

Concentration and Competition in U.S. Agribusiness

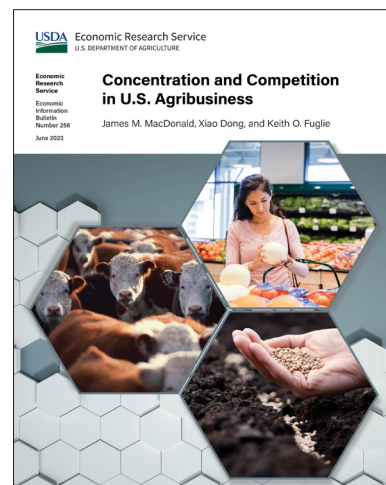
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What Is the Issue?

Market concentration, and its impact on competition, has attracted growing public scrutiny. Critics argue that many industries have grown too concentrated, with fewer firms competing with one another and a consequent weakening of competition. The issues surrounding concentration extend to agribusiness, particularly to three agribusiness sectors where concentration has increased over time: seeds, meatpacking, and food retail. This report details consolidation in each of these industries, explains the driving forces behind increased concentration, and examines public policies aimed at encouraging competition, with a focus on the implementation of merger policy.

What Did the Study Find?

- Market concentration—measured by the share of industry sales held by the largest firms—has increased sharply over the last four decades in many seed, livestock, and food retail markets. In 2018–20, two seed companies accounted for 72 percent of planted corn acres and 66 percent of planted soybean acres in the United States. In 2019, the four largest meatpackers accounted for 85 percent of steer and heifer slaughter and 67 percent of hog slaughter. In most metropolitan areas, five to six store chains account for most super-market sales.
- Economic theory and empirical analyses demonstrate that high concentration can facilitate the exercise of market power, with firms driving sales prices above—or livestock purchase prices below—the prices that would prevail in competitive markets.
- However, the relationship between concentration and market power is not tight, and high concentration can often result from factors like innovations or the realization of scale economies that improve productivity and reduce costs and prices.
- Competition often occurs in local and regional markets, especially in food retail sales and livestock procurement for meatpackers. Some local markets are highly concentrated, with just two to three firms competing with one another.



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- Increasing concentration reflected a consolidation of production into fewer but larger firms, driven by technological innovations, changes in market demand, and redesigned supply chains. Mergers among competitors played a significant role in increasing concentration in the seed sector, a contributing role in food retail, and a limited role in meatpacking.
- Opportunities to commercialize innovations in agricultural biotechnology and stronger protection for intellectual property rights over seed and related agricultural biotechnology innovations were major driver of seed sector consolidation. This was accompanied by more private research and development (R&D) investment in crop agriculture, rapid diffusion of improved crop varieties to farmers, and higher farm productivity. Stronger scientific and marketing links between seeds and agricultural chemicals were followed by a series of mergers among firms in these industries.
- Between 1990 and 2020, prices paid by farmers for crop seed increased by an average of 270 percent, while seed prices for crops grown predominantly with genetically modified (GM) traits rose by 463 percent, substantially more than commodity output prices. The increases in seed prices reflected to a large degree the higher productivity of improved crop varieties and provided a return on investments in R&D by seed companies.
- The transformation of meatpacking industries featured shifts of production to larger plants to realize economies of scale, as well as tighter vertical coordination among production and processing stages through reliance on contract arrangements in place of cash markets. Because mature livestock lose value if they are moved long distances for slaughter, packers acquire animals in local and regional markets, which can be highly concentrated.
- Food retail has undergone a long reorganization, featuring: (1) traditional supermarkets facing entry from new store formats like Walmart and Costco; (2) increasing store sizes, offering a wider variety of products; (3) the emergence of national chains, often realized through mergers and acquisitions involving local and regional chains; and (4) a growing reliance on data-driven distribution and inventory strategies within agri-food market chains.
- U.S. antitrust laws prohibit mergers that reduce competition. Antitrust enforcement agencies consider a wide range of evidence, including the likely impact of a merger on market concentration, when investigating the likely impact of a merger on competition.
- U.S. antitrust reviews played important roles in agrifood industry restructuring. To maintain market competition and incentives to innovate, antitrust reviews led to divestitures of some company assets in mergers involving the “Big Six” seed-chemical global leaders. Merger reviews have stopped or altered a few meatpacking mergers, but mergers have not been the primary source of consolidation in that industry. Food retail mergers frequently attract antitrust scrutiny, but the standards for review have changed along with regulators’ understanding of the nature of competition in the sector.

How Was the Study Conducted?

The authors drew heavily on prior research—much of it done at the U.S. Department of Agriculture’s (USDA) Economic Research Service—and on data from USDA sources, along with additional data from other U.S. Government and private sources, to describe recent market trends.