

Cornhusker Economics

Cooperative Extension

Institute of Agriculture & Natural Resources
Department of Agricultural Economics
University of Nebraska – Lincoln

The Effect of Concentration in the Food Processing Industry on Food Prices

Market Report	Yr Ago	4 Wks Ago	2/1/02
<u>Livestock and Products,</u>			
<u>Average Prices for Week Ending</u>			
Slaughter Steers, Ch. 204, 1100-1300 lb Omaha, cwt	\$98.55	\$65.63	\$69.75
Feeder Steers, Med. Frame, 600-650 lb Dodge City, KS, cwt	89.55	88.25	*
Feeder Steers, Med. Frame 600-650 lb, Nebraska Auction Wght. Avg	98.55	91.05	93.43
Carcass Price, Ch. 1-3, 550-700 lb Cent. US, Equiv. Index Value, cwt	116.74	102.33	107.67
Hogs, US 1-2, 220-230 lb Sioux Falls, SD, cwt	40.00	38.00	40.50
Feeder Pigs, US 1-2, 40-45 lb Sioux Falls, SD, hd	*	46.87	58.23
Vacuum Packed Pork Loins, Wholesale, 13-19 lb, 1/4" Trim, Cent. US, cwt	110.00	106.63	107.10
Slaughter Lambs, Ch. & Pr., 115-125 lb Sioux Falls, SD, cwt	*	60.87	65.40
Carcass Lambs, Ch. & Pr., 1-4, 55-65 lb FOB Midwest, cwt	160.00	130.31	131.92
<u>Crops,</u>			
<u>Cash Truck Prices for Date Shown</u>			
Wheat, No. 1, H.W. Omaha, bu	3.26	3.09	3.01
Corn, No. 2, Yellow Omaha, bu	1.86	1.89	1.87
Soybeans, No. 1, Yellow Omaha, bu	4.48	4.08	4.08
Grain Sorghum, No. 2, Yellow Kansas City, cwt	3.54	3.54	3.52
Oats, No. 2, Heavy Minneapolis, MN, bu	1.35	2.38	2.21
<u>Hay,</u>			
<u>First Day of Week Pile Prices</u>			
Alfalfa, Sm. Square, RFV 150 or better Platte Valley, ton	115.00	115.00	*
Alfalfa, Lg. Round, Good Northeast Nebraska, ton	70.00	75.00	65.00
Prairie, Sm. Square, Good Northeast Nebraska, ton	105.00	105.00	105.00
* No market.			

Whether rising concentration in the food processing industry leads to higher or lower food prices depends on the relative strengths of the market power effect (higher food prices), and the efficiency effect (lower or higher production costs) associated with rising concentration.

If rising concentration leads to lower production costs and more market power, food prices rise if the market power effect dominates the cost-efficiency effect. In this case, both food consumers and farmers are worse off. If the cost-efficiency effect dominates the market power effect, then food prices decline as concentration rises. In this case, both consumers and farmers are better off. If on the other hand, rising concentration leads to higher production costs and more market power, then food prices rise and both consumers and producers are worse off.

The market power effect of concentration is the most familiar: Concentration leads to higher food prices, because as fewer and fewer companies own larger and larger chunks of the food business, tacit collusion rises and competition suffers. The efficiency effect has to do with the effect of concentration on prices through its influence on processing costs, when the food industry consolidates as has happened in the meat packing industry, for example. If the influence of concentration on costs is negative, it means the industry processes food more cheaply as concentration rises. If the influence on costs is positive, it means the industry becomes less efficient as concentration rises. This could happen if barriers to entry in the industry are so high that companies are under little pressure to process food efficiently.

Measuring the market power effect and cost-efficiency effect associated with rising concentration in the food industry is the subject of recently published joint research between researchers at the Center for Agri-Food Industrial Organization & Policy here at UNL and the Food Market-



ing Policy Center at the University of Connecticut. Thirty-three food industries, as classified by the Census Bureau, were considered.

The following table lists the name of each industry with its Standard Industrial Classification (SIC) number in parentheses, and the respective effects of rising concentration on market power, costs and price in each industry. A positive sign ‘+’ denotes “upward effect,” a negative sign ‘-’ denotes “downward effect” and a zero means “no effect.” As an example, take industry #12 Cereal Breakfast Food (SIC 2043). Rising concentration in that industry had an upward effect on both market power and costs. The ‘+’ sign on price means the market power effect in combination with the cost-inefficiency effect associated with concentration resulted in higher cereal prices. For industry #1, Meat Packing (SIC 2011), rising concentration led to more market power and cost-efficiency, but no effect on meat prices.

Overall, of the 33 food-processing industries, rising concentration had an upward effect on market power in 28, a downward effect on costs in 14 and an upward effect on costs in 9. That led to higher food prices in 24 and to lower food prices in 3. This suggests that although concentration led to lower costs in most cases, the market power effect more than dominated the cost-efficiency effect associated with rising concentration, resulting in higher food prices in most food industries.

Lopez, R., A. Azzam and C. Liron-Espana (2002). “Market Power and/or Efficiency: A Structural Approach.” *Review of Industrial Organization* 20(2):115-126.

Azzeddine Azzam, (402) 472-5326

Professor & Director

Center for Agri-Food Industrial

Organization & Policy

Department of Agricultural Economics

<<http://agecon.unl.edu/caiep/homepage.html>>

Impact of Concentration on Market Power, Cost and Consumer Price In the Food Industry

Industry	Effect of Increased Concentration On:		
	Market Power	Cost	Price
1 Meat Packing (2011)			0
2 Sausages & Prepared Meats (2013)			
3 Poultry & Egg Processing (2015)			
4 Cheese (2022)		0	
5 Dry Condensed & Evaporated Milk (2023)		0	
6 Ice Cream & Fresh Desserts (2024)			
7 Fluid Milk (2026)			
8 Canned Specialties (2032)			
9 Canned Fruit & Vegetables (2033)			
10 Dried Fruit & Vegetables (2034)			
11 Pickles, Sauces, etc. (2035)			
12 Cereal Breakfast Foods (2043)			
13 Rice Milling (2044)	0		
14 Prepared Flour (2045)	0		0
15 Wet Corn Milling (2046)		0	
16 Prepared Feeds (2048)		0	
17 Cookies & Crackers (2052)			
18 Cane Sugar (2061)		0	0
19 Cane Sugar Refining (2062)	0	0	0
20 Beet Sugar (2064)			0
21 Candy Products (2065)		0	
22 Chocolate & Cocoa (2066)	0		
23 Cottonseed Oil Mill (2074)			
24 Soybean Oil Mill (2075)		0	0
25 Vegetable Oil Mill (2076)			
26 Animal Fats & Oils (2077)			
27 Malt Beverages (2082)			
28 Wines & Brandy (2084)		0	
29 Food Extracts & Syrups (2087)			
30 Roasted Coffee (2095)	0	0	
31 Manufactured Ice (2097)			
32 Macaroni & Spaghetti (2098)			
33 Food Preparations (2099)			