Concentration, Mergers, and Antitrust Policy

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Background

Farmers and ranchers in many agricultural commodity markets have experienced prices that do not keep up with inflation, or with occasional sharp drops in prices and income. Several reasons are often given as to why low prices occur:

- Long-term productivity increases and supply shifts in agriculture may outpace demand increases.
- Cyclical, and often weather-related, production surpluses may lead to low prices in some industries.
- Concentration and market power by processors, distributors, or input suppliers may adversely affect farm prices and incomes.

This paper will focus on the increasing concentration in agribusiness, including evidence of its impact on prices. It will review current antitrust policy and several proposals that have been advanced to deal with agribusiness concentration.

Table 1. Concentration in Meatpacking

	1980	1985	1990	1995	1997
	-- Share of Purchases by Four Largest Packers --				
Hogs	34	32	40	46	54
Steers/Heifers	36	50	72	79	78
Broilers	30	35	44	46	49

Source: USDA/GIPSA for hog and steer and heifer measures; data derived from Feedstuffs (annual reference issues) for broilers in 1990-97, and from Census Bureau data for 1980-85.

The most striking recent case of concentration occurs in meatpacking, where the 4 largest firms handle 80 percent of U.S. steer and heifer slaughter, up from only 36 percent in 1980 (Table 1). Concentration in hog slaughter — also increased rapidly—the four largest firms handled 54 percent of all 1998 slaughter, up from 32 percent in 1985. Poultry processing concentration is lower, but increasing rapidly, the 4 largest processors handled 49 percent of all 1998 broiler slaughter — up from 35 percent just 12 years before.

High concentration extends to other agribusiness sectors as well. In grain and oilseed processing

Table 2. Concentration in Grain and Oilseed Processing

Industry	Leading Firms	Four Firm Concentration			
		1977	1987	1992	1997
Flour Milling	ADM Conagra Cargill Cereal Food	33	44	56	62
Wet Corn	ADM Cargill Staley CPC	63	74	73	74
Soybean Milling	ADM Cargill Bunge AGP	54	71	71	83
Cottonseed Milling	Anderson Clayton	45	43	62	
Maltin	Conagra Cargill ADM Breweries	59	64	65	

Sources: 1977-92 concentration data from Census of Manufactuers. The identities of leading firms, and the concentration estimates, were obtained from trade publications.

(Table 2), the top 4 firms handle more than 60 percent of shipments in flour milling, wet corn milling, soybean processing, and cottonseed milling — with some sharp increases in recent years. The largest agribusiness firms are also quite diversified, so that a few large firms face each other in many meat, grain, and oilseed businesses.

These examples concern firms that buy farm commodities. However, concentration is also high and rising in some businesses that provide inputs and services for farmers.

Concentration and Current Federal Merger Policy

The goal of the antitrust laws is to protect economic freedom and opportunity by promoting competition. The laws prohibit practices that restrain trade, such as price-fixing conspiracies, predatory acts designed to achieve or maintain monopoly power, and corporate mergers likely to reduce competition in particular markets.

Two federal agencies, the Federal Trade Commission (FTC) and the Antitrust Division of the Justice Department (DOJ), share responsibility for merger enforcement. The U.S. Department of Agriculture provides technical advice to those agencies on agribusiness issues and enforces the Packers and Stockyards Act, which is aimed at controlling unfair or deceptive trade practices in livestock marketing.

Because Congress provided the agencies with a general mandate — to prevent those mergers that might substantially lessen competition — agencies and courts must specify the precise conditions under which a merger might lessen competition. The antitrust agencies have codified a set of guidelines that they use in deciding whether or not to oppose a merger. The guidelines indicate that antitrust agencies are concerned about mergers where a few firms dominate a market, and where a merger will noticeably increase concentration (the guidelines may be found at on the DOJ website at www.usdoj.gov/atr/public/guidelines/horiz_book/hmg1.html).

Firms merge for many reasons. Eliminating a rival (through merger) may lead to less competition and higher profits. The laws are designed to prevent those mergers. However, firms may also merge to reduce costs, either because economies of scale in production or merchandising processes allows a larger firm to realize lower unit costs, or because one of the merger partners is better managed and can run the acquired firm more effectively. Mergers that reduce costs further the ultimate goals of the antitrust laws by allowing lower costs, lower product prices, and greater production.

Agribusiness Examples

Two examples highlight antitrust enforcement of current merger policy to firms that buy from or sell to farmers. In its review of Cargill's proposed acquisition of Continental Grain's North American grain operations, DOJ quickly decided that the relevant geographic market for grain sales from those facilities was global. Because Cargill and Continental competed with many other firms in that world-wide business, a combination of the two was unlikely to lead to increase in prices to grain buyers. However, DOJ also decided that procurement markets for purchases of grain from farmers and country elevators were local and regional — transport costs, among other things, limited grain producers' options — and that a merger would reduce the number of relevant buyers in some markets that already had only two or three. The investigation further established that there were significant entry barriers in some port and terminal elevator markets, such that the combined firm might be able to set lower prices to grain producers without facing new entry. DOJ and Cargill reached an agreement that allowed the merger — if Cargill or Continental facilities in highly concentrated port and terminal markets were sold to other firms to maintain competition in those markets.

The second example concerns Syngenta AG, a company formed by combining the seed and agricultural chemical business of Novartis with the agricultural chemical business of AstraZeneca. The FTC filed a civil complaint against the merger, alleging that it would reduce competition in two markets: 1) pre-emergent herbicides for the control of grassy weeds in corn, and 2) foliar fungicides for the treatment of diseases in cereal, citrus, cotton, peanuts, potatoes, rice, vegetables, and turf crops.

The FTC ultimately cleared the merger under the conditions that Novartis divest its worldwide foliar fungicide business (sold to Bayer), and that AstraZeneca divest its worldwide corn herbicide business (sold to Dow AgroSciences).

Enforcement agencies were concerned that these mergers would combine large competitors who faced each other in many precisely defined local (Cargill and Continental Grain) or nationwide (Novartis and AstraZeneca) highly concentrated markets. In each case, the agencies chose to settle before trial — accepting the sale of businesses or facilities in the most worrisome markets. Generally, agencies may accept a settlement because a divestiture meets the government's competitive concerns, and due to the cost and uncertainty of the outcome if the government pursues the case in court.

Issues

What is the effect of concentration on agricultural commodity prices?

Economic analyses of the linkage between concentration and competition typically look at statistical associations between concentration and prices. Such studies do not find a robust and universal relationship. On average, high concentration is weakly associated with less competition. That average encompasses cases where concentration leads to considerable market power and much higher prices to buyers, as well as cases in which high concentration has no apparent effect on competition and prices. Market power is more likely when branded consumer products have weak substitutes, and is less likely for basic commodities with easy market entry or good substitutes. While some highly concentrated agribusiness industries have been able to substantially raise prices on products bought from or sold to agriculture (for example, in the lysine and citric acid price fixing cases), other concentrated agribusiness sectors have not shown any price effects from higher concentration.

Why is agribusiness concentration increasing?

There is no single reason. Some processing industries do have important and wide-ranging economies of scale, which allow larger plants and firms to realize lower costs and improved competitiveness. As long as demand for the industry's product grows slowly, increased plant sizes will lead to increased concentration. Increased concentration can then lead to greater profits, even while suppliers and consumers are not adversely affected.

Some mergers do lead only to increased market power through eliminating competitors. The prospect of greater market power may be the motivation for concentration, and antitrust agencies try to foreclose mergers with likely significant anti-competitive effects.

Seed industry concentration represents a third avenue. Mergers have combined firms at different stages of the process (trait developers, established seed companies, and distributors) as part of a search to find organizational forms that will best allow them to create and exploit investments in biotechnology.

Finally, many mergers in consumer products food industries and in food retailing combine firms that do not compete directly. That is, they combine retailers who primarily operate in different geographic areas — perhaps to buy products or serve national customers more effectively, or manufacturers whose products do not directly compete with one another. In these cases, aggregate concentration (e.g., the share of the largest retailers in nationwide retail sales) may increase, but market concentration (e.g., the share of the largest retailers in the relevant local market) may not.

Why are farm to retail margins increasing?

Increasing farm to retail margins are presumed to be evidence of increases in agribusiness market power, leading to reduced farm prices, increased retail prices, and increased margins. However, that is not necessarily correct, as market power is not the only source of widening margins.

Processors and retailers face higher input costs (e.g., for labor, fuel, or materials), and they have added more processing to food products in order to provide greater convenience to consumers. Further, productivity growth in agriculture has exceeded that in food processing and retailing. Thus, the costs of food marketing have been rising faster than the costs of producing agricultural products, leading to widening margins.

Are antitrust laws biased against farmers?

Some argue that antitrust laws are designed only to protect consumers against high prices and, hence, do not protect farmers against low prices due to the market power exerted by industrial buyers.

Because most cases concern seller market power, enforcement agencies have more experience in those investigations. It is also possible that some judges and prosecutors may act as if seller market power were the primary or only concern. However, the laws direct enforcement agencies to focus on competition, and merger enforcement guidelines specifically consider buyer as well as seller market power. The DOJ, in the Cargill-Continental Grain case, clearly recognized that the key issue was restricted competition for farmers' grain, and it forced the sale of facilities in local and regional markets where too few competitors remained.

Policy Alternatives and Consequences

Maintain current merger policy under the antitrust laws.

Congress could maintain the current policy, which prohibits those mergers that may reduce competition. Current policy does not restrict conglomerate mergers among firms that do not directly compete with one another. As such, it allows mergers among firms in different parts of agribusiness (such as a merger between a grain processor and a meatpacker). Moreover, as the laws are currently enforced, mergers among competitors are allowed in industries with moderate levels of concentration or low entry barriers. As a result, market concentration would probably continue to increase under current policy; particularly in commodity processing industries.

Prohibit mergers among large agribusiness firms

Some recent Congressional proposals would place a temporary or permanent moratoria on mergers between large agribusiness firms. Such actions would eliminate two types of mergers that can bring overall benefits to the economy. First, mergers that allow firms to realize economies of scale would not occur. Second, some mergers would effectively allow for the replacement of one poorly performing management team by another. In each case, the merger would allow for lower costs, however product prices, and expanded output. Expanded output, in turn, would lead to a higher demand for agricultural inputs. Merger prohibition could eliminate those gains.

A prohibition on large mergers would also eliminate those mergers that create market power, but which would not have been stopped by antitrust authorities. In those cases, the prohibition will lead to lower product prices to consumers, or higher prices paid to farm producers. Finally, some mergers do not lead to market power, but they create no new cost efficiencies — rather, they lead to inefficiency by simply making the merged firm more complicated, without any attendant advantages. An agribusiness merger moratorium might also limit those types of mergers and their attendant costs.

Agribusiness mergers are one strategy for large firms, and they could respond to a ban with other strategic steps. Those seeking scale economies could grow internally by building bigger facilities instead of merging. Because firms have that alternative, a merger prohibition will not necessarily halt increases in concentration based on scale economies. Second, firms could respond to a prohibition on the purchase of large agribusiness firms by purchasing other large firms in the economy and becoming conglomerates. Such moves might be particularly inefficient (cost-raising).

The likely economic effects of a merger prohibition, therefore, rest on a weighing of several effects. In particular, if the current merger policy effectively stops anti-competitive mergers, then a merger ban looks quite costly. Its advantages grow with one's estimate of the current competitive losses from the merger that are currently allowed.

Change the standard for evaluating agribusiness mergers from one based on harm to competition to one based on harm to agricultural producers.

Several proposals restate antitrust law to prohibit those mergers which are likely to result in substantial harm to the ability of producers (usually defined specifically as family farmers or independent producers) to compete in the marketplace. Harm is usually defined according to likely effects on prices paid to the producers who deal with the merger parties, and sometimes note is also taken of a merger's adverse effects on other producers or on specific regions.

These proposals represent a fundamental policy shift. Current merger laws focus on competition, and enforcement in agribusiness mergers emphasizes the effect of changes in the number of competitors on prices received by agricultural sellers (as in the Cargill-Continental Grain merger). However, some mergers reduce costs for the merging firms. In those cases, a merged processing firm will generally expand production and purchase more local agricultural output, benefiting local agricultural suppliers. Conversely, output expansion will harm competing processors, causing them to reduce output and, if they purchase agricultural production in a different local market than the merged processor, harming their agricultural suppliers as well. The policy proposal would require antitrust agencies to identify separate winners and losers from a merger, and to oppose the merger if some of the identified losers were agricultural suppliers or regions — a far more complicated task than they now face.

Specifically prohibit meatpackers from offering higher prices to those livestock producers who sell in greater volumes, irrespective of livestock quality differences.

This practice is common in other agricultural commodities and in a range of businesses, and has two sources. First, in some cases, larger volumes may be less costly to buy, on a per unit basis. For that reason, some of these proposals allow cost justification defenses.

Second, firms with market power may be able make more money by paying discriminatory prices to some producers based on their size or on easily available options for selling their livestock. Those with fewer livestock or market options will be offered lower prices. In short, buyers in this case may have market power (the ability to lower price from competitive levels) over some sellers but not others, and they will exercise market power where they can.

In addition, most packers offer higher prices to producers of higher quality livestock (e.g. grade and yield buying programs). Such programs provide incentives to increase livestock quality.

To be effective, enforcement of a ban on price discrimination must be able to distinguish those cases in which favorable prices are based on lower costs, higher quality, or value, since to prohibit different prices in those instances would also serve to limit firms' searches for ways to reduce costs or produce better quality products. However, even without cost justifications, higher prices may reflect competition among buyers where they collide in selected geographic areas, or where they face a few well-informed and aggressive sellers. By banning the higher price, enforcement could lead to less competition among buyers, and ultimately lower prices for all sellers. In short, enforcement of laws against price discrimination can sometimes result in the strengthening of market power. Enforcers would need to be quite careful to tailor enforcement actions to cases in which price differences actually reflect the exercise of market power, rather than quality incentives, cost differences, or emerging competition.

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