results of a recent study that finds that while pork packers exercise some degree of oligopsony power, alternative marketing agreements do not appear to be a contributing factor. Indeed, economic efficiencies associated with marketing contracts may benefit both producers and consumers. Thus, recent proposals to limit use of marketing contracts in hog procurement may be counterproductive.

Two articles on the dairy sector highlight the role of government regulations in dairy pricing. Brian Gould documents the growing concentration among dairy farms, dairy cooperatives, and dairy manufacturers, and then goes on to describe how particular marketing order regulations and conventions in dairy pricing may facilitate the exercise of market power. Many regulated and contract prices rely on wholesale prices determined in thinly traded markets for dairy commodities. Thus large cooperatives or private manufacturers may influence regulated farm prices via strategic trades in wholesale markets. Haley Chouinard, David Davis, Jeffrey LaFrance, and Jeffrey Perloff find a more direct effect of marketing orders on market performance. They use their estimates of retail demand for dairy products to calculate the impact of price discrimination—the practice, enforced by marketing orders, of setting a higher price for milk used in fluid products—on dairy consumers. They conclude that marketing order regulations are regressive, harming those consumers who can least afford to pay.

Finally, two articles turn our attention to competition in food retailing. Rich Sexton argues that while the emergence of large, dominant grocery retailers probably has been beneficial for consumers, it probably has not been so for producers. Moreover, Sexton warns that models of perfect competition as well as traditional models of imperfect competition are inadequate to capture observed patterns in retail food prices. Tim Richards and Geoffrey Pofahl list many of the features of grocery retail markets that are relevant to competition, and report on their results from analysis that attempts to capture some of this richness. Among other insights, they find that market power increases in the number of products offered, and also that grocery retailers may use private labels to wrest pricing power from food manufacturers.

Taken together the papers in this *Choices* theme highlight some of the important economic issues at the heart of competition in U.S. agricultural and food markets. The papers also highlight the insights that the agricultural economics profession has to offer on this pressing public policy issue. In many cases, the authors raise more questions than they provide answers, which may be unsatisfying to those looking for a quick solution to a preconceived notion of a problem. But full appreciation of the scope of the problem is a prerequisite for sound economic policy.

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