



The Honorable Eric Holder  
Attorney General  
U.S. Department of Justice  
950 Pennsylvania Avenue, NW  
Washington, DC 20530

The Honorable Tom Vilsack  
Secretary  
U.S. Department of Agriculture  
1400 Independence Avenue, SW  
Washington, DC 20250

Legal Policy Section  
Antitrust Division  
U.S. Department of Justice  
450 5<sup>th</sup> Street, NW Suite 11700  
Washington, DC 20001

Electronically to [agriculturalworkshops@usdoj.gov](mailto:agriculturalworkshops@usdoj.gov).

December 31, 2009

**In re: Agriculture and Antitrust Enforcement Issues in Our 21<sup>st</sup> Century Economy**

Dear Attorney General Holder and Secretary Vilsack:

On behalf of the non-profit consumer advocacy organization Food & Water Watch, I respectfully submit the following comments to the U.S. Department of Justice and U.S. Department of Agriculture on Agriculture and Antitrust Enforcement Issues in Our 21<sup>st</sup> Century Economy (74 Fed. Reg. 165 43725-43726). Food & Water Watch commends the U.S. Departments of Justice and Agriculture for soliciting public input and convening a series of workshops on the impact of the agricultural and food industry concentration on consumers, farmers and the marketplace. The agricultural and food sectors have undergone significant horizontal and vertical consolidation over the past two decades. A closer examination of the implications of concentrated market power on producers and consumers is long overdue.

The growing consolidation in the farm and food sectors puts a handful of companies between two million farmers and more than 300 million consumers. These companies can and do exercise considerable market power over consumer food choices and prices, as well as contribute to the often-precarious economic condition of farmers. American consumers are increasingly interested in where their food is from, how it is grown and raised, and whether local, sustainable food choices are available in their communities and grocery stores.

Many of the fundamental questions Americans are asking about their food system are questions about economic power and equity. Today, a tiny cabal of agribusinesses and

food manufacturing conglomerates has a stranglehold on every link of the food chain. Access to locally grown, organic, sustainable, equitable food is hindered by a marketplace that is controlled top to bottom by a few firms and rewards only scale but not innovation. For example, when consumers and farmers want more local food to be available in their supermarket aisles, they run up against a few supermarket chains each with a single, national buyer (a category captain) responsible for supplying thousands of stores – a model that is inaccessible for small or midsize independent producers or processors.<sup>1</sup>

### *Horizontal and Vertical Consolidation in the Agriculture and Food Sectors*

Agricultural concentration has been both horizontal (mergers between firms in the same subsector, such as pork processing or retail groceries) and vertical (consolidation throughout different stages in the food chain, such as beef packers owning beef cattle, feedlots, slaughter plants and processing operations).<sup>2</sup> In many cases, the same firm is both the buyer of the farm good and the seller of the food product, and thus can exert buyer or seller power to fit the market circumstances at several steps of the food chain.<sup>3</sup>

Over the past three decades, concentration and consolidation have narrowed the number of businesses operating in every agricultural sector and sub-sector to a small clique of giant companies. There were about 400 food company mergers in both 2006 and 2007.<sup>4</sup> Although merger activity slowed during the economic downturn, JP Morgan predicts that there will be more mergers in the food sector during 2010.<sup>5</sup> These mergers have increased the market share of the four largest companies in the food and agriculture sectors, a metric known as four-firm concentration.<sup>6</sup>

The agriculture and food sector is unusually concentrated. The four-firm concentration for most sectors of the economy has hovered between 40 and 45 percent; many economists maintain that four-firm concentration ratios above this level can start to erode competitiveness.<sup>7</sup> In the food and agriculture sectors, the four-firm concentration ratios often exceed 50 percent. According to data compiled by the University of Missouri-

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<sup>1</sup> Domina, David and C. Robert Taylor. Organization for Competitive Markets. “The Debilitating Effects of Concentration in Markets Affecting Agriculture.” September 2009 at 36.

<sup>2</sup> Democratic Staff Report, U.S. Senate Committee on Agriculture Nutrition, Forestry. “Economic Concentration and Structural Change in the Food and Agriculture Sector: Trends, Consequences and Policy Options.” October 29, 2004 at 3.

<sup>3</sup> Taylor, C. Robert. Auburn University. “The Many Faces of Power in the Food System.” Presentation at the DoJ/FTC Workshop on Merger Enforcement. February 17, 2004 at 1.

<sup>4</sup> “Food industry mergers & acquisitions continued upward trend in 2007, Food Institute analysis shows.” *Mergers & Acquisitions Week*. March 24, 2009.

<sup>5</sup> Webb, Quentin. “JPM sees more food, telecoms, insurer M&A in 2010.” *Reuters*. December 2, 2009.

<sup>6</sup> Horizontal concentration is most typically described by either a four-firm concentration ratio or the Herfindahl-Hirschman Index (HHI). HHI is the sum of the squares of the market shares of the companies in any sector. The four-firm concentration ratio is the sum of the market shares of the four largest firms and weights each market share equally, while the HHI gives greater weight to the larger competitors. The Justice Department and Federal Trade Commission consider HHI below 1,000 to be non-concentrated, an HHI between 1,000 and 1,800 to be moderately concentrated and those markets with HHI over 1,800 to be highly concentrated. Four-firm concentration ratios are used here because they are publicly available from the U.S. Census Bureau and are more commonly reported in economic literature, government reports and periodicals.

<sup>7</sup> Democratic Senate Agriculture Committee Staff Report (2004) at 4-5.

Columbia, the four-firm concentration was 83.5 percent for beef packing, 80 percent for soybean crushing, 66 percent for pork packing, and 58 percent for broiler integrators.<sup>8</sup> The Farm Foundation has predicted that the livestock industry will continue consolidating into even fewer and even larger companies.<sup>9</sup> These national concentration measurements can conceal much higher levels of concentration at the regional or local level. Although the top four supermarket chains control half of the national market, on the local level the top four chains can control more than 70 percent of the marketplace.<sup>10</sup>

Extremely concentrated markets create barriers to entry for new competitors, allow economies of scale to drive out innovation, and allow oligopolies to raise prices on captive consumers of groceries or agricultural inputs. In highly consolidated food markets, new entrants require highly capitalized operations to develop the research effort needed to deliver a competitive flow of food products necessary to compete.<sup>11</sup> Mergers between rivals can distort markets sufficiently to deter new market entrants from restoring competition.<sup>12</sup>

Mergers have concentrated market power in the food and agriculture sectors, but these large companies can also exert considerable power through vertical consolidation. Especially in the livestock sector, vertical integration by meat and poultry processors controls a growing share of the supply chain and tightly manages all aspects of meat and poultry production “from genetics to grocery.”<sup>13</sup> In the poultry industry, growers do not even own the birds – they merely perform the service of raising birds for the poultry integrators under extremely rigid and often unfair contracts. Beef and hog packers often secure livestock through confidential forward contract arrangements to manage their slaughterhouse supplies but disadvantage farmers. Supermarket chains can pressure produce and processed food suppliers to lower prices or pay special promotional fees (known as slotting fees), and these suppliers, in turn, can leverage farmers into low-price contractual relationships with shippers or manufacturers. According to Auburn professor C. Robert Taylor, “[V]ertical integration combined with horizontal consolidation may also lead to an imbalance of economic power that will harm both consumers and contract producers.”<sup>14</sup>

Rigid vertical integration can undermine competitive markets by distorting and concealing prices, making it difficult for new entrants to secure suppliers, and by

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<sup>8</sup> Hendrickson, Mary and Bill Heffernan. Department of Rural Sociology, University of Missouri-Columbia. “Concentration of Agricultural Markets.” April 2007.

<sup>9</sup> Farm Foundation. “The Future of Animal Agriculture in North America.” 2006 at 31.

<sup>10</sup> “*Supermarket News’s* top 75 retailers for 2009.” *Supermarket News*. June 2009; Martinez, Steve W. USDA Economic Research Service. “The U.S. Food Marketing System: Recent Developments 1997-2006.” Economic Research Report Number 42. May 2007 at note 11 at 18.

<sup>11</sup> Harl, Neil E. Charles F. Curtiss Distinguished Professor of Agriculture and Professor of Economics, Iowa State University. “The Structural Transformation of Agriculture.” Presentation at 2003 Master Farmer Ceremony, West Des Moines, Iowa. March 20, 2003 at 10.

<sup>12</sup> Ross, Douglas. “Antitrust enforcement and agriculture.” Address before the American Farm Bureau Policy Development Meeting. Kansas City, Missouri. August 20, 2002 at 16.

<sup>13</sup> Barkema, Lan, Mark Drabentstott and Nancy Novack. Federal Reserve Bank of Kansas City. “The new U.S. meat industry.” *Economic Review*. Second Quarter 2001 at 36.

<sup>14</sup> Taylor, C. Robert. Auburn University College of Agriculture. “Restoring Economic Health to Poultry Production.” May 2002 at 3.

allowing dominant food processing firms to exercise unfair buyer power over farmer suppliers. The contractual arrangements between agribusinesses and growers short-circuit the price discovery functions of the marketplace by avoiding commodity spot markets and auctions, which therefore reduces price discovery.<sup>15</sup> The larger livestock operations are now “tightly linked” to the meat production industry through “formal contracts, alliances, and joint financing.”<sup>16</sup> These arrangements hinder new market entrants by locking producers into contractually bound arrangements with entrenched firms.

### *Efficiency, Consumer Prices and Externalities*

Agribusinesses pursue consolidation to increase efficiency, attain larger economies of scale, expand to new geographic markets and increase revenues.<sup>17</sup> Some food industry analysts contend that the increased efficiency from concentration and consolidation exceeds any costs associated with increased market power and diminished market competition.<sup>18</sup> Theoretically, increased competitive pressures should reduce consumer prices, as sellers increase efficiencies and offer better prices to capture consumers. This promised higher efficiency is used by agribusinesses to justify increased horizontal and vertical integration in agriculture.

Protecting the interests of consumers is the key concept behind federal antitrust law and enforcement. As long as increased concentration does not directly harm consumers, say through retail price gouging, the U.S. Department of Justice has taken a deferential approach to industry consolidation.<sup>19</sup> Although consolidation in the food and agriculture sector have pushed down the real prices farmers receive for their crops and livestock, few of these savings are passed on to consumers. Companies with a significant market share can seize a larger share of the market value – more of the margin between the farmgate and retail prices. Since the mid-1980’s, the inflation adjusted cost of a market-basket of groceries has risen relatively steadily.<sup>20</sup> In contrast, the farm share of the same market-basket of groceries remained at about a third of the retail grocery sales between 1960 and 1980, but then declined sharply to 24 percent in 1990 and to 19 percent in 2006.<sup>21</sup> Food & Water Watch has found that the margin between the farmgate and retail prices has been rising for some products like beef, dairy and produce.

Consumers are especially vulnerable to the consolidated market power of food companies since food is essential and total consumer demand for food is largely unresponsive to price. This inelastic demand also means that concentrated market power in the food sector can distort competition, raise prices and erode equity more significantly than

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<sup>15</sup> Barkema et al. (2001) at 36.

<sup>16</sup> MacDonald, James M. and William D. McBride. USDA ERS. “The Transformation of U.S. Livestock Agriculture: Scale, Efficiency, and Risks.” EIB-43. January 2009 at 1.

<sup>17</sup> Democratic Senate Agriculture Committee Staff Report (2004) at 3.

<sup>18</sup> Sexton, Richard J. Department of Agricultural and Resource Economics, University of California Davis. “Industrialization and Consolidation in the U.S. Food Sector: Implications for Competition and Welfare.” Waugh Lecture, Agricultural & Applied Economics Association Annual Meeting, Tampa, Florida. August 2, 2000 at 25.

<sup>19</sup> O’Brien, Doug. National Agricultural Law Center, Drake Agricultural Law Center. “Developments in Horizontal Consolidation and Vertical Integration.” January 2005 at 7.

<sup>20</sup> Domina and Taylor (2009) at 4.

<sup>21</sup> USDA ERS. “Price spreads from farm to consumer.” ERS Data Sets. Updated May 28, 2008.

sectors where consumers are more responsive to prices.<sup>22</sup> According to the American Antitrust Institute, the concentration in buyers, processing and retailing has “undoubtedly contributed to the increased cost of food.”<sup>23</sup>

Even when consumer food inflation is modest, food processors and retailers largely capture any marginal value between consumers and farmers.<sup>24</sup> Some studies have found that increases in farmgate prices are passed onto consumers completely and immediately, but when farmgate prices fall, the grocery store prices do not fall as rapidly or completely.<sup>25</sup> In some cases, like pork, the factory farm and processor efficiency gains may have reduced the cost of production, but nonetheless the U.S. Department of Agriculture (USDA) found that consumer prices for retail pork “increased substantially.”<sup>26</sup> According to the USDA, high levels of market concentration allow the largest participants to extract more of the economic value from food transactions, but “consumers typically bear the burden, paying higher prices for goods of lower quality.”<sup>27</sup> For example, according to USDA, the low-cost pork produced from large-scale hog operations, where the animals are bred to gain weight quickly, “may not have the flavor or texture some buyers seek.”<sup>28</sup>

Moreover, the theoretical gains from increased economic efficiency and consumer welfare ignores the considerable cost to communities and the environment from the system of industrialized agriculture. For example, the consolidated market power of meat and poultry companies has driven contract livestock operators to become significantly larger. Giant commercial confined livestock and poultry operations produce an estimated 500 million tons of manure each year, more than three times as much as that produced by the entire U.S. population.<sup>29</sup> Taxpayers paid \$179 million between 2003 and 2007 to cover manure management costs for industrial dairies and hog operations alone (not counting poultry or beef production).<sup>30</sup> The Union of Concerned Scientists has estimated that it would cost \$4 billion just to fully mitigate the soil damage caused by large-scale hog and dairy operations.<sup>31</sup> The air pollutions from industrial livestock operations can compromise the respiratory health of the community and workers.<sup>32</sup> The widespread use of non-therapeutic antibiotics on confined livestock can reduce the effectiveness of

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<sup>22</sup> Domina and Taylor (2009) at 8.

<sup>23</sup> American Antitrust Institute’s Transition Report on Competition Policy: Chapter 8 Food. 2008 at 281.

<sup>24</sup> Domina and Taylor (2009) at 47.

<sup>25</sup> Dimitri, Carolyn, Abebayehu Tegene and Phil R. Kaufman. USDA ERS. “U.S. Fresh Produce Markets: Marketing Channels, Trade Practices, and Retail Pricing Behavior.” Agricultural Economic Report No. 825. September 2003 at 15.

<sup>26</sup> Key, Nigel and William McBride. USDA ERS. “The Changing Economics of U.S. Hog Production.” Economic Research Report 52. December 2007 at 24-26.

<sup>27</sup> King, John L. USDA ERS. “Concentration and Technology in Agricultural Input Industries.” AIB-763. March 2001 at 2.

<sup>28</sup> MacDonald and McBride (2009) at 22.

<sup>29</sup> Pew Commission on Industrial Farm Animal Production. “Putting meat on the table: industrial farm animal production in America.” April 2008 at 23.

<sup>30</sup> Starmer, Elanor. Report to the Campaign for Family Farms and the Environment. “Industrial Livestock at the Taxpayer Trough: How Large Hog and Dairy Operations are Subsidized by the Environmental Quality Incentives Program.” December 2008 at 11-12.

<sup>31</sup> Gurian-Sherman, Doug. “CAFOs uncovered.” Union of Concerned Scientists. April 2008 at 4.

<sup>32</sup> Osterberg, David and Wallinga, David. “Addressing Externalities from swine production to reduce public health and environmental impacts.” *American Journal of Public Health*. Vol. 94, Iss. 10. October 2004 at 1705.

antibiotics on human patients.<sup>33</sup> These costs are borne by consumers and the community, but are not accounted for in the consumer welfare benefit or economic efficiency analysis of vertical integration and concentration. These are some of the real costs of cheap food that do not get paid for at the grocery store.

### *The Impact of Monopoly Power and Buyer Power on Farmers*

Farmers produce the raw inputs that the food industry – meatpackers, dairy companies, food manufacturers – use to produce the goods consumers buy at grocery stores. Farmers face concentrated markets both as buyers of farm inputs like seed, feed and fertilizer and as sellers of crops and livestock.

Although farmers purchase large volumes of agrochemical and seed inputs, the diffuse power of two million farmer buyers prevents them from exerting bargaining power over input sellers and relegates them to price takers.<sup>34</sup> Crop producers buy seeds from only a few companies and the few companies that sell genetically modified seeds cross license the traits to effectively control seed sales from other firms. In 2009, nearly all (93 percent) soybeans and four-fifths (80 percent) of corn cultivated in the United States are grown from seeds containing traits covered by Monsanto patents.<sup>35</sup> Only a few companies manufacture tractors and other farm equipment and a handful of global companies control the fertilizer market. In 2002, the four largest companies sold three-quarters (77.8 percent) of the phosphate fertilizer and more than half (53.9 percent) of the nitrogen fertilizer sold in the United States.<sup>36</sup> Four companies controlled more than half the market for farm machinery and agricultural implements (57.6 and 50.7 percent, respectively) in 2002 sold in the United States.<sup>37</sup> This concentration in agricultural input industries, which increases prices for farmers, can also raise prices in supermarkets for consumers.<sup>38</sup>

Highly concentrated food processing, manufacturing and slaughter markets disadvantage farmers because few buying companies are competing for the products of their farms. The large companies that use raw agricultural products as inputs also use their market power as buyers to depress the prices they pay for crops or livestock. When there are only a few buyers of agricultural products in any subsector, there are not enough competing buyers to bid up prices, and farmers are forced to accept lower prices for perishable goods that must go to market.<sup>39</sup> This anticompetitive buyer power is known as “monopsony.” Iowa State University professor Neil Harl noted, “A producer without

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<sup>33</sup> Pew Commission (2008) at 15.

<sup>34</sup> American Antitrust Institute’s Transition Report on Competition Policy: Chapter 8 Fighting Food Inflation through Competition. 2008 at 284.

<sup>35</sup> Whoriskey, Peter. “Monsanto’s dominance draws antitrust inquiry.” *Washington Post*. November 29, 2009.

<sup>36</sup> U.S. Bureau of the Census. 2002 Economic Census: Manufacturing Subject Series – Concentration Ratios: Share of the Value of Shipments Accounted for by the top 4, 8, 20 and 50 Largest Companies for Industries: 2002. May 23, 2006.

<sup>37</sup> U.S. Bureau of the Census (2002).

<sup>38</sup> King (2001) at 1.

<sup>39</sup> Sexton, Richard, Mingzia Zhang and James Chalfant. USDA ERS. “Grocery Retailer Behavior in the Procurement and Sale of Perishable Fresh Produce Commodities.” Contractors and Cooperators Report No. 2. September 2003 at 1.

meaningful competitive options is a relatively powerless pawn in the production process.”<sup>40</sup>

Although buyer power is similar to seller power, in many respects the power dynamics between agribusinesses buying farm inputs are different from the monopolistic power exerted by food companies on retail consumers. Buyer power is often exerted over sellers using much more complex strategies and techniques.<sup>41</sup> Buyers have different market incentives, operate in different marketplaces, and the limitations on buyer-side competition can be different than for sellers.<sup>42</sup> The market pressure that encourages competitors to undercut price-gouging monopolist sellers to capture consumer markets does not work as well on the buyer side. Because all buyers benefit when purchase prices are low, there is little incentive in a concentrated market for competitors to bid up input prices.<sup>43</sup>

The typical measurements of market concentration focus on sales markets – the share of retail sales – that reflects these firms’ dominance in the consumer market. But this may be an inadequate measurement of buyer power concentration.<sup>44</sup> Buyers can exercise more power over their suppliers with a smaller share of the purchasing market than sellers can exercise of retail customers with the same market share. Sellers may need to control more than half of the consumer market to exercise single-firm monopoly power, but buyers can potentially exert dominance over suppliers with less than ten percent of the purchasing market.<sup>45</sup>

Additionally, a firm with a small share of the national retail sales market could be the only local or regional purchaser of hogs, poultry, cattle, corn or soybeans. Agricultural processors generally tend to avoid building facilities that directly compete with other buying firms, instead trying to develop their own supply in a geographic area.<sup>46</sup> For example, a large beef packing plant can control a large purchasing territory because most beef cattle shipments are less than 300 miles.<sup>47</sup> More than half of poultry growers are served by only one or two poultry integrators – 24.7 percent are served by only one and another 28.7 percent are served by only two integrators.<sup>48</sup> The cost of shipping limits the ability of farmers to shop their crops and livestock around to more distant potential buyers. USDA has noted that “National concentration measures understate the concentration that many farmers face in local and regional markets.”<sup>49</sup>

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<sup>40</sup> Harl (2003) at 1.

<sup>41</sup> Taylor (2004) at 1.

<sup>42</sup> Carstensen, Peter C. University of Wisconsin Law School. Statement Prepared for the Workshop on Merger Enforcement. February 17, 2004 at 3.

<sup>43</sup> *Ibid.* at 4-5.

<sup>44</sup> Domina and Taylor (2009) at 6.

<sup>45</sup> Foer, Albert A. American Antitrust Institute. “Mr. Magoo Visits Wal-Mart: Finding the Right Lens for Antitrust.” Working Paper No. 06-07. November 30, 2006 at 5.

<sup>46</sup> Carstensen (2004) at 16.

<sup>47</sup> Sexton (2000) at 21.

<sup>48</sup> MacDonald, James M. USDA ERS. “The Economic Organization of U.S. Broiler Production.” EIB-38. June 2008 at 13.

<sup>49</sup> MacDonald and McBride (2009) at 25.

The perishability of most agricultural products gives buyers unique leverage over farmers who need to market their agricultural output. The information imbalance between buyers that have detailed knowledge of their agricultural input need over time and producers that sell perishable products or livestock allows agribusinesses to put downward pressure on the prices they pay to farmers.<sup>50</sup> Unlike manufacturing goods, farmers cannot speed up or slow down crop growth or livestock maturity. The farmers selling spring lambs or fresh tomatoes cannot negotiate with or stall potential buyers. Moreover, farmers face the cost of maintaining their livestock, often including paying for feed, while they seek buyers. Dairy farmers are especially subject to this pressure, as their cows produce more milk every day. Even live cattle are only at their ideal slaughter weight for a few weeks.<sup>51</sup> The perishability of farm products significantly exacerbates the impact of market concentration in agricultural markets.<sup>52</sup> The largely fixed volume of agricultural production in the short-term pipeline gives buyers leverage over producers. Agribusinesses understand that higher bid prices will not expand the supply of crops or livestock, which encourages competitors to tacitly collude to keep prices low.<sup>53</sup>

Agricultural mergers can consolidate and exacerbate the already significant informational advantage buyers have over farmers, especially for commodities traded on the futures exchange.<sup>54</sup> Buyers of farm products that have prices based on the prices on the commodity futures market have an incentive to manipulate the futures price to impact the actual purchase prices.<sup>55</sup> For example, the cash or spot price for live cattle is influenced by the price for live cattle commodity futures contracts, so meatpackers can participate in the futures market to influence the cash price they pay for cattle. Moreover, since many cattle and hog contracts pay producers a formula based on the spot or futures market prices, meatpackers can benefit when futures and spot prices decline. This may be especially true of thinly traded commodities, like hogs, where the futures market represents a tiny share of the national hog market, but hog contract prices are based on the commodities futures prices.<sup>56</sup> Beef packers buy and sell live cattle futures contracts and some have seats on the futures exchanges, which allows these companies to exert market pressure on the futures contract price of cattle, which in turn impacts the spot price, and vice versa.<sup>57</sup>

Fluid milk prices are especially vulnerable to manipulation by commodities traders. Cheddar cheese spot prices on the Chicago Mercantile Exchange (which are closely related to the commodity futures market prices) are the basis for the federal government's milk price formulas.<sup>58</sup> The cheese commodity futures trade occurs for half an hour a week, is estimated to involve 40 or fewer traders working for half a dozen firms, and covers 80 percent of the cheese marketed in the United States.<sup>59</sup> The very small number

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<sup>50</sup> Domina and Taylor (2009) at 48.

<sup>51</sup> Taylor (2004) at 3.

<sup>52</sup> Domina and Taylor (2009) at 8.

<sup>53</sup> American Antitrust Institute (2008) at 291.

<sup>54</sup> Taylor (2004) at 8.

<sup>55</sup> Carstensen (2004) at 8.

<sup>56</sup> *Ibid.*

<sup>57</sup> Taylor (2004) at 4-5.

<sup>58</sup> Wilke, John R. "Dairy co-op faces price manipulation probe." *Wall Street Journal*. May 19, 2008.

<sup>59</sup> Domina and Taylor (2009) at 63-64.

of traders representing huge dairy companies can actually influence the price of cheese at the CME—and thus the price paid to farmers for their milk—by holding or selling cheese at strategic moments. The federal Government Accountability Office (GAO) determined that cheese prices at the CME were prone to manipulation.<sup>60</sup> In 2008, the Dairy Farmers of America and two of its former executives were fined \$12 million for attempting to manipulate the price of fluid milk through cheddar cheese purchases at the CME (two other executives paid smaller fines).<sup>61</sup>

### *Vertical Integration Through Rigid Contracts with Farmers*

Agribusinesses secure entrenched vertical integration and consolidation through contractual relationships with agricultural producers. Agribusiness and farmers often enter into contracts to deliver farm goods to buyers. These contracts help to give farmers a guaranteed market for their crops and livestock, but large contract buyers can extract lower prices and impose exploitative contract terms on farmers.

There are two basic types of agricultural contracts. Marketing agreements are long-term contracts for the sale agricultural commodities and production contracts pay farmers for agricultural or farming services.<sup>62</sup> In 2001, more than a third (36 percent) of the value of all U.S. agricultural production was delivered under contract.<sup>63</sup> By 2005, more than two-fifths (41 percent) of the value of agricultural production was under contract.<sup>64</sup>

Buyers use marketing contracts to secure a reliable supply of the input they process, generally livestock. The farmers make production decisions with limited oversight by the contract buyer and own the commodity they are producing.<sup>65</sup> Farmers are paid based on a formula price (either a fixed baseline price or a price tied to the spot or futures market) that can vary based on volume.<sup>66</sup> Buyers develop these input streams (known as captive supplies) because they allow the buyer to exercise power over the seller without competing with other potential buyers on open or spot markets at the time when they need the livestock.<sup>67</sup> Production contracts pay farmers for the service of raising the crop or livestock, not the crop or livestock itself.<sup>68</sup> The agricultural processing company delivers the inputs (seed, feed, young livestock, transportation, etc.) to the farmer and then picks up the farm goods when the production is complete.<sup>69</sup>

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<sup>60</sup> See U.S. Government Accountability Office. “Spot Cheese Market: Market Oversight has Increased, but Concerns Remain about Potential Manipulation.” 2007.

<sup>61</sup> Palmer, Eric. “Dairy co-op, former execs fined \$12 million in price manipulation case.” *Kansas City Star*. December 16, 2008.

<sup>62</sup> Moeller, David. Farmers’ Legal Action Group, Inc. (FLAG). “Livestock Production Contracts: Risks for Family Farmers.” March 22, 2003 at 2.

<sup>63</sup> MacDonald, James et al. USDA ERS. “Contracts, Markets, and Prices: Organizing and Use of Agricultural Commodities.” Agricultural Economic Report 837. November 2004 at 9.

<sup>64</sup> MacDonald, James and Penni Korb. USDA ERS. “Agricultural Contracting Update, 2005.” Economic Information Bulletin No. 35. April 2008 at 9.

<sup>65</sup> MacDonald et al. (2004) at 4-5.

<sup>66</sup> Taylor (2004) at 3.

<sup>67</sup> Carstensen (2004) at 6.

<sup>68</sup> MacDonald (2008) at 3

<sup>69</sup> MacDonald et al. (2004) at 4.

Contracting is most prevalent (even dominant) in livestock markets. Nearly all (94.2 percent) of poultry and egg production, three-quarters (76.2 percent) of hog production and one-sixth (17.6 percent) of beef cattle production was under contract in 2005.<sup>70</sup> But many crops are grown under production or marketing contracts as well. In 2005, contracts covered three-fifths (63.6 percent) of fruit production, half (54.3 percent) of vegetable production, and nearly one-fifth of corn and soybean production (19.6 and 18.4 percent, respectively).<sup>71</sup> Nearly all vegetables for processing and most fresh lettuce are grown under production contracts where the buyer specifies (and often provides) the seed type, agrochemical inputs and production volumes.<sup>72</sup>

Contracting agribusinesses primarily do business with the largest farms and are reluctant to deal with medium-sized or smaller producers.<sup>73</sup> As a result, more large farms operate under contract than medium-sized, independent farms. In 2005, nearly half (49.3 percent) of commercial farms (more than \$250,000 in farm sales or corporate-ownership) operated on contract, compared to 15.8 percent of intermediate-sized farms (households with farm sales up to \$250,000 that earn the majority of their income from farming).<sup>74</sup> The largest farms were even more likely to operate under contract. More than two-thirds (67.5 percent) of operations with farms sales over \$1 million and three-fifths (63.4 percent) of farms with sales between \$500,000 and \$1 million operated under contract in 2005.<sup>75</sup>

Contract-driven vertical integration can distort the competitive market by eliminating price transparency. The rapid rise of contracting can undercut or even effectively eliminate the spot market for agricultural products. In cash or spot markets, farmers are paid when their agricultural products are transferred off the farm and farmers arrange for the selling and marketing of their goods.<sup>76</sup> Spot market prices are publicly available, providing transparent information to both buyers and sellers and providing market signals for future transactions. Marketing and production contract prices are privately negotiated, which reduces transparency and hinders price discovery.<sup>77</sup> USDA notes:

Contract prices are usually not publicly reported, and the effectiveness of spot markets can be eroded as contracting expands. The remaining sales may reflect a nonrepresentative set of transactions, making the reported prices an inaccurate reflection of activity, and market reports based on smaller samples can be less reliable. Further, some participants fear that thinning cash markets may make it easier for markets to be manipulated in favor of insiders. This weakening efficacy can spur further decline in the spot market.<sup>78</sup>

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<sup>70</sup> MacDonald and Korb (2008) at 13.

<sup>71</sup> *Ibid.*

<sup>72</sup> MacDonald et al. (2004) at 29.

<sup>73</sup> Democratic Senate Agriculture Committee Staff Report (2004) at 11.

<sup>74</sup> MacDonald and Korb (2008) at 8.

<sup>75</sup> *Ibid.* at 10.

<sup>76</sup> MacDonald et al. (2004) at 3.

<sup>77</sup> Hayes, Lynn A. Farmers' Legal Action Group, Inc. (FLAG). Testimony before the Senate Committee on Agriculture, Nutrition, and Forestry. April 18, 2007 at 13.

<sup>78</sup> MacDonald et al. (2004) at 55.

Proponents contend that contract arrangements provide stability for producers and reduce market price risks, but farmers may be exchanging price risk for liabilities in the terms of the contracts – contract risk.<sup>79</sup> Farmers risk lower (if more stable) prices, the loss of autonomy, abusive contract terms and the possibility that the buyer will fail.

Contract hog and poultry producers receive a tiny fraction of the value of their livestock from the contractor – between 10 to 12 percent of the production value in 2001.<sup>80</sup> This reflects, in part, the costs that agribusinesses bear in production contracting (feed, providing the young livestock, veterinary services) but also reflects the disproportionate power that poultry and pork processors can exert over farmers that are dependent on a single pork processor or poultry company. For example, pork processors typically only pay 80 percent of the cost of production to farmers under production contracts.<sup>81</sup> Independent hog producers can earn higher returns than contract producers, but their earnings were more volatile than contract producers.<sup>82</sup> Of course, many hog farmers do not even have the option to sell hogs on the open markets, because they may live in an area with a single hog buyer or a few buyers that only purchase hogs through contracts.

The terms of production contracts can be severe. Rigid contract terms can reduce or eliminate farmer autonomy.<sup>83</sup> Contract livestock operators are often required to make significant investments – in land, buildings and equipment – in order to secure contracts.<sup>84</sup> Many poultry integrators and pork processors require capital upgrades in order for growers to keep or renew their contracts. In 2004, half (49 percent) of poultry growers and three-fifths (61 percent) of hog operators were required to make these capital upgrades.<sup>85</sup> These costs can be extensive, as a single large broiler house can cost \$300,000.<sup>86</sup>

Many livestock contracts require binding arbitration, force farmers to waive their rights to jury trials, determine the rules and venue for resolving disputes – at times in a location far from the farm.<sup>87</sup> Under the 2008 Farm Bill, growers were immediately given the right to opt out of binding arbitration clauses and USDA is currently promulgating regulations that are designed to remedy some of the rest of these concerns, but the pending draft regulations have not been released as of this writing. Contract livestock farmers are also responsible for securing permits for disposing of livestock manure and the environmental liability associated with any manure disposal.<sup>88</sup> Farmers or growers that rely on a steady contract relationship with a packer or processor are unable to complain about shoddy treatment or unfair terms for fear of retaliation that could end their business.<sup>89</sup>

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<sup>79</sup> *Ibid.* at 1.

<sup>80</sup> *Ibid.* at 23.

<sup>81</sup> *Ibid.* at 34.

<sup>82</sup> *Ibid.* at 36.

<sup>83</sup> *Ibid.* at 29.

<sup>84</sup> Hayes (2007) at 7.

<sup>85</sup> MacDonald and Korb (2008) at 17.

<sup>86</sup> MacDonald (2008) at 7.

<sup>87</sup> Domina and Taylor (2009) at 43.

<sup>88</sup> Moeller (2003) at 4.

<sup>89</sup> Domina and Taylor (2009) at 65.

Contracts expose farmers to the risk of buyer failure.<sup>90</sup> In 2009, the risk of buyer failure was not academic, as pork processors and poultry integrators began to fail. Four pork processors in North Carolina declared bankruptcy in 2009, which imperiled the contracts of the farmers that supplied hogs to the processors.<sup>91</sup> The 2009 Pilgrim's Pride bankruptcy led to the closure of three processing plant complexes.<sup>92</sup> Some of these closures led to the termination of grower contracts. For example, in Live Oak, Florida, Pilgrim's terminated contracts with some growers (including some with about \$600,000 in debt on their chicken houses).<sup>93</sup>

### *Consolidation Erodes Rural Economies*

The consolidation in the food and farm sector can sap the economic vitality of rural communities. Fewer national companies selling farm inputs and buying farm output means there are fewer small agricultural businesses providing products and services to farmers. These independent feed and equipment dealers, locally owned grain elevators, small slaughterhouses and medium-sized regional food processing firms provide employment, investment and stability to rural communities. Independent agricultural producers are the economic engine that drives economic stability in rural communities.<sup>94</sup> Yet as Professor Taylor notes, this concentrated economic power in the hands of few companies effectively "siphons profits out of rural areas and moves them to international financial centers."<sup>95</sup>

Concentrated agribusiness and food company market power also puts pressure on farmers to increase the scale of their operations – to get big or get out. Larger food processing firms prefer to buy from larger, high-volume commercial farms. The number of very large farms has soared over the past fifteen years while the number of independent, medium-sized farms has declined. Between 1992 and 2007, the number of farms with more than \$1 million in farm sales nearly quadrupled, rising from 14,758 in 1992 to 57,292 in 2007.<sup>96</sup> Over the same period, the number of medium-sized operations (gross farm sales between \$100,000 and \$250,000) fell by a quarter from 202,779 in 1992 to 149,049 in 2007 and the share of these farms fell by more than a third from 10.5 percent in 1992 to 6.8 percent in 2007.<sup>97</sup>

Consolidated meatpackers and poultry processors have pushed livestock producers to rapidly expand the scale of their operations. Larger slaughter and processing firms tend to purchase from and contract with the largest livestock operators. Over the past several decades, livestock production has become increasingly specialized with farms raising a single kind of animal or even a specific stage of production (farrowing hogs, for

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<sup>90</sup> MacDonald et al. (2004) at 30.

<sup>91</sup> Ovaska, Sarah. "Hog farmers reel as buyers go bankrupt." *Raleigh News-Observer*. November 20, 2009.

<sup>92</sup> Smith, Rod. "JBS cleared to buy control of Pilgrim's." *Feedstuffs*. October 19, 2009.

<sup>93</sup> "Canceled Pilgrim's growers face huge losses." (Live Oak, Florida) *Suwannee Democrat*. January 9, 2009.

<sup>94</sup> Democratic Senate Agriculture Committee Staff Report (2004) at 2.

<sup>95</sup> Taylor (2004) at 8.

<sup>96</sup> USDA National Agricultural Statistics Service. 2007 Census of Agriculture. 2009 at 10, Table 3; Hoppe, Robert A. et al. USDA ERS. "Structure and Finances of U.S. Farms: Family Farm Report, 2007 Edition." Economic Information Bulletin No. 24. June 2007 at 30.

<sup>97</sup> *Ibid.*

example). USDA found that larger meatpacking and processing plants “all rely on tighter coordination of the [livestock] production process. They may also encourage larger farms.”<sup>98</sup>

The demise of local agricultural businesses combined with a declining number of independent full-time farmers creates a real economic cost for rural America. University of California Davis professor Richard Sexton noted that “[E]ven modest market power might have important redistributive consequences. For example, what are the implications of this redistribution for the future of farming in some regions and for the vitality of rural communities.”<sup>99</sup>

### *Antitrust Law and Enforcement*

Federal antitrust law prohibits companies from colluding to suppress competition, engaging in predatory conduct to seize or maintain a monopoly, or creating corporate mergers that significantly reduce competition in a geographic market. The Sherman Antitrust Act prohibits the collusion between competitors to subvert the operation of the marketplace including price fixing agreements, apportioning geographic or consumer markets, or coordinated boycotts or blacklists against suppliers or consumers.<sup>100</sup> The Sherman Act also bars the coercive use of monopoly power to interfere with rivals’ ability to compete in the marketplace. Monopolies must have a very high market share – sometimes more than 60 or 70 percent single-firm market share – and engage in anticompetitive conduct to trigger Sherman Act anti-monopoly enforcement.<sup>101</sup> The Clayton Antitrust Act allows federal regulators to review proposed mergers to ensure that the newly merged companies do not alter the market landscape enough to significantly reduce competition. The U.S. Department of Justice can prevent or modify anticompetitive mergers that would be difficult to remedy once they were complete.<sup>102</sup> Mergers between national firms that do not compete head-to-head in local markets generally do not trigger merger reviews.<sup>103</sup> The USDA-enforced Packers & Stockyards Act (P&SA) was designed to prevent meatpackers and processors from using unfair, deceptive, or unjustified discriminatory practices against producers.<sup>104</sup> Farmers pushed the P&SA in the early 20<sup>th</sup> century in response to what was seen as weak or limited enforcement of the Sherman Act against agricultural market power.<sup>105</sup> P&SA also bars anticompetitive actions such as manipulating or controlling prices, creating monopoly, conspiring to allocate territory or sales.<sup>106</sup> USDA’s enforcement of the P&SA against meatpackers and processors has been uneven and limited and some provisions of the act (namely the prohibition against undue preferences) have yet to be implemented.

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<sup>98</sup> MacDonald and McBride (2009) at 20.

<sup>99</sup> Sexton (2000) at 30.

<sup>100</sup> Ross (2002) at 5-6.

<sup>101</sup> *Ibid.* at 11.

<sup>102</sup> *Ibid.* at 13.

<sup>103</sup> Moeller (2003) at 5.

<sup>104</sup> Heykoop, Jerry. Congressional Research Service. “Merger and Antitrust Issues in Agriculture: Statutes and Agencies.” RS20562. January 29, 2003 at 2-3.

<sup>105</sup> O’Brien (2005) at 5.

<sup>106</sup> Heykoop (2003) at 3.

Although the existing laws could be used to curb coercive market power, the U.S. Department of Justice and USDA have taken a laissez faire approach to agricultural market power in recent decades. Generally, the U.S. Department of Justice only challenges the most extreme cases where companies clearly exert coercive market power to restrain competition.<sup>107</sup> Although some notable agricultural price fixing cases initiated during the Clinton Administration were completed in the early years of the Bush Administration, agricultural antitrust enforcement was largely anemic over the past decade. The Bush Administration did not file a single anti-monopoly case in any sector.<sup>108</sup> Most agricultural mergers were approved without any significant modifications or divestitures. The American Antitrust Institute noted that “Antitrust law enforcement over the past eight years has failed to deal effectively with either the substantial structural changes or the exploitative and exclusionary conduct manifest in both the input and output markets that farmers face.”<sup>109</sup>

The result of the federal government’s unwillingness to address the growing consolidation in agricultural and food markets has facilitated a substantive change in the structure of the food system. Below, we examine how the declining competition in agricultural markets, increased consolidation and vertical integration impact the marketplace, farmers and consumers of food.

### ***Consolidation and Intellectual Property Rights in the Seed Industry***

Over the past decade, the number of companies that sell seeds for commodity crops has dramatically decreased. The consolidation and concentrated economic power is especially stark for genetically modified seeds and the cross licensing of genetic traits. Farmers are dependent on a smaller number of firms that sell seeds for corn, soybeans, cotton and other crops. The prices for seeds and the agrochemicals that are tied to the genetic seed traits has risen sharply as the market has become more concentrated. The seed and biotechnology firms that dominate the marketplace deter new market entrants by controlling the cross licensing of traits, engaging in entangling and binding joint ventures, and impose stringent requirements on farmers who use their patented seeds.

The U.S. seed industry for field crops is extremely consolidated. In 2007, the top two firms sold 58 percent of the corn seeds.<sup>110</sup> Two firms sold 60 percent of the soybean seeds in 2005.<sup>111</sup> In the United States, genetically modified seeds are grown on nearly nine out of ten acres of corn and soybeans – 85 percent of corn, and 91 percent of soybeans.<sup>112</sup> In 2009, nearly all (93 percent) soybeans and four-fifths (80 percent) of corn cultivated in the United States are grown from seeds with Monsanto patents.<sup>113</sup>

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<sup>107</sup> O’Brien (2005) at 7.

<sup>108</sup> Whoriskey (2009).

<sup>109</sup> American Antitrust Institute (2008) at 282.

<sup>110</sup> Hendrickson and Heffernan (2007).

<sup>111</sup> Hendrickson, Mary and Heffernan, William. University of Missouri. “Concentration of Agricultural Markets.” February 2005.

<sup>112</sup> USDA, NASS. “Acreage.” June 30, 2009 at 24-25.

<sup>113</sup> Whoriskey (2009).

A few major chemical and pharmaceutical giants now dominate the seed industry, which once relied on universities for most research and development.<sup>114</sup> Since 1990, the largest seed companies (many of them biotechnology seed producers) vacuumed up many small and medium sized seed companies, which deterred innovation and competition in conventional and biotech seeds.<sup>115</sup> Between 1995 and 1998, the largest seed, pharmaceutical and agrochemical companies acquired or entered into joint ventures with almost seventy smaller seed companies.<sup>116</sup> Between 1998 and 2003, there were \$15 billion in seed mergers, many at price levels in excess of the underlying corporate value.<sup>117</sup> Between 1996 and 2007, Monsanto acquired more than a dozen smaller companies.<sup>118</sup> The few firms that do exist often have cross-licensing agreements for their patents that create partnerships between companies to sell seeds with specific combinations of traits from multiple firms.<sup>119</sup>

In 2008, two additional seed company mergers were proposed or finalized. Monsanto finally acquired Delta Pine & Land, Co., which sold half of the cottonseed in the United States, (nearly a decade after the same merger was scrubbed after U.S. Department of Justice Department scrutiny). Although Delta Pine & Land (DPL) did not develop its own genetically engineered seeds, it had planned to license genetically modified traits from Monsanto's competitors; after the merger, DPL had no incentive to use non-Monsanto technology, which undercut the market for cotton seed traits from Monsanto's competitors.<sup>120</sup> Additionally, Dow's seed and agro-biotechnology division acquired corn, sunflower and sorghum seed seller Triumph Seeds.<sup>121</sup>

### *Patents, Joint Ventures and Cross Licensing*

Seeds, especially genetically modified seeds, are protected by patent and intellectual property law. Patents are designed to give innovators a safe harbor to develop their products and markets, but seed patents – especially when many traits are held by a small number of firms – can freeze new entrants out of the marketplace.<sup>122</sup> Genetically engineered seeds were not considered patentable until several court cases and rulings extended patent rights to genetically modified organisms.<sup>123</sup> In 1996, biotech crops became commercially available, and by 2009, the vast majority of the corn, cotton and

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<sup>114</sup> Howard, Phil. Michigan State University, Assistant Professor. "Seed Industry Structure, 1996-2008." 2009. Available online at <https://www.msu.edu/~howardp/seedindustry.html> and on file. Accessed September 8, 2009; Fernandez-Cornejo, Jorge. USDA, Economic Research Service. "The Seed Industry in Agriculture." AIB-786. January 2004 at 25-26 and Table 18.

<sup>115</sup> American Antitrust Institute (2008) at 285.

<sup>116</sup> King (2001) at 6,

<sup>117</sup> Harl (2003) at 2.

<sup>118</sup> Organization for Competitive Markets. "Monsanto Transgenic Trait Dominance in US Market, 1996-2007." June 2008; Fernandez-Cornejo, 2004 at 33-34 .

<sup>119</sup> Howard, Phil. Michigan State University, Assistant Professor. "Seed Industry Structure, Cross-Licensing Agreements for Genetically Engineered Traits." 2009.

<sup>120</sup> American Antitrust Institute (2008) at 285.

<sup>121</sup> "Dow acquires Triumph Seed." *Feedstuffs*. March 17, 2008.

<sup>122</sup> Harl (2003) at 10.

<sup>123</sup> Fernandez-Cornejo (2004) at 19.

soybean crops in America were genetically modified.<sup>124</sup> The limited monopoly created by a patent can be used by the holder to exercise considerable market power. According to the U.S. Department of Justice, the aggressive application and exercise of intellectual property rights can constitute anticompetitive behavior.<sup>125</sup>

The owners and developers of patented seed traits can exert considerable market power through joint ventures and cross licensing agreements. Seed companies that do not hold patented traits must enter into licensing agreements with the patent owner to include patented technology in their seed products. Consequently, although it appears that there are a number of competing seed companies with equal power, most corn, soybean and cotton seeds in the United States include traits developed and patented by Monsanto and then cross-licensed to competitors for use in their seed.<sup>126</sup>

These licensing agreements can be particularly anticompetitive, because the patent holders cross-license their traits at their discretion.<sup>127</sup> The patent holder can control how the licensee uses the traits, including whether they can be combined with other competitors' traits.<sup>128</sup> The concentration of both patented genetic traits and the process of genetic manipulation into a few corporate owners allows these companies to block the use or cross-licensing of traits, genetic lines and other biotechnologies by competitors.<sup>129</sup>

#### *High Seed Prices and Farmer License Agreements*

Farmers pay a licensing fee to use patented seeds and sign a contract with the biotechnology company that gives the farmer limited permission to plant the patented seeds for a single crop season.<sup>130</sup> The licenses typically prohibit the common and traditional practice of saving seeds from harvested crops to plant the next season, require farmers to follow specific farming practices and sell in specific markets, and allow the company to inspect their fields.<sup>131</sup> Preventing farmers from planting saved seeds effectively permits seed companies to artificially raise seed prices for all farmers.<sup>132</sup>

The tiny number of seed sellers can exert significant oligopoly seller power over farmers. Indeed, seed prices have been rising, especially for genetically modified seeds. The seed share of farmer's costs has almost doubled in the last 20 years, from 2.6 percent in 1988<sup>133</sup> to 4.9 percent in 2008.<sup>134</sup> The USDA projected that seed expenses for farmers

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<sup>124</sup> USDA, ERS. "Adoption of Bioengineered Crops." Available at <http://www.ers.usda.gov/Data/BiotechCrops/> and on file. Accessed September 9, 2009.

<sup>125</sup> Ross (2002) at 9.

<sup>126</sup> Monsanto, Inc. Securities and Exchange Commission. 10K Filing. October 27, 2009 at 6; Schimmelpfennig, David E. et al, "The impact of seed industry concentration on innovation: A study of U.S. biotech market leaders." *Agricultural Economics*. Vol. 30, Iss. 2. March 2004 at 159.

<sup>127</sup> King (2001) at 4-5.

<sup>128</sup> Monsanto Inc. Press Release. "Monsanto Challenges Unauthorized Use of Roundup Ready® Technology by DuPont." May 5, 2009; Monsanto Inc. "Monsanto ~ Why we're suing DuPont." Available at <http://www.monsanto.com/duPontlawsuit/> and on file. Accessed December 8, 2009.

<sup>129</sup> Harl (2003) at 2.

<sup>130</sup> Fernandez-Cornejo (2004) at 21, footnote 4.

<sup>131</sup> Farmers' Legal Action Group (FLAG). "Farmers' Guide to GMOs." February 2009 at 9.

<sup>132</sup> American Antitrust Institute (2008) at 288.

<sup>133</sup> Fernandez-Cornejo (2004) at 9, Table 3.

rose by 66.3 percent from \$10.4 billion in 2005 to \$17.3 billion in 2009 – more than double the increase in total farm production expenses.<sup>135</sup>

Biotech seeds can be four times as expensive as non-GM seeds.<sup>136</sup> In 2009, non-biotech soybean seed cost half as much as Roundup Ready seed – \$17 a bag versus \$35.<sup>137</sup> Seed prices are likely to continue to rise. Monsanto is planning to charge as much as 42 percent more for its GM seeds in 2010 than in 2009.<sup>138</sup> DuPont Pioneer Hi-Bred announced a 20 percent increase for corn seed and 35 percent increase in soy seed in 2009 and is projecting “double-digit seed price increases” between 2009 and 2013.<sup>139</sup>

The price of GM-affiliated herbicides has risen as well; between 2006 and 2009, Roundup prices nearly doubled from between \$11-\$13 to more than \$20 a gallon.<sup>140</sup> Although GM proponents contend that farmers save on herbicides designed for GM crops, the savings per acre may be less than the increased cost of GM seeds. At most, farmers saved from \$3 to \$20 per acre on lower herbicide costs for GM soybean cultivation,<sup>141</sup> but GM soybean seed can cost about \$23 more per acre than conventional seed,<sup>142</sup> meaning the higher seed costs exceed the herbicide savings.

The biotech companies zealously pursue anyone that may be violating the license agreement or infringing on their patents. Monsanto has hired private investigators to videotape farmers, infiltrate community meetings and interview informants about local farming activities.<sup>143</sup> Monsanto even has a toll-free 800 number to encourage farmers to report their neighbors for “seed piracy.”<sup>144</sup> By October 2007, Monsanto had filed 112 lawsuits against farmers for patent infringement, recovering between \$85.7 and \$160.6 million from farmers in court rulings and out-of-court settlements.<sup>145</sup> It is well-documented that a farmer’s field could be inadvertently contaminated with GM material through cross-pollination and seed dispersal, and at least one farmer contends he was sued when his fields were inadvertently contaminated with GM crops from neighboring farms.<sup>146</sup>

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<sup>134</sup> USDA, NASS. “Farm Production Expenditures 2008 Summary.” August 2009 at 13.

<sup>135</sup> USDA, ERS. “Farm Income and Costs: Farm Sector Income Forecast.” August 27, 2009.

<sup>136</sup> Clapp, Stephen. “Opponents challenge ISAAA biotech crop forecast.” *Food Chemical News*. February 16, 2009.

<sup>137</sup> “Non-biotech soybean acreage increasing in the United States.” *Food Chemical News*. August 17, 2009.

<sup>138</sup> Clapp, Stephen. “Monsanto to charge up to 42% more for next generation seeds.” *Food Chemical News*. August 24, 2009.

<sup>139</sup> “Pioneer seed sales up.” *Feedstuffs*. June 29, 2009; Kaskey, Jack. “DuPont Raises Corn, Soybean Seed Prices Most Ever.” *Bloomberg*. June 12, 2009.

<sup>140</sup> Casale, Carl. Monsanto Chief Financial Officer. Presentation, UBS Best of Americas Conference. September 10, 2009 at 11.

<sup>141</sup> Price, Gregory K, William Lin et al. USDA ERS. “Size and Distribution of Market Benefits from Adopting Biotech Crops.” Technical Bulletin No. 1906. November 2003 at 3.

<sup>142</sup> “Non-biotech soybean acreage increasing in the United States.” *Food Chemical News*. August 17, 2009; Whigham, Kieth, Iowa State University. “How to lower soybean seed costs.” *Integrated Crop Management*. IC-480(23). October 12, 1998; it takes about 1.3 bags of soybean seeds per acre (assuming the most common 3,000 seeds per pound and a target 200,000 seeds per acre).

<sup>143</sup> Barlett, Donald L. and James B. Steele. “Monsanto’s harvest of fear.” *Vanity Fair*. May 2008.

<sup>144</sup> FLAG (2009) at 32.

<sup>145</sup> Center for Food Safety. “Monsanto vs. U.S. Farmers.” November 2007 at 1-2.

<sup>146</sup> FLAG (2009) at 29-31; Ellstrand, Norman. “Going to ‘Great Lengths to Prevent the Escape of Genes That Produce Specialty Chemicals.” *Plant Physiology*. August 2003.

## *Horizontal Consolidation and Buyer Power in the Beef Industry*

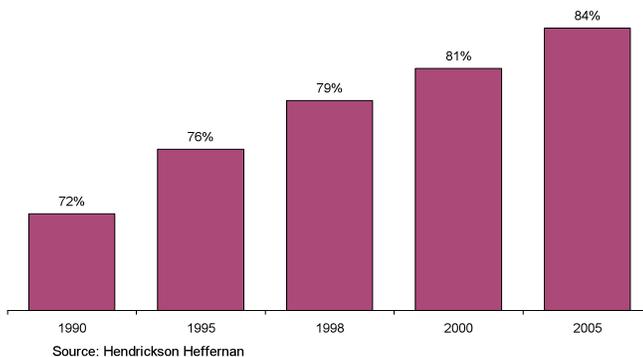
The beef packing industry is the most consolidated in the meat and poultry sector. Meatpackers have merged into a few dominant players that effectively slaughter and market almost all of the beef products in the United States. This horizontal concentration gives the large packers considerable leverage over independent cattle operators. But the beef packing industry has also become vertically integrated, with large packers owning their own cattle, operating feedlots and coordinating the supply of cattle through marketing arrangements that give meatpackers control over live cattle through all stages of production. The consolidation in the industry, packer-ownership of live cattle and vertical marketing arrangements give the meatpackers considerable control over the supply and the price of live cattle, and put producers at significant disadvantage.

Beef cattle are raised by cow-calf operators, fattened by stockers and backgrounders, finished at feeders and sold to slaughterhouses and processors. Even in 2008, nearly half (46 percent) of beef cattle are on 679,540 farms and ranches with fewer than 100 head.<sup>147</sup> Most beef cattle are eventually finished on feedlots, but the facilities for this stage of production have gotten much larger and are often integrated with the meatpackers.

Until the mid-1960s, most feedlots were small, family-owned operations that handled fewer than 1,000 head, but collectively marketed 60 percent of fed-cattle.<sup>148</sup> In the 1980s, feedlots with more than 32,000

head capacity accounted for less than a third of marketed cattle, but by 2000, these giant feedlots marketed nearly a half of the cattle.<sup>149</sup> Now, the largest beef feedlots finish the vast majority of beef cattle. In 2008, one eighth (12.1 percent) of the nation's feedlots finish more than 16,000 cattle but market nearly three-quarters (70.2 percent) of beef cattle.<sup>150</sup>

**Four-Firm Beef Packer Concentration**



### *Hyper-Consolidation Disadvantages Independent Producers*

Concentration in the meatpacking industry has disadvantaged family cattle producers since the turn of the 19<sup>th</sup> century and the exercise of unfair market power by the beef-

<sup>147</sup> Ellis, Shane. Iowa State University. State of the Beef Industry 2008. 2009 at 9.

<sup>148</sup> MacDonald and McBride (2009) at 12.

<sup>149</sup> Barkema et al. (2001) at 37.

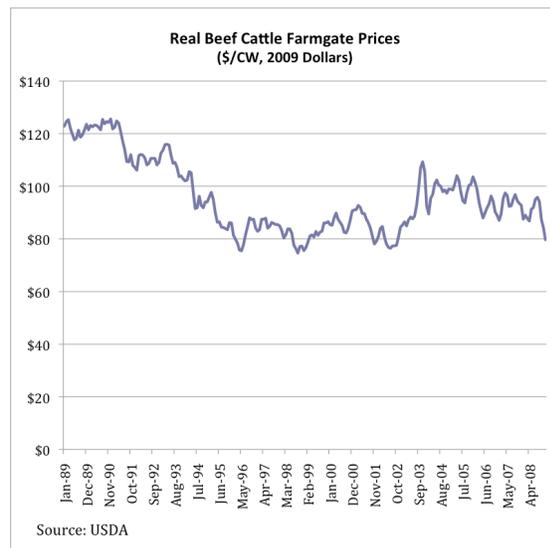
<sup>150</sup> Ellis (2009) at 11.

packing cartel helped to spawn today's antitrust laws.<sup>151</sup> But the meatpacking companies of the late 19<sup>th</sup> century were significantly less concentrated than the handful of companies that dominate the industry today.<sup>152</sup>

By the late 1990s, the beef processing industry was so concentrated that the U.S. Department of Justice classified the industry as “highly concentrated,” its highest rating for antitrust oversight.<sup>153</sup> But the horizontal consolidation has continued since the Department made this assessment. The number of cattle slaughter plants declined by more than a third in ten years from more than 270 in 1996 to fewer than 170 in 2006.<sup>154</sup> In 2007, the top three beef packers (Tyson, Cargill and Swift) processed two-thirds (67 percent) of beef cattle and three-fifths (58 percent) of commercial cattle.<sup>155</sup> The 2008 JBS-Swift merger was anticipated to only increase the anti-competitive concentration of beefpackers.<sup>156</sup>

More concentrated beef packer markets can drive down live cattle auction prices. In many cases, only one or two of the three or four major beef packers will attend any given feedlot auction and maybe only one buyer will bid on cattle, which suggests that the buyers are effectively allocating purchase markets.<sup>157</sup> Nearly three-fifths (57 percent) of feedlots sell auction cattle to a single beef packer, and some feedlots occasionally reject higher bids to maintain positive relationships with their primary buyer.<sup>158</sup>

Studies of the beef packing industry commissioned by USDA in the 1990s found that higher levels of packer concentration tended to drive down the price farmers received for live cattle and that larger feedlots received higher prices



<sup>151</sup> Azzam, Azzeddine M. and Dale G. Anderson. Department of Agricultural Economics, University of Nebraska-Lincoln. Report to GIPSA. “Assessing Competition in Meatpacking: Economic History, Theory and Evidence.” GIPSA-RR 96-6. May 1996 at 1; Ollinger, Michael et al. USDA ERS. “Structural Change in the Meat, Poultry, Dairy, and Grain Processing Industries.” Economic Research Report 3. March 2005 at 7.

<sup>152</sup> Domina and Taylor (2009) at 46.

<sup>153</sup> Barkema et al. (2001) at 35.

<sup>154</sup> USDA Grain Inspection, Packers and Stockyards Administration. “Assessment of the Livestock and Poultry Industries: Fiscal Year 2007 Report.” May 2008 at 9.

<sup>155</sup> Ellis (2009) at 9.

<sup>156</sup> R-CALF USA/Organization of Competitive Markets. Letter to U.S. Department of Justice in re. United States of America, et al. v. JBS S.A., et al. December 26, 2008.

<sup>157</sup> American Antitrust Institute 2008 at 297.

<sup>158</sup> Ward, Clement E. Oklahoma State University Department of Agricultural Economics. “Feedlot and Packer Pricing Behavior: Implications for Competition Research.” Paper presented at Western Agricultural Economics Association annual meeting. Portland, Oregon. July 29-August 1, 2007 at 1.

than smaller feeders, which suggests that larger feedlots have some leverage even in concentrated packer markets.<sup>159</sup> A University of Oklahoma study found that when the number of packers bidding on cattle auctions fell and the market concentration increased because of mergers, live cattle prices fell by as much as \$9.39 per hundredweight.<sup>160</sup>

The prices farmers receive for their beef cattle have fallen steadily over the past 20 years and most of the retail prices are captured by the meatpackers and retailers, not the farmers. The real farmgate price for beef cattle has fallen by nearly a fifth (18.5 percent) from an annual monthly average of \$116 between 1989-1992 to \$94.60 between 2004-2008.<sup>161</sup> The net return to producers fell by half over the past several decades. Between 1981 and 1994, the net returns for fed cattle averaged \$36 a head, but between 1995 and 2008 net returns averaged \$14 a head.<sup>162</sup>

Beef packers have captured most of the gains from industry consolidation. One model estimates that the concentrated meatpacker buyer power reduces the benefits to cattle producers by 31 percent and allows packers capture more than half (55 percent) of the total producer and marketing benefits than under competitive markets.<sup>163</sup> Over the past decade, real consumer prices for ground beef have increased by 24.0 percent, from a monthly average price of \$1.89 a pound in 1999 (in 2009 dollars) to \$2.34 a pound in 2008.<sup>164</sup> Over the same period, farmgate prices for beef cattle rose by 8.5 percent – a third as fast as retail prices increased – and the real retail-farmgate price spread (ground beef compared to live beef cattle on a per pound basis) rose by 36.0 percent from \$1.06 per pound in 1999 to \$1.45 per pound in 2008.<sup>165</sup>

### *Captive Supply and Packer Ownership Subvert Competitive Markets*

Beef packers manage the supply of cattle to their plants through a combination of packer-owned cattle, long-term forward contracting arrangements with feedlots or producers and cash market purchases at cattle auction barns.<sup>166</sup> Packer ownership and forward contracts, known as captive supply arrangements, represent the beef packing industry's vertical integration of live cattle and slaughter production stages in the supply chain. Packers use these vertical integration strategies to manage and secure supplies of live cattle for their slaughterhouses. In 2007, USDA estimated that more than two-fifths (between 42 and 45 percent) of slaughtered cattle were committed to meatpackers through captive supply arrangements, marketing agreements and packer-ownership.<sup>167</sup> About one in 12 cattle (between 7 and 8 percent) that were slaughtered in 2007 were packer-owned cattle, owned and held by the meatpacker for at least two weeks before slaughter.<sup>168</sup>

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<sup>159</sup> Sexton (2000) at 14.

<sup>160</sup> Ward (2007) at 11-12.

<sup>161</sup> USDA NASS. Agricultural Prices Annual Summary. 1990-2009.

<sup>162</sup> Domina and Taylor (2009) at 57.

<sup>163</sup> Sexton (2000) at 29.

<sup>164</sup> U.S. Bureau of Labor Statistics. Consumer Price Index—Average Price Data. Series Id: APU0000703112.

<sup>165</sup> U.S. Bureau of Labor Statistics; USDA NASS. Agricultural Prices Annual Summary. 1990-2009.

<sup>166</sup> MacDonald and McBride (2009) at 20.

<sup>167</sup> GIPSA (2008) at 20.

<sup>168</sup> *Ibid.* at 19.

Packer vertical control of live cattle through packer ownership and captive supply arrangements can distort the marketplace, undermine price transparency and price discovery, and hinder new market entrants. For example, captive supply arrangements can deter new meatpackers from entering the market because existing packers can effectively tie up the supply of live cattle for slaughter, forcing new entrants to pay higher prices to attract sufficient cattle to gain efficiencies of scale.<sup>169</sup>

In most transactions and industries, there is a bright line between the sellers and the buyers and these parties can negotiate over prices and terms. In the live cattle market, meatpackers can be buyers or sellers of beef cattle through packer-owned herds, joint ventures and captive supply marketing contracts with producers and feedlots, depending on their slaughter needs. These arrangements allow meatpackers to own or control half their slaughter requirements.<sup>170</sup> Since meatpackers can be on either or both sides of the live cattle sales transaction, they can distort or manipulate prices by slaughtering their own stocks when the cash market price is high or purchase from captive supplies or the spot market when prices are low.<sup>171</sup> Packers can wait out the marketplace, exerting downward actual and psychological pressure on the spot market where there are few buyers.<sup>172</sup>

Beef cattle producers that enter into captive supply agreements with beef packers are likely to receive lower prices for their cattle than on the open market and can receive discriminatory terms relative to more favored suppliers. Captive supply prices for cattle are often tied to a market price (known as a formula price), but the meatpacker is an active participant in the market price as both a buyer and sometimes a seller, which gives the packer the ability to manipulate or distort market prices.<sup>173</sup> Favored contract terms not only benefit the selected feedlots and disadvantage less favored captive suppliers but also distort the prices all producers receive.

Meatpackers offer special captive supply arrangement deals (on price or volume) to selected feedlots, which can alter the landscape of the marketplace by changing the flow of cattle onto feedlots and into the spot market.<sup>174</sup> Favored sellers often receive higher prices than the cash market, but non-favored cattle sellers must rely on the cash market where the meatpackers are the dominant buyers.<sup>175</sup> Moreover, captive supply agreements are confidential, which creates an opaque market where one cattle feeder does not know what others are receiving for their cattle.<sup>176</sup>

The volume of captive supply arrangements – about 40 percent of the live cattle market – has depressed all live cattle prices. Beef packers with significant captive supply arrangements can effectively manipulate cash markets for live cattle.<sup>177</sup> A USDA-funded

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<sup>169</sup> MacDonald et al. (2004) at 51.

<sup>170</sup> Taylor (2004) at 2-3.

<sup>171</sup> *Ibid.* at 3.

<sup>172</sup> *Ibid.* at 4.

<sup>173</sup> *Ibid.* at 3.

<sup>174</sup> *Ibid.* at 4.

<sup>175</sup> Carstensen (2004) at 9.

<sup>176</sup> American Antitrust Institute (2008) at 297.

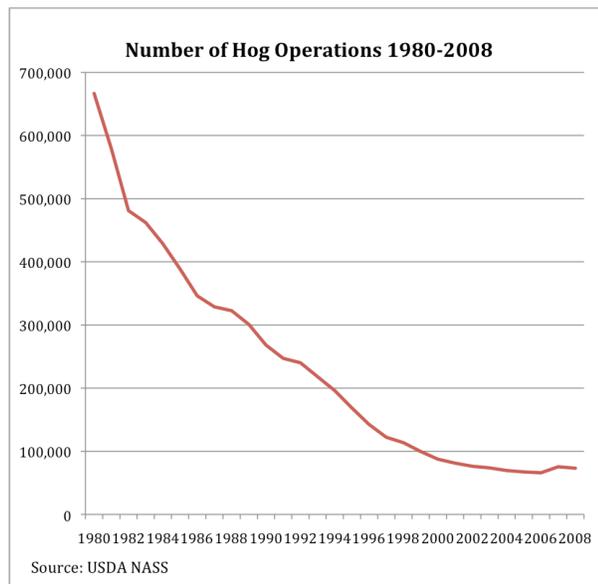
<sup>177</sup> Domina and Taylor (2009) at 18.

study found that auction prices for fed cattle were generally higher than captive supply forward contract prices.<sup>178</sup> Moreover, as meatpackers increase their use of captive supply arrangements, they tend to pay lower prices for fed cattle on the spot market.<sup>179</sup> A study commissioned by the Western Organization of Resource Councils found that cattle producers would receive an estimated \$1 to \$2 per hundredweight more for their cattle if captive supply arrangements were not putting downward pressure on live cattle prices.<sup>180</sup>

### ***Pork Processing Highly Concentrated, Hog Production Vertically Integrated***

Pork packing and processing has become highly concentrated, with two-thirds of all hogs slaughtered by the top four companies, and hog production has become significantly vertically integrated through production and marketing contracts. Pork integrators increasingly own their own hogs for slaughter. In the last two decades, hog production has become concentrated into farms that specialize in a single stage of production (farrowing, nursery pigs and finishing hogs) that are linked together by pork processing integrators through contracts.<sup>181</sup> In 1992, more than half (54 percent) of hog operations were farrow-to-finish farms that sold hogs directly to pork packers; by 2004, less than a third (31 percent) were farrow-to-finish.<sup>182</sup> Feeder-to-finish hog operations that fatten hogs for slaughter were less than a fifth (19 percent) of hog farms in 1992, but two-fifths (40 percent) in 2004.<sup>183</sup> These feeder-to-finish operations provided a fifth (22 percent) of market hogs in 1992, but three-quarters (77 percent) in 2004.<sup>184</sup>

Although the total number of all farms has remained fairly steady over the past two decades (about 2 million operations), the number of hog farms declined by 70 percent from more than 240,000 in 1992 to fewer than 70,000 in 2004.<sup>185</sup> Despite the decline in the number of farms, total hog inventory remained fairly constant because the share of large hog farms increased. The farms with more than 5,000 hogs held half of the hog inventory in 2004, and the share of hogs on operations with more than 2,000 hogs grew from 30



<sup>178</sup> RTI International. Prepared for GIPSA. “GIPSA Livestock and Meat Marketing Study: Volume 1: Executive Summary and Overview – Final Report.” January 2007 at ES-6.

<sup>179</sup> *Ibid.*

<sup>180</sup> Democratic Senate Agriculture Committee Staff Report (2004) at 11.

<sup>181</sup> MacDonald and McBride (2009) at 8.

<sup>182</sup> Key and McBride (2007) at 6.

<sup>183</sup> *Ibid.* at 9.

<sup>184</sup> *Ibid.*

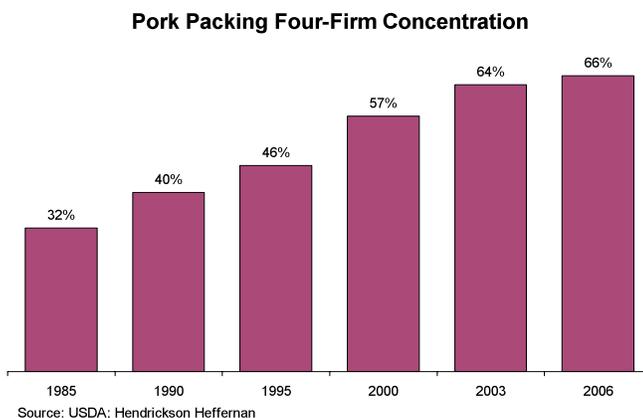
<sup>185</sup> Key and McBride (2007) at 5.

percent in 1992 to 80 percent in 2004.<sup>186</sup> By 2007, 95 percent of hogs were on operations with more than 2000 hogs.<sup>187</sup> Contract hog farms are larger than cash-market, non-contract farms. In 1992, average contract farms were 1,000 hogs larger than non-contract farms; by 2004, average contract farms had 7,000 hogs – nearly three times larger than the average 2,500 hogs on non-contract operations.<sup>188</sup> In 2007, the 7,000 largest contract growers with more than 2,000 hogs sold 89 million hogs – 43 percent of all hog sales.<sup>189</sup>

### *Horizontal Consolidation*

Since the 1990s, a wave of mergers and acquisitions has significantly increased the consolidation in the pork packing industry. The volume of hog slaughter increased by about a quarter over a decade from about 84 million head in 1996 to about 105 million head in 2006.<sup>190</sup> Over the same period, the number of hog slaughter plants declined by 30 percent from more than 230 in 1996 to 160 in 2006.<sup>191</sup>

The top four pork packers slaughtered a less than half of the hogs (46 percent) in 1995, but by 2006, the top four firms slaughtered two-thirds of the hogs.<sup>192</sup> In 2009, about 40 hog integrators coordinate the production of 75 percent of the hogs marketed in the United States.<sup>193</sup>



Since the 1990s, Smithfield devoured competitors in both the production and processing industries, and even ventured outside of the pork market into other meats. Major acquisitions included Valleydale, John Morrell, Lykes Meat Group, North Side Foods, Moyer, Packerland, Stefano Foods, Farmland, Cumberland Gap, Cook’s, Armour Eckrich, and the turkey company, Butterball.<sup>194</sup> Additional acquisitions included Carroll’s Foods, Murphy’s Farms, Vall, Inc., Alliance Farms, MF Cattle Feeding, and Five Rivers Cattle Ranch<sup>195</sup> (a cattle feeding business with a combined feeding capacity of 800,000 head of cattle).<sup>196</sup>

<sup>186</sup> *Ibid.*

<sup>187</sup> USDA NASS. 2007 Census of Agriculture. 2009 at Table 20.

<sup>188</sup> Key and McBride (2007) at 8-9.

<sup>189</sup> USDA NASS. 2007 Census of Agriculture. 2009 at Table 22 and 23.

<sup>190</sup> GIPSA (2008) at 10.

<sup>191</sup> *Ibid.* at 11.

<sup>192</sup> MacDonald and McBride (2009) at 25; Hendrickson and Heffernan (2007).

<sup>193</sup> MacDonald and McBride (2009) at 8.

<sup>194</sup> Smithfield Foods. “Acquisitions at a glance.” Available at: <http://www.smithfieldfoods.com/Investor/Acquisitions/>

<sup>195</sup> *Ibid.*

<sup>196</sup> Smithfield Foods. “See our products: Five Rivers Cattle Feeding.” Available at: <http://www.smithfieldfoods.com/Brands/See/FiveRivers.asp>

The Murphy Farms acquisition made Smithfield the largest hog producer in the country. In 2006, Smithfield purchased the second largest hog producer and sixth largest pork processor, Premium Standard Farms.<sup>197</sup> At the time, Smithfield operated packing plants in Illinois, Iowa, Nebraska, North Carolina, South Dakota and Virginia, and Premium Standard operated plants in Missouri and North Carolina.<sup>198</sup> The merged companies would have accounted for 20 percent of hog production (packer-owned hogs) and 31 percent of hog slaughter – the company’s own hogs would be 54 percent of its slaughtered hogs.<sup>199</sup> The merger also reduced the number of pork processors in the Southeast from two to one, forcing farmers to transport their hogs hundreds of miles away at considerable cost to the next closest packer in the Midwest.<sup>200</sup> The U.S. Department of Justice found that “independent farmers currently ship, and have the ability to increase shipments of, market-weight hogs to plants outside” the Southeast.<sup>201</sup> Even before the merger, the elimination in regional competition had already helped to push down the price of hogs by ten percent in the Southeast.<sup>202</sup> The U.S. Department of Justice approved the merger and “determined that the merged firm is not likely to harm competition, consumers or farmers.”<sup>203</sup>

### *Vertical Integration and Hog Contracting*

In 1993, almost all (87 percent) of hog sales were negotiated purchases between farmers and pork packers or processors (spot market sales), but by 2006, nearly all (90 percent) of hogs were controlled by the pork packers either through packer-owned hogs (20 percent) or production contracted hogs (70 percent).<sup>204</sup> Packer-ownership could be higher. USDA’s Grain Inspection, Packers & Stockyards Administration (GIPSA) estimates that between 2002 and 2005, 20 to 30 percent of hogs were owned by packers.<sup>205</sup> Smithfield alone produced 1.2 million of its own sows in 2006.<sup>206</sup> Many pork production companies own their own sows (four of the top five firms owned 1.2 million breeding sows in 2002), own feed mills, and operate slaughter and processing plants – “in some cases controlling the product from the birth of the pig to [the] delivery of pork to the freezer case at the local grocery store.”<sup>207</sup>

Contract hog production began in North Carolina in the late 1980s and early 1990s, but spread rapidly to the Midwest, where it became the predominant structure of production by the late 1990s.<sup>208</sup> Some hog integrators operate like poultry integrators, owning the

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<sup>197</sup> Martinez (2007) at 28.

<sup>198</sup> U.S. Department of Justice. Press release. “Statement of the Department of Justice Antitrust Division on its Decision to Close Its Investigation of Smithfield Inc.’s Acquisition of Premium Standard Farms Inc.” May 4, 2007 at 2.

<sup>199</sup> Martinez (2007) at 28.

<sup>200</sup> American Antitrust Institute (2008) at 292.

<sup>201</sup> U.S. Department of Justice. (2007) at 2.

<sup>202</sup> American Antitrust Institute (2008) at 292.

<sup>203</sup> U.S. Department of Justice (2007) at 1.

<sup>204</sup> Martinez (2007) at 27.

<sup>205</sup> Key and McBride (2007) at 4.

<sup>206</sup> Hendrickson and Heffernan (2007).

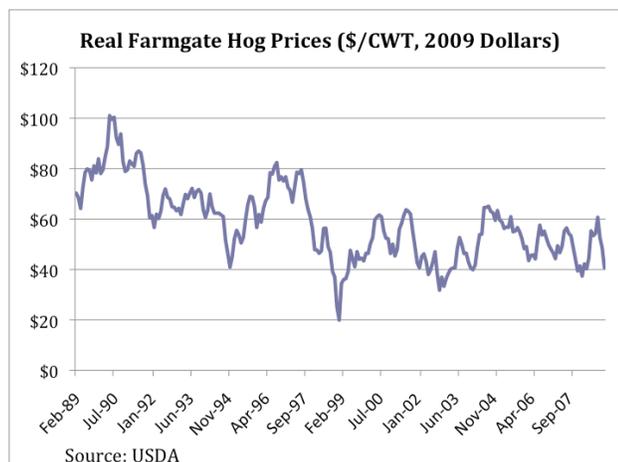
<sup>207</sup> Democratic Senate Agriculture Committee Staff Report (2004) at 7.

<sup>208</sup> MacDonald et al. (2004) at 17.

hogs, supplying the feed and owning and operating the meatpacking factories.<sup>209</sup> Most production contracts pay a fixed fee for the service of raising the hogs that is not tied to any market price.<sup>210</sup>

In the Midwest, there appear to be more marketing contracts than production contracts. These contracts coordinate production between hog producers and feed mills and sell the hogs to pork packers through cash sales or marketing contracts.<sup>211</sup> The price for marketing contract hogs is typically tied to the market price, but since so few hogs are traded on the open market, it is easy for pork packers and processors to manipulate hog prices. For example, the basis price for hog contracts is typically the prevailing mid-morning upper Midwest market price, which allows pork processor buyers to withhold their purchases until the afternoon to drive down prices.<sup>212</sup> The use of hog production contracts and packer-owned hogs depresses the spot price for hogs. Real average monthly hog prices were \$75 per hundredweight between 1989-1993 (in 2009 dollars), when the minority of hog farms used contract production. During the 2004-2008 period, average monthly farmgate hog prices were \$52 per hundredweight, a 31 percent decline.<sup>213</sup> A USDA-funded study found that a 1 percent increase in the use of packer-ownership or contract production causes the spot market for hogs to fall by a nearly the same amount (0.88 percent).<sup>214</sup>

The terms for hog production contracts can significantly disadvantage producers. Some contracts provide a strict management manual for contract growers that eliminates farmer autonomy.<sup>215</sup> Contracts can require farmers to build or upgrade facilities, which can require significant investments for farmers. For a median-sized finishing hog operation, the six 1,100 head hog houses typically cost between \$600,000 and \$900,000.<sup>216</sup> In 2005, three-fifths (61 percent) of hog operators were required to make these capital investments.<sup>217</sup> Some contracts even have a provision that allows the pork packer to evict farmers from their own hog barns and force them to hire company-selected managers to finish the hogs if the packer decides that the farmer was not properly caring for the livestock.<sup>218</sup>



<sup>209</sup> MacDonald and McBride (2009) at 8.

<sup>210</sup> Key and McBride (2007) at 8.

<sup>211</sup> MacDonald and McBride (2009) at 8.

<sup>212</sup> American Antitrust Institute (2008) at 294.

<sup>213</sup> USDA NASS. Agricultural Prices Annual Summaries. 1990-2009.

<sup>214</sup> RTI International (2007) at ES-10.

<sup>215</sup> Hayes (2007) at 3.

<sup>216</sup> MacDonald and McBride (2009) at 10.

<sup>217</sup> MacDonald and Korb (2008) at 17.

<sup>218</sup> Hayes (2007) at 3.

## *Extreme Vertical Integration in the Broiler Industry*

The broiler chicken industry is the most vertically integrated segment of agriculture. A handful of poultry processors, known as integrators, supply their plants with production contracts with about 30,000 growers. The integrators dominate poultry production by operating hatcheries, processing plants and specialized feed mills and contracting with growers to raise the chickens to slaughter weight.<sup>219</sup> The integrators own the birds and the feed, as well as control the breeding stock and chicks, the delivery of feed, the timing of the delivery of chicks and when the flocks are picked up to be processed.<sup>220</sup> One-third of poultry processing plants also owned feed processing mills.<sup>221</sup>

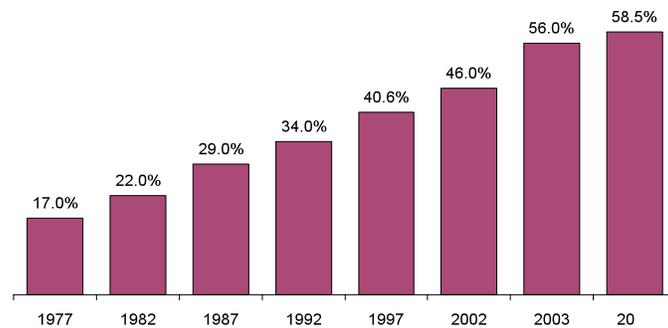
Poultry growers do not own the chickens; they merely raise them on contract for the integrators. There has not been a cash market for broilers since the 1950s, when the poultry companies vertically integrated the entire industry within only a few years.<sup>222</sup> Some form of production contracts exist in

almost all livestock and many crop sectors, but the broiler industry is unique in the near universal use of production contracts.<sup>223</sup> Nearly all (98.9 percent) broiler growers operate under production contracts.<sup>224</sup> The scale of poultry farms has grown rapidly, as growers try to eke out a living by increasing the volume of birds they produce on contract. The median-sized poultry operation increased by 15 percent in four years, rising from 520,000 birds in 2002 to 600,00 birds in 2006.<sup>225</sup>

### *Consolidation in the Broiler Industry*

The poultry industry became increasingly concentrated over the past 20 years as larger companies acquired smaller, regional processors and cooperatives. In the past decade, the four-firm concentration of broiler integrators has increased by nearly 50 percent – it has tripled since the 1980s as the result of mergers and acquisitions. In 2006, nearly three out of five (58.5 percent) of broilers were controlled by four integrators.<sup>226</sup> This is more than 27 percent higher than the 1995 four-firm concentration of 46 percent.<sup>227</sup> Although there

Broiler Four-Firm Concentration



<sup>219</sup> MacDonald and McBride (2009) at 6.

<sup>220</sup> Taylor (2004) at 6.

<sup>221</sup> Ollinger et al. (2005) at 12.

<sup>222</sup> Taylor (2004) at 5.

<sup>223</sup> MacDonald (2008) at iv.

<sup>224</sup> *Ibid.* at 7.

<sup>225</sup> MacDonald and McBride (2009) at 7.

<sup>226</sup> Hendrickson and Heffernan (2007).

<sup>227</sup> MacDonald and McBride (2009) at 25.

are fewer firms, the volume of chicken production and processing has sharply increased. Over the past fifty years, broiler processing rose nearly six-fold from 1.5 billion birds in 1960 to 8.8 billion in 2006.<sup>228</sup>

Broiler production is concentrated in Southeastern states and concentrated within states into localized networks of production.<sup>229</sup> Most poultry growers operate in areas with only one or two integrators offering contracts and there is no spot market for poultry at all.<sup>230</sup> Most integrators operate in a small geographic area, typically within 40 miles of the processing plant and feed mill.<sup>231</sup> In 2006, a quarter (24.7 percent) of growers were served by only one poultry integrator and another third (28.7 percent) were served by only two integrators.<sup>232</sup> Even when there was more than one integrator, the companies may not be seeking new growers; more than half of growers (59 percent) reported they had no alternative to their current contract.<sup>233</sup> The few integrators that do operate in the same region have no incentive to aggressively compete for growers on price, because growers have so few alternatives that they generally tied to a single integrator as long as they raise chickens.<sup>234</sup> Most producers have worked with the same contract integrator for at least a decade.<sup>235</sup>

### *Production Contracts Disadvantage Growers and Undermine Competition*

Integrators use production contracts to manage the supply of birds to their slaughter plants and to rigidly control the management of contract grower operations. Poultry contracts set the terms of production and price, can be manipulated by integrators, often include significant capital investment requirements, and can require growers to surrender their legal rights. Poultry integrators with large processing facilities control the output of their factories “by directly controlling the production process,” according to USDA.<sup>236</sup> Poultry contracts can disadvantage contract growers through unfair terms and unfair pricing formulas. Although poultry processors view growers as “independent contractors,”<sup>237</sup> professor Robert Taylor accurately notes the relationship “can best be described as feudal.”<sup>238</sup>

The industry uses take-it-or-leave-it contracts of adhesion between the integrators and the growers; many of the contracts effectively shift the cost and risk from the integrator to the poultry growers.<sup>239</sup> Some contracts are for a single flock of birds – about 7 weeks – and are automatically renewed as new flocks are delivered, but do not guarantee any future flock deliveries.<sup>240</sup> Nearly half (45 percent) of the contracts are flock-to-flock.<sup>241</sup>

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<sup>228</sup> MacDonald (2008) at 2.

<sup>229</sup> *Ibid.*

<sup>230</sup> MacDonald and McBride (2009) at 26.

<sup>231</sup> Domina and Taylor (2009) at note 88 at 50.

<sup>232</sup> MacDonald (2008) at 13.

<sup>233</sup> *Ibid.*

<sup>234</sup> American Antitrust Institute (2008) at 305.

<sup>235</sup> MacDonald (2008) at 2.

<sup>236</sup> MacDonald and McBride (2009) at 20.

<sup>237</sup> Hayes (2007) at 2.

<sup>238</sup> Taylor (2004) at 6.

<sup>239</sup> Carstensen (2004) at 10.

<sup>240</sup> Hayes (2007) at 4.

Even longer duration contracts allow the integrators to cancel the contract without notice.<sup>242</sup>

Poultry processing companies can manipulate the price and income growers receive by arbitrarily changing the flock delivery schedule and by the system of paying growers on a ranking or “tournament” system that pits producers against one another to determine what they are paid. The integrators also determine the economic viability of contract growers by controlling the time lag between flocks and the number of flocks a grower raises each year.<sup>243</sup> Two-fifths of growers (38 percent) reported that they are sometimes left without flocks long enough to create financial harm.<sup>244</sup>

Growers receive a base payment for raising each flock (based on average production costs) and an incentive payment based on the growers “ranking” with other growers.<sup>245</sup> Each grower’s payment is determined by their comparison to other growers’ performance – a higher ranking than average growers increases the payments growers receive, but a lower ranking reduces their payments. Almost all contracts use ranking systems for some portion of the grower’s compensation.<sup>246</sup> Rankings are typically based on the feed-weight ratio (heavier chickens on the same amount of feed) and the mortality rate of the birds.<sup>247</sup> Although the system seems to be a meritocracy, the integrators control the terms of the ranking system and competition, which largely determines the outcome of the ranking-based pay.<sup>248</sup> The integrator also can manipulate the performance of any individual grower by the quality and timeliness of bird delivery, of feed and veterinary services. Deliveries of underweight chicks, late chick deliveries, poor feed deliveries, late bird pick-up or other outside factors could significantly undermine a growers’ performance and ranking.<sup>249</sup>

Many integrators demand that poultry growers invest in significant capital upgrades – broiler houses and other equipment – in order to secure contracts.<sup>250</sup> The integrators can explicitly mandate the building and equipment design specifications rather than just demand new poultry barns.<sup>251</sup> In 2005, half (49 percent) of poultry growers were required to make these capital upgrades.<sup>252</sup> New broiler houses are extraordinarily expensive and can run between \$350,000 and \$750,000 for a pair (which is typical to increase the scale of operations).<sup>253</sup> A single large broiler house (30,000 square feet) can cost \$300,000.<sup>254</sup>

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<sup>241</sup> MacDonald (2008) at 13.

<sup>242</sup> Hayes (2007) at 2.

<sup>243</sup> *Ibid.* at 3.

<sup>244</sup> Farmers’ Legal Action Group, Inc. (FLAG). “Assessing the Impact of Integrator Practices on Contract Poultry Growers.” September 2001 at 2-6.

<sup>245</sup> MacDonald and McBride (2009) at 6.

<sup>246</sup> MacDonald (2008) at iv.

<sup>247</sup> MacDonald and McBride (2009) at 6.

<sup>248</sup> Taylor (2004) at 6.

<sup>249</sup> Domina and Taylor (2009) at 65.

<sup>250</sup> American Antitrust Institute (2008) at 304.

<sup>251</sup> Hayes (2007) at 7.

<sup>252</sup> MacDonald and Korb (2008) at 17.

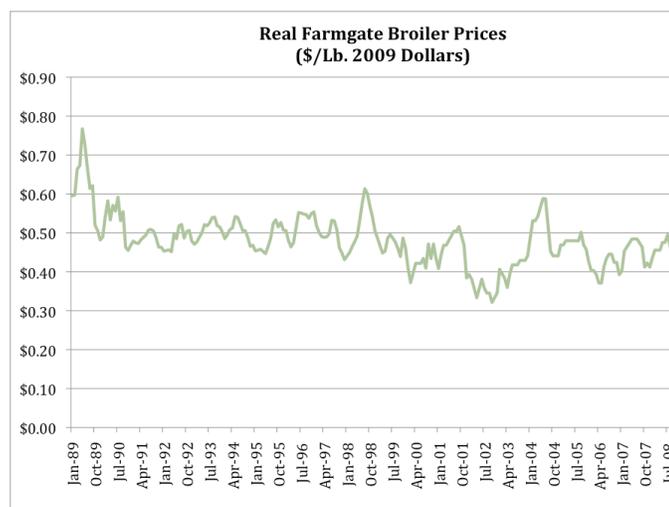
<sup>253</sup> MacDonald and McBride (2009) at 7 and 18.

<sup>254</sup> MacDonald (2008) at 7.

Between 2004 and 2006, poultry operators spent \$650 million in capital upgrades, averaging \$38,000 and with one farm in six investing an additional \$50,000.<sup>255</sup>

Although integrators require new investments, the contracts typically do not increase reimbursement or compensation to adequately cover the costs of the investments.<sup>256</sup> Growers that make upgrades do not receive guaranteed long-term contracts to recover the cost of their investments.<sup>257</sup> Some poultry growers have reported that the integrators have threatened to terminate contract renewals if the farmers do not make equipment upgrades.<sup>258</sup> Even after growers make the required investments, some integrators have terminated contracts.<sup>259</sup> Although the contracts are for short periods, the farmers can be stuck with debt loads that last for five to 15 years.<sup>260</sup>

Individual growers cannot effectively bargain with integrators and integrators have broken efforts to build farmer organizations.<sup>261</sup> In some cases, integrators have discriminated against poultry grower associations by delivering substandard inputs or delays in picking up flocks until after the birds stop gaining weight (which lowers the tournament ranking, because the birds eat feed without adding weight).<sup>262</sup> Since most growers only have one or two integrators that contract in their region, threats and intimidation can destroy their livelihoods. Retaliation and discrimination against grower association members and leaders obviously deters participation in collective groups that could better negotiate with powerful integrators.



### *Tenuous Economic Viability of Contract Poultry Growers*

Many contract poultry growers barely break even, real farmgate broiler prices have been falling steadily and the significant investment requirements can mire growers in debt. A quarter of poultry operations have negative net farm income; farms with significant new capital expenditures have sufficient depreciation expenses to create negative net farm incomes.<sup>263</sup> Real average monthly farmgate prices for broilers fell by 26 percent over the

<sup>255</sup> *Ibid.* at 14.

<sup>256</sup> Moeller (2003) at 5.

<sup>257</sup> GIPSA 2008 at 31.

<sup>258</sup> Hayes (2007) at 7.

<sup>259</sup> *Ibid.*

<sup>260</sup> *Ibid.*

<sup>261</sup> Taylor (2004) at 7

<sup>262</sup> Hayes (2007) at 11-12.

<sup>263</sup> MacDonald (2008) at 23.

last two decades, falling from 62¢ a pound (in 2009 dollars) in 1989 to 46¢ a pound in 2008.<sup>264</sup>

This “farmgate” price does not reflect what growers are paid, but the integrator’s total production costs, including payments to growers. Most grower report receiving about 5¢ per pound for the birds they raise. Between 1995 and 2000, average contract poultry producers with four houses in Alabama faced a net loss of \$7,000 a year after taking depreciation, family labor and a small return on equity into account.<sup>265</sup> In 2006, the average on-farm net income was \$10,000 for small poultry operations (the 25 percent of farms with fewer than 1.33 million pounds of production) and \$20,000 for medium sized poultry operations (the 50 percent of farms with between 1.33 and 3.30 million pounds of production).<sup>266</sup> These limited farm earnings are often after investing hundreds of thousands of dollars in the original poultry houses and capital upgrades. According to professor Robert Taylor, “contract producers who once had acceptable income from their poultry operations now put up a few hundred thousand dollars of equity and borrow several hundred thousand more to hire themselves at minimum wage with no benefits and no real rate of return on their equity.”<sup>267</sup>

### ***Consolidation in the Dairy Industry and Rising Farmgate-Retail Price Spread***

Over the last 20 years, the dairy industry has transformed at all levels, from the cows that produce its raw materials to the cooperatives that secure its prices and the processors that turn milk into finished products for consumers. Dairy farms sell their milk to handlers (often cooperatives) that collect fluid milk; processors pasteurize, bottle and distribute fluid milk; and manufacturers convert fluid milk into cheese, ice cream and industrial dairy ingredients for other processed food companies. The consolidation in the dairy industry has increased the size of dairy cooperatives, fluid milk processors and dairy product manufacturers.<sup>268</sup> Horizontal consolidation in the dairy industry has reduced the number of companies or cooperatives at each dairy production stage and vertical coordination has linked the production chain into powerful alliances. These larger market players increasingly source their milk from industrial mega-dairies that dominate milk production. Despite increased scale and production by farms, processors and manufacturers, the efficiency gains are not being shared by farmers or consumers.

The United States is hemorrhaging dairy farms and farmers: between 1997 and 2007, an average of 5,000 dairy farms were lost annually, for a total loss of over 52,000 dairies in just a decade.<sup>269</sup> Milk production has remained constant because the scale of the farms has significantly increased.<sup>270</sup> From 1980 to 2004, the average size of a dairy more than

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<sup>264</sup> USDA NASS. Agricultural Prices, Annual Summaries. 1990-2009.

<sup>265</sup> Taylor (2002) at 1-2.

<sup>266</sup> MacDonald (2008) at 22, 24.

<sup>267</sup> Taylor (2004) at 6.

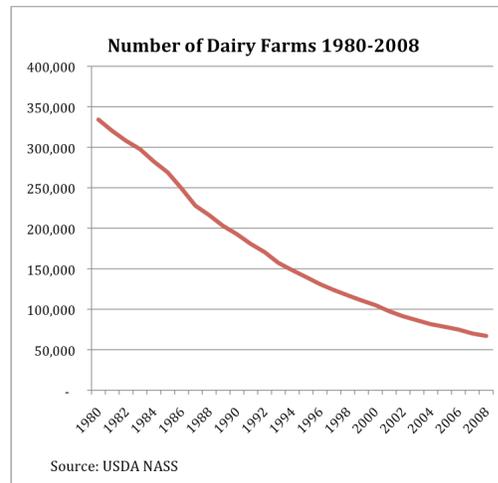
<sup>268</sup> USDA. “Economic Effects of U.S. Dairy Policy and Alternative Approaches to Milk Pricing” Report to Congress. July 2004 at 17-18.

<sup>269</sup> USDA NASS. Agricultural Statistics Database. Accessed August 5, 2008. Available at <http://www.nass.usda.gov/QuickStats/>.

<sup>270</sup> MacDonald and McBride (2009) at 10.

tripled, from 32 to 111 cows,<sup>271</sup> As late as 1998, the majority of milk was produced on small farms with fewer than 200 cows; by 2007, the majority of milk was produced on large dairies with over 500 cows.<sup>272</sup> The number of farms having over 2,000 cows more than doubled between 2000 and 2006.<sup>273</sup> More than a quarter of all milk now comes from industrial dairies with over 2,000 cows, nearly 20 times larger than the national average herd size.<sup>274</sup>

These new mega-dairies can house 10,000 cows or more crowded into high-density feedlots with no access to grass and milked in round-the-clock shifts. These larger operations can have difficulty managing the manure from thousands of dairy cows, which can pollute groundwater, contribute to airborne particulate pollution, and lead to excess phosphorus and nitrogen runoff to streams and rivers.<sup>275</sup> As farms have grown larger, they have also moved westward. The shift to larger dairy farms is most pronounced in western states like California as well as Arizona, Idaho, New Mexico, Texas and Washington.<sup>276</sup> The emergence of mega-dairies has contributed to the decline of local dairy farms in the Southeast, Northeast, Upper Midwest and parts of the prairie states.<sup>277</sup>



### *Horizontal Consolidation and Vertical Coordination*

Milk produced on the 70,000 remaining dairy farms is funneled through a handful of powerful buyers and retailers that can use their market power to push down farmgate milk prices. Until recently, most milk was sold by dairy farms to local milk processors that supplied the dairy case at local grocery stores. Up until the 1990s, medium sized fluid milk processors were local, family-owned businesses that bought milk from local dairies and supplied local consumers and retailers.<sup>278</sup> The extreme perishability and constant production of milk makes dairy farmers especially dependent on their buyers. Dairy farmers have to move their milk while it is still fresh, which gives buyers considerable leverage over farmers.

<sup>271</sup> Miller, James J. and Blayney, Don P. USDA, ERS. "Dairy Background." (LDP-M-145-01). July 2006 at 7.

<sup>272</sup> USDA NASS. Agricultural Statistics Database.

<sup>273</sup> McDonald et al. USDA ERS. "Profits, Costs, and the Changing Structure of Dairy Farming." Economic Research Report No. 47. September 2007 at 3.

<sup>274</sup> USDA NASS. Agricultural Statistics Database.

<sup>275</sup> McDonald et al. (2007) at 25-26; Miller and Blayney (2006) at 9.

<sup>276</sup> MacDonald and McBride (2009) at 10.

<sup>277</sup> USDA NASS. Agricultural Statistics Database.

<sup>278</sup> Hendrickson, Mary, William D. Heffernan et al. Department of Rural Sociology, University of Missouri-Columbia. Report to the National Farmers Union. "Consolidation in Food Retailing and Dairy: Implications for Farmers and Consumers in a Global Food System." January 8, 2001 at 7.

As the milk-processing industry has consolidated and specialized, farmers have fewer and fewer options in their area. Today, a tiny handful of companies buy the majority of milk from farms and process it into dairy products and industrial food ingredients. The four-firm concentration of fluid milk manufacturers doubled in five years, rising from 21 percent in 1997 to 43 percent in 2002.<sup>279</sup> Between 1972 and 1992, the number of fluid milk processing plants fell by 70 percent and the average plant size doubled.<sup>280</sup>

Most dairy farmers market their milk through cooperatives. These cooperatives allow producers to pool the product and participate in pricing set by the federal dairy marketing order. The cooperatives determine how to distribute the milk payments amongst the membership, and the cooperative is not required to pass any price premiums for the highest value products to its members.<sup>281</sup> In many areas, the cooperative is the only buyer, forcing farmers to endure this discriminatory treatment by the cooperative because they do not have other viable marketing alternatives.<sup>282</sup> Consolidation also slashed the number of dairy cooperatives by half in twenty years but the smaller number of cooperatives marketed a larger share of milk. In 1980, there were 435 dairy cooperatives that marketed 77 percent of the fluid milk, by 2002, there were only 196 cooperatives but they marketed 86 percent of the milk.<sup>283</sup>

Horizontal consolidation and vertical coordination between milk processors and the largest, corporate-style dairy cooperative has made the remaining dairy farms vulnerable to milk handlers, processors and manufacturers. Dairy Farmers of America (DFA), a marketing “cooperative” with more than 18,000 members and ties to big processing companies, collects and markets over a third of all U.S. milk.<sup>284</sup> DFA was created in 1998 out of the merger of four large cooperatives.<sup>285</sup> DFA is the primary—and in some regions, the exclusive—supplier to Dean Foods,<sup>286</sup> which controls around 40 percent of the nation’s fluid milk supply,<sup>287</sup> 60 percent of all organic milk,<sup>288</sup> and 90 percent of soymilk.<sup>289</sup> Dairy farmers effectively are required to market their milk through DFA to access the marketplace and take whatever price DFA offers.<sup>290</sup>

Dean Foods began buying strong regional milk brands in the 1980s; between 1997 and 1998, Dean bought 14 fluid milk companies.<sup>291</sup> In 2001, Dean Foods merged with Suiza Foods, a merger of two of the largest fluid milk processors, which created a company

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<sup>279</sup> Martinez (2007) at 24.

<sup>280</sup> Ollinger et al. (2005) at 16.

<sup>281</sup> American Antitrust Institute (2008) at 300.

<sup>282</sup> *Ibid.*

<sup>283</sup> USDA Report to Congress (2004) at 21.

<sup>284</sup> Hendrickson, Heffernan, et al. (2001).

<sup>285</sup> Wilke (2008).

<sup>286</sup> Dean Foods Co. 10-Q SEC Filing. 2002. Item 2. See also *Dairy Field Magazine*. 2003. D-Brief, Issue 1. Accessed September 2, 2008.

<sup>287</sup> Cheng, A. “Dean Foods Cuts 2007 Forecast on Milk Price.” *MarketWatch*. June 12, 2007.

<sup>288</sup> Scott, C. “Organic Milk Goes Corporate.” *Mother Jones*. April 26, 2006.

<sup>289</sup> Silverstein, B. “Silk Soymilk: Smooth.” Brandchannel.com, Brand Features: Profile. December 31, 2007. Accessed August 19, 2008.

<sup>290</sup> Martin, Andrew. “Yes, it’s a Cooperative. But for Whom?” *New York Times*, May 18, 2008.

<sup>291</sup> Ollinger et al. (2005) at 17.

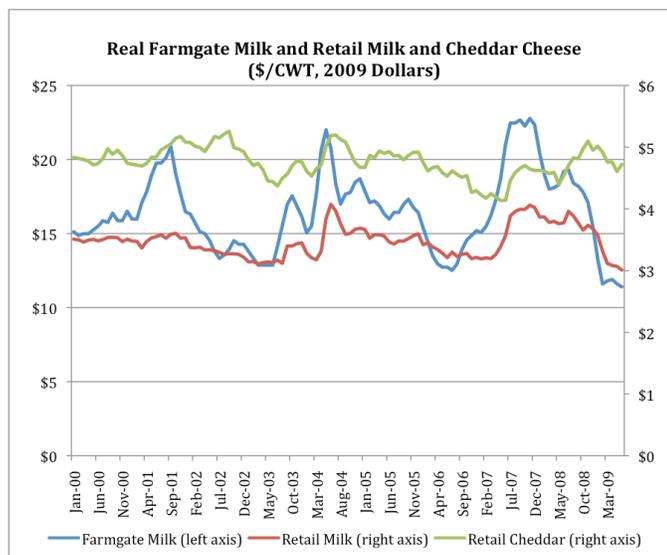
with more than a third (35 percent) of the market.<sup>292</sup> The U.S. Department of Justice estimated that the merger would give the company local market shares between 43 and 100 percent in 22 cities and would likely “result in unilateral price increases.”<sup>293</sup> The merger was approved after Suiza divested 11 milk processing plants and changed its exclusive arrangement with DFA to allow the divested dairy processors to buy fluid milk from non-DFA sources.<sup>294</sup> After the merger, the new Dean reestablished an arrangement with DFA that effectively created an exclusive, long-term deal; Dean then stopped buying milk from the independent producers (who then had to sell to DFA).<sup>295</sup>

The third largest milk processor, HP Hood, has shared management with National Dairy Holdings, which is half owned by Dairy Farmers of America.<sup>296</sup> Smaller cooperatives that sold to HP Hood and opposed the joint management of HP Hood and National Dairy Holdings have been effectively forced to market their milk through DFA to HP Hood.<sup>297</sup>

### *Consumer Prices Unresponsive to 2009 Dairy Crisis*

During the summer of 2007, the price farmers received for milk reached a record \$21.70 per hundred pounds of fluid milk (known as a hundredweight).<sup>298</sup> Over the next two years, the prices farmers received for milk fell by nearly half (47.7 percent) from \$21.60 per hundredweight in July 2007 to \$11.30 in June 2009.<sup>299</sup> Although milk prices fell, production costs did not – the cost of feed rose 35 percent and the cost of energy rose by 30 percent during 2008.<sup>300</sup> Many dairy farmers were losing between \$100 and \$200 per cow every month in 2009.<sup>301</sup>

Very little of the money consumers pay for milk ends up in the hands of farmers. In 2009, farmers only received 97¢ for every \$2.99 gallon of milk and



<sup>292</sup> *Ibid.* at 18.

<sup>293</sup> Kolasky, William J. Deputy Assistant Attorney General. Speech Before the Association of the Bar of the City of New York. “Sound Economics and Hard Evidence: The Touchstones of Sound Merger Review.” June 14, 2002 at 17.

<sup>294</sup> Ross (2002) at 20-21.

<sup>295</sup> American Antitrust Institute (2008) at 301-302 and at note 63.

<sup>296</sup> *Ibid.* at 302.

<sup>297</sup> *Ibid.*

<sup>298</sup> Miller, James. Under Secretary of Agriculture, Farm and Foreign Agricultural Services. Statement before the House Agriculture Subcommittee on Livestock, Dairy and Poultry. July 14, 2009 at 2.

<sup>299</sup> USDA National Agricultural Statistics Service. Prices Received by Farmers, Milk U.S. Available at [http://www.nass.usda.gov/Charts\\_and\\_Maps/graphics/data/pricemk.txt](http://www.nass.usda.gov/Charts_and_Maps/graphics/data/pricemk.txt). Downloaded July 30, 2009; U.S. Department of Labor, Bureau of Labor Statistics. Consumer Price Index data for fresh, whole milk. Downloaded July 30, 2009.

<sup>300</sup> Miller (2009) at 2.

<sup>301</sup> Hoese, Scott. Carver County (Minn.) Farmers Union. Statement before the House Agriculture Subcommittee on Livestock, Dairy and Poultry Concerning Review of Economic Conditions in the Dairy Industry. July 21, 2009 at 7.

less than \$1.00 for every \$4.99 pound of cheddar cheese.<sup>302</sup> Since milk prices began collapsing, the price consumers paid for dairy products has fallen modestly – if at all. Between July 2007 and June 2009, the real price farmers received for milk fell by 49.3 percent, but the retail price for fresh whole milk fell only half as fast (declining by 22.6 percent) and the price of cheddar cheese actually increased by 5.8 percent.

Since 2000, farmgate milk prices have declined sharply during three periods (fall 2001-winter 2002, summer 2004-spring 2006, and summer 2007-present), but retail milk and cheese prices have been largely unresponsive to these significant farmgate price declines. The growing spread between what consumers pay and what farmers receive is captured by the dairy processors and retailers that dominate the industry. The Utah Commissioner of Agriculture noted in June that consumers are not gaining from the declining milk prices that farmers receive, saying “We are concerned that retailers have not reduced the retail price of milk to reflect the huge reduction in the wholesale level.”<sup>303</sup>

### ***Consolidation and Vertical Integration in the Fresh Produce Marketing Chain Fails to Benefit Consumers***

Fresh produce sales and distribution has evolved into tightly integrated marketing arrangements with retailers. Before the late 1980s, produce grower-shippers sold their crops to wholesalers daily, and the wholesalers supplied supermarkets and restaurants.<sup>304</sup> This market of many shippers selling to many wholesalers and terminal markets that in turn sold to local retailers and restaurants created a competitive market where transparent spot prices were established.<sup>305</sup>

Produce sales now are provided under a contract arrangement between a large multi-crop grower-shipper and a large grocery retail chain.<sup>306</sup> National retailers purchase fresh produce directly from shippers and many retailers became self-distributing, bypassing wholesalers and terminal markets.<sup>307</sup> Produce shippers also pay slotting fees to retailers to secure shelf space for fresh fruits and vegetables.<sup>308</sup> The elimination of spot markets and the rise of contracts can hinder competition by obscuring transactional information needed to set transparent market prices. The share of daily produce sales in terminal markets (essentially a produce spot market) fell from 72 percent in 1994 to 58 percent in 1999.<sup>309</sup> Retailers are increasingly buying directly from grower shippers.<sup>310</sup> Shippers have

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<sup>302</sup> *Ibid.* at 3.

<sup>303</sup> House, Dawn. “Retail Milk Prices Too High, Says Utah’s Commissioner of Agriculture.” *Salt Lake Tribune*. June 25, 2009.

<sup>304</sup> Dimitri et al. (2003) at 7.

<sup>305</sup> Cook, Roberta L. Professor, Department of Agricultural and Resource Economics, University of California Davis. “Supermarket Challenges and Opportunities for Fresh Fruit and Vegetable Producers and Shippers: Lessons from the U.S. Experience.” Presented at the Conference on Supermarkets and Agricultural Development in China—Opportunities and Challenges. Shanghai, China. May 24, 2004 at 1.

<sup>306</sup> Dimitri et al. (2003) at 7.

<sup>307</sup> Cook (2004) at 1.

<sup>308</sup> Dimitri et al. (2003) at 3.

<sup>309</sup> *Ibid.* at 11.

<sup>310</sup> *Ibid.* at 7.

also shifted to forward contracts with farmers that pay growers a share of the market price less the cost of marketing, packing, picking and other fees.<sup>311</sup>

There can be considerable consolidation of produce shippers and retailer buyers. Produce suppliers and shippers have gotten larger to meet the volume and service requirements of the national retail chains.<sup>312</sup> In 1999, there were only 25 California tomato shippers and 54 bagged salad shippers, but the top two bagged salad companies accounted for three quarters (76 percent) of the grocery sales.<sup>313</sup> These consolidated shippers sell to a small handful of buyers – the top four produce buyers purchased between 22 and 45 percent of the produce in 1999 (depending on the kind of produce).<sup>314</sup>

### *The Impact of Retailer Consolidation on Retail Fresh Produce Prices*

The small number of retailers can leverage their buyer power over the many produce growers who are price takers because they have little bargaining power to market highly perishable produce before it spoils.<sup>315</sup> A 2003 USDA commissioned study found that consolidated retailers could and did exercise buyer power that reduced the bargaining power of iceberg lettuce and tomato producers which harmed consumers through an increased margin between farmgate and retail prices and suggested an imperfectly competitive market.<sup>316</sup> An examination of iceberg lettuce prices from the mid-1990s found that grocery stores captured the majority of the profits from retail lettuce sales but farmers received nearly no profits from the transaction.<sup>317</sup>

When retailers fail to promptly lower prices after farmgate prices fall, they effectively increase their retail margin for that good.<sup>318</sup> Studies in the late 1980s and 1990s found that consumer prices for dairy products, citrus fruits and peanuts increased when farmgate prices rose but did not fall as quickly or as far when farmgate prices fell.<sup>319</sup> A 2003 USDA commissioned study found that retailers promptly increased grocery prices for grapes, oranges and grapefruit when farmgate prices rose, but reduced retail prices more slowly and less completely when farmgate prices declined.<sup>320</sup> Some retailers essentially offer fixed prices, which also can harm farmers and consumers because the failure to reduce prices during periods of high supply (and low price) does not clear the excess supply from the marketplace and does not offer consumers lower prices.<sup>321</sup>

Food & Water Watch's analysis of farmgate and retail produce prices found that the real fresh produce prices for consumers have generally been rising while the farmgate price

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<sup>311</sup> Cook (2004) at 6.

<sup>312</sup> *Ibid.* at 3.

<sup>313</sup> Dimitri et al. (2003) at 10.

<sup>314</sup> *Ibid.* at 10.

<sup>315</sup> Sexton et al. (2003) at 1

<sup>316</sup> *Ibid.* at 45.

<sup>317</sup> Dimitri et al. (2003) at 16.

<sup>318</sup> Richards, Timothy J. and Paul M. Patterson. USDA ERS. "Competition in Fresh Produce Markets: an Empirical Analysis of Marketing Channel Performance." Contractors and Cooperators Report No. 1. September 2003 at 4.

<sup>319</sup> Sexton et al. (2003) at 3.

<sup>320</sup> Richards and Patterson (2003) at 6.

<sup>321</sup> *Ibid.* at 4.

for produce has fallen. Over the past 20 years, the farmgate price for tomatoes, potatoes and lettuce has fallen. These vegetables typically are the largest share of consumer vegetable purchases.<sup>322</sup> Food & Water Watch analysis found that the real average annualized monthly farmgate price for tomatoes fell by a 24.3 percent from the 1989-1993 period to the 2004-2008 period.<sup>323</sup> The real price of potatoes fell by 15.7 percent and the real price of lettuce fell by 3.5 percent over the same periods. Real consumer prices for tomatoes and potatoes rose during these periods, which increased the margin between farmgate and retail prices.<sup>324</sup> The retail-farmgate margin for tomatoes rose by 25.5 percent between the 1989-2003 and 2004-2008 periods; the real margin for potatoes rose by 8.2 percent over the same period. The real price for lettuce fell slightly (by 3.5 percent between the 1989-1993 and 2004-2008 periods), but by slightly less than half the decline in real lettuce farmgate prices.

### ***Emerging Consolidation and Vertical Integration in Organic Food***

The organic movement has built support for food produced in ways that ensured the health of land, animals, and consumer health. Consumer demand for organic food has risen sharply and organic food sales have surged from \$3.6 billion in 1997 to \$21.1 billion in 2008.<sup>325</sup> The acreage of certified organic farmland tripled in one decade, rising from 1.3 million acres in 1997 to 4.0 million acres in 2005.<sup>326</sup> As demand for premium-priced organic food has risen, conventional food companies have acquired organic brands and launched their own organic products. In the past decade, the organic food sector has rapidly consolidated and it now closely resembles the concentration commonly found in other segments of the food and agriculture sector.

USDA implemented national organic standards in 2002, which began to codify uniform guidelines for organic production practices. The USDA organic standards created a regulatory definition of organic that some criticized as falling below some organic certification programs that existed prior to the USDA standard.<sup>327</sup> While many credit the creation of a national organic standard with sparking tremendous growth in the organic industry, this growth, along with the challenge of getting organic products into national distribution in large retail chains, led to the rapid entrance of large food manufacturers, dairy companies and retailers into the organic sector. These large players began buying up organic brands, launching their own organic products and distributing a wider range organic processed foods at traditional grocery stores.

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<sup>322</sup> Dimitri et al. (2003) at 5.

<sup>323</sup> USDA NASS. Agricultural Prices Annual Summary 1981-2009.

<sup>324</sup> U.S. Bureau of Labor Statistics. Consumer Price Index—Average Price Data. Tomato Series Id: APU0000712311, Potato Series ID: APU0000712112, Lettuce Series ID: APU0000712211.

<sup>325</sup> Dimitri, Carolyn and Lydia Oberholtzer. USDA ERS. “Marketing U.S. Organic Foods: Recent Trends from Farms to Consumers.” Economic Information Bulletin No. 58. September 2009 at iii.

<sup>326</sup> *Ibid.* at 11.

<sup>327</sup> Howard, Philip H. Assistant Professor, Department of Community, Agriculture, Recreation and Resource Studies, Michigan State University. “Consolidation in the North American Organic Food Processing Sector, 1997 to 2007.” *International Journal of Sociology of Agriculture & Food*. Vol. 16, No. 1. April 3, 2009 at 14.

One of the best examples of the tremendous growth in organic sales is the organic dairy sector, which has had retail sales rising between 16 and 37 percent annually between 1997 and 2007.<sup>328</sup> Consequently, organic dairy farms were pushed by the fluid milk processing companies to become larger and more like conventional mega-dairies. Although most (87 percent) organic dairy farms milk fewer than 100 cows, the large organic dairy farms with more than 200 cows produce one-third of the organic milk.<sup>329</sup> Two-fifths of organic milk is estimated to come from confined feeding mega-dairies.<sup>330</sup>

In addition to the amount of organic food being produced, the distribution channels have also changed. Traditional supermarkets began to eclipse organic and natural food stores as the primary retailer of organic food. In 2004, more than a third (37 percent) of organic food was sold at mainstream supermarkets, more than a quarter (28 percent) was sold at natural food stores, and a fifth (19 percent) was sold at natural food chains.<sup>331</sup> By 2006, conventional retailers sold more organic food (46 percent) than natural food stores (44 percent).<sup>332</sup> More than a third (12) of the top 30 grocery retailers and 4 food distributor-wholesalers also offer private label, store-brand organic processed foods.<sup>333</sup> The private label organic products tend to be supplied by the largest organic food processing companies, especially for store-brand organic milk and dairy products.

### *Mergers, Acquisitions and Consolidation in Organic Food Industry*

Organic's small presence in the market once protected it from the consolidation. But as its popularity increased, so did consolidation pressure. By 2008, organic food processors were increasingly absorbed into conventional food companies or competing with these companies.<sup>334</sup> Between 1997 and 2007, a third of the 30 largest food processing companies purchased organic brands – typically paying about twice the organic company's annual sales, an unusually high purchase premium in the food industry.<sup>335</sup>

Over the past decade, half (16) of the top 30 food companies introduced organic versions of their conventional food brands (like organic Nabisco Oreos).<sup>336</sup> Giant agribusinesses are selling organic products, including General Mills, Kellogg's, Cargill and Dean Foods.<sup>337</sup> The majority of organic handlers and food processors now market and manufacture organic and non-organic food products.<sup>338</sup> Although organic labels are often owned by conventional agribusinesses, the corporate ownership is rarely displayed on the label, perhaps to prevent dedicated organic consumers from associating their organic food with big agribusinesses.<sup>339</sup>

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<sup>328</sup> Dimitri and Oberholtzer (2009) at 16.

<sup>329</sup> Clapp, Stephen. "ERS finds organic dairies pushed to be like conventional ones." *Food Chemical News*. November 16, 2009.

<sup>330</sup> Clapp November 16, 2009.

<sup>331</sup> Martinez (2007) at 11.

<sup>332</sup> Dimitri and Oberholtzer (2009) at 6.

<sup>333</sup> Howard. *International Journal of Sociology of Agriculture & Food* (2009) at 25.

<sup>334</sup> Dimitri and Oberholtzer (2009) at 1.

<sup>335</sup> Howard. *International Journal of Sociology of Agriculture & Food* (2009) at 16-17.

<sup>336</sup> *Ibid.* at 22-23.

<sup>337</sup> Mills, Steve. "Big food companies trying to snatch up organic labels." *Chicago Tribune*. August 23, 2009.

<sup>338</sup> Dimitri and Oberholtzer (2009) at 8.

<sup>339</sup> Howard. *International Journal of Sociology of Agriculture & Food*. (2009) at 18.

### *Vertical Integration and Contract Organic Farming*

The demand for organic foods and ingredients often exceeds the supply of available organic ingredients, and organic processors have shifted to vertically integrated supply management and contract arrangements to secure organic inputs. Organic food manufacturers secured nearly two-thirds (65 percent) of organic inputs through contract arrangements.<sup>340</sup> Organic growers are more likely to produce under some form of contract arrangement than conventional farmers.<sup>341</sup> More than three-quarters of organic dairy, poultry and eggs, and produce are procured under written or verbal contract arrangements (78 percent, 78 percent and 75 percent, respectively).<sup>342</sup>

### *Consolidation and Buyer Power in the Retail Grocery Industry*

The regional and local supermarket chains that dominated the economic landscape through the 1980s largely disappeared over the past twenty years. A wave of mergers and acquisitions since the 1990s created a network of national supermarket chains – many that continue to display the old regional store names. At the same time, national supercenters and discounters have emerged as new grocery retailer powerhouses. These consolidated retailers can exert seller power over consumers and leverage buyer power over the food manufacturing, meat processing and produce suppliers. These suppliers, in turn, press farmers to lower their prices.

In 2005, traditional grocery stores (including supermarkets, convenience stores, other grocery stores and specialty food stores) accounted for more than two-thirds (67.4 percent) of food sales (excluding restaurants).<sup>343</sup> The share of food eaten at home sold by supercenters and mass marketers like Wal-Mart, Target, and Costco tripled from 5.7 percent in 1994 to 18.9 percent in 2005.<sup>344</sup> Wal-Mart became the largest food retailer within a dozen years of opening its first supercenter.<sup>345</sup> Wal-Mart's supply chain management, logistics, data sharing and the requirement that suppliers manage their own inventory cut its costs.<sup>346</sup> This efficiency pressured Wal-Mart's competitors and suppliers to squeeze costs. Food processors, meat packers, and other suppliers cannot sacrifice their sales to major retailers, but the retailers can easily switch to alternative suppliers.<sup>347</sup> Large traditional grocery chains have improved their inventory and shelf space management, entered into exclusive supplier arrangements with volume discounts, and developed streamlined distribution chains from the food manufacturers to the retailers.<sup>348</sup>

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<sup>340</sup> Dimitri and Oberholtzer (2009) at 9.

<sup>341</sup> *Ibid.*

<sup>342</sup> *Ibid.* at 10.

<sup>343</sup> Martinez (2007) at 5.

<sup>344</sup> *Ibid.*

<sup>345</sup> *Ibid.* at 6.

<sup>346</sup> *Ibid.* at 6-7.

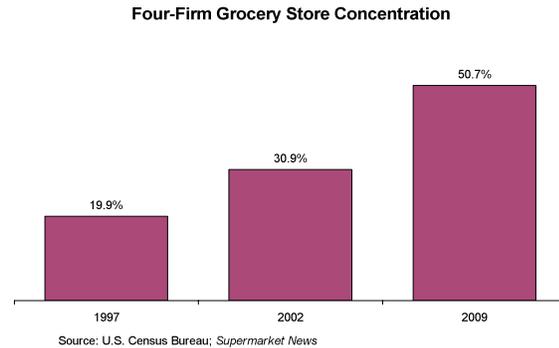
<sup>347</sup> Foer (2006) at 5.

<sup>348</sup> Barkema et al. (2001) at 39.

## Horizontal Consolidation

In the 1990s, large grocery store chains merged or bought out other regional retailers and large warehouse clubs and large discount general merchandise stores like Wal-Mart expanded into grocery products.<sup>349</sup> Over the past decade, grocery store chains have focused on consolidation, mergers and takeovers in an effort to compete with the giant food warehouses.<sup>350</sup> Between 1996 and 1999, there were 385 grocery mergers – nearly 100 each year.<sup>351</sup> The four firm concentration nearly doubled during the late 1990s, rising from 17 percent in the mid-1990s to 34 percent in 2000.<sup>352</sup>

The top four retailers controlled more than half (50.7 percent) of all grocery sales in 2009.<sup>353</sup> This is more than double the four-firm concentration of 19.9 percent in 1997 and 64 percent higher than the 30.9 percent four-firm



concentration in 2002.<sup>354</sup> Grocery store concentration can be considerably higher on the local level. Consumers face a basic form of retailer market power based on the location of the grocery store, since consumers bear travel and time costs to get to the retailer which creates a kind of captive market.<sup>355</sup> For example, in the largest 100 metropolitan areas, the four largest food retailers controlled 72 percent of sales in 1998.<sup>356</sup>

Consumers have not necessarily benefited from the rapidly consolidating grocery industry. Grocery mergers have increased chain gross margins and some mergers improved efficiency, but even when the mergers increased efficiencies, the lowered costs were not passed onto consumers in the form of lower grocery prices.<sup>357</sup> Some academic studies have found that higher levels of local retail concentration are associated with higher grocery prices.<sup>358</sup> The majority of studies reviewed by USDA in 2003 found that increased grocery chain consolidation contributed to an increase in consumer grocery prices, which suggests that further consolidation in the retail sector could cost consumers more.<sup>359</sup> A study of grocery store concentration in the United Kingdom found that retailer mergers increased grocery prices by as much as 7 percent but breaking up big grocery store chains could reduce retail prices by 2 to 4 percent.<sup>360</sup>

<sup>349</sup> *Ibid.* at 34.

<sup>350</sup> Martinez (2007) at iii.

<sup>351</sup> Richards and Patterson (2003) at 1.

<sup>352</sup> Barkema et al. (2001) at 34.

<sup>353</sup> *Supermarket News* (2009).

<sup>354</sup> U.S. Bureau of the Census. Economic Census 1997 and 2002.

<sup>355</sup> Sexton et al. (2003) at 2.

<sup>356</sup> Martinez (2007) at note 11 at 18.

<sup>357</sup> *Ibid.* at 19-20.

<sup>358</sup> Cotterill, Ronald W. University of Connecticut Department of Agricultural and Resource Economics, Food Marketing Policy Center. "Antitrust Analysis of Supermarket Retailing: Common Global Concerns that Play Out in Local Markets." Research Report No. 88. July 2005 at 7 and 9-10.

<sup>359</sup> Sexton et al. (2003) at 3.

<sup>360</sup> Cotterill (2005) at 10.

### *Retailers Exert Buyer Power Over Suppliers*

Horizontal consolidation has given the largest retailers considerable power as buyers of wholesale groceries to fill their stores. These retailers can exert this market power over food manufacturers, meat processors, produce shippers and other suppliers to reduce their prices and offer other ancillary services (self-stocking requirements or reusable packages). Retailers also can require food manufacturers and other suppliers to pay fees to ensure their products receive prime shelf-space, promotional efforts or other marketing fees. This buyer power favors the largest suppliers, who can best negotiate with the retailer and who then pass on the cost cutting pressure to their farm suppliers. Larger food manufacturers can also afford to pay fees to retailers, which creates a barrier to entry for smaller firms that cannot afford a pay-to-play arrangement to get their products onto store shelves.

Large retailers can represent between 10 and 30 percent of a food processor's sales, which gives the retailer significant bargaining power over their suppliers.<sup>361</sup> Retailers often have long-term contracts with food processors and manufacturers; between 50 and 80 percent of meat and poultry are estimated to be delivered to retailers under long-term contracts between grocery chains and meat processors.<sup>362</sup> An empirical USDA study found that retailer market power enabled supermarkets to push the prices paid to produce shippers for grapefruit, apples and lettuce below the prices they might receive in a functioning competitive market and consumer retail prices were higher than "purely" competitive prices for apples, oranges, grapefruit, fresh grapes and lettuce.<sup>363</sup>

The retailer pressure on food manufacturers contributed to the consolidation in the food-manufacturing sector. Many food processing firms justify their own mergers as an effort to create stronger bargaining power with large retailers.<sup>364</sup> The mergers of food processors and manufacturers can restore leverage with the large suppliers.<sup>365</sup> Even large suppliers merge to consolidate their bargaining power with large retail buyers, and smaller food processors and manufacturers may exit the industry after determining they cannot get fair prices from dominant buyers.<sup>366</sup>

Mergers in the food manufacturing sector has already consolidated some of the largest food processing companies.<sup>367</sup> Between 1997 and 2002, two-thirds of the food manufacturing subsectors became more concentrated.<sup>368</sup> Multinational food processing companies operate less than 2 percent of the facilities but employ more than a third (36 percent) of all food processing workers.<sup>369</sup> A 2002 University of Connecticut study of 22 food manufacturing subsectors found that increased consolidation increased oligopoly

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<sup>361</sup> Foer (2006) at 4.

<sup>362</sup> Domina and Taylor (2009) at 75.

<sup>363</sup> Dimitri et al. (2003) at 4.

<sup>364</sup> American Antitrust Institute (2008) at 307.

<sup>365</sup> Harl (2003) at 3.

<sup>366</sup> Foer (2006) at 19.

<sup>367</sup> U.S. Department of Commerce. "Industry Report: Food Manufacturing NAICS 311." June 2008 at 1.

<sup>368</sup> Martinez (2007) at 24.

<sup>369</sup> U.S. Department of Commerce. "Industry Report: Food Manufacturing NAICS 311." June 2008 at 1.

power and consumer prices but only increased efficiency in a third of the studied subsectors.<sup>370</sup>

Retailers can also use their buyer power to exert producers to pay for access to their retail space – slotting allowances (payments for shelf space, shelf location or other marketing services), advertising fees and other financial tributes.<sup>371</sup> Total merchandizing allowances (including slotting fees tied to premium shelf space or end-of-aisle displays) rose from \$9 billion in 1990 to \$16 billion in 2000.<sup>372</sup> Slotting fees for new products vary widely between stores for the same product; in some cases slotting fees for new products can exceed the product’s sales revenue for the first year.<sup>373</sup> Between half and three-quarters of grocery retailer net profits come from these fees.<sup>374</sup> Although these fees ostensibly cover the legitimate retail costs (for example, the cost of introducing new products), fees like slotting fees for shelf space at retailers can be allocated unfairly to food manufacturers in a manner that reduces competition. Larger food manufacturers can invest in slotting fee payments to retailers to monopolize store shelf space.<sup>375</sup> (Although Wal-Mart does not use slotting fees, it does negotiate wholesale price discounts with suppliers that include the allocation of desirable shelf space in contracts.<sup>376</sup>)

Slotting and merchandizing fees can reduce competition by increasing the net cost of wholesale groceries – retailers may be willing to pay higher wholesale prices if they are compensated with merchandizing and slotting payments.<sup>377</sup> Manufacturers that can afford to pay slotting fees can effectively press rivals to match or exceed slotting payments to access retail shelf space, which can be a barrier to entry and raise consumer prices. Slotting fees can discriminate between small firms and larger firms that are more able to afford higher fees for shelf space.<sup>378</sup> Slotting fees can reduce consumer welfare by about \$10 million annually, relative to food manufacturers and wholesalers offering lower prices to retailers.<sup>379</sup>

## ***Conclusions and Recommendations***

The century-old U.S. antitrust laws were not designed to address the scale, shape or structure of today’s agricultural marketplace and federal enforcement has failed to

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<sup>370</sup> Lopez, Rigoberto A, Azzeddine M. Azzam and Carmen Lirón-España. Department of Agricultural and Resource Economics, University of Connecticut. “Market Power and/or Efficiency: A Structural Approach.” *Review of Industrial Organizations*. Vol. 20, 2002 at 123.

<sup>371</sup> Carstensen (2004) at 13.

<sup>372</sup> Rennhoff, Adam D. University of Connecticut Department of Agricultural and Resource Economics, Food Marketing Research Center. “Paying for Shelf Space: An Investigation of Merchandizing Allowances in the Grocery Industry.” Research Report No. 84. October 2004 at 1.

<sup>373</sup> U.S. Federal Trade Commission. Staff Study. “Slotting Allowances in the Retail Grocery: Selected Case Studies in Five Product Categories.” November 2003 at 21.

<sup>374</sup> Hendrickson, Heffernan et al. (2001) at 12.

<sup>375</sup> U.S. FTC (2003) at 4.

<sup>376</sup> Klein, Benjamin and Joshua D. Wright. “The economics of slotting contracts.” *Journal of Law & Economics*. August 2007 at 5-6.

<sup>377</sup> U.S. FTC (2003) at 3.

<sup>378</sup> Hendrickson, Heffernan et al. (2001) at 12.

<sup>379</sup> Rennhoff (2004) at 2.

effectively moderate the impact of consolidated power on consumers, farmers or the marketplace. While an investigation into the state of competition in agriculture markets is long overdue, it is time for USDA and the U.S. Department of Justice to embark on a program of enforcement and regulation that begins to restore competition to the marketplace to benefit consumers and producers. Specific pieces of this program should include:

- **Prompt Release of Any Investigations Already Underway:** The commendable effort to refocus the U.S. Department of Justice’s attention on the anticompetitive effect of consolidation in the food and agriculture sectors through the series of 2010 workshops should not delay, deter or replace any antitrust enforcement activities that are already underway. Media stories and congressional testimony report that investigations into the consolidation and market power in the genetically modified seed industry as well as the dairy industry are in progress. Some of these investigations have languished at the department for years. These investigations and any other investigations in the pipeline must continue to be vigorously pursued and finalized as soon as possible.
- **A Moratorium on Mergers by the Top Four Firms in Any Subsector:** The four-firm concentration levels are already at very high levels compared to other industries and sectors. The deleterious impacts on competition of these high levels of concentration are well documented. The U.S. Department of Justice should at least defer any proposed agricultural and food company mergers for the duration of the 2010 workshops.
- **Strong 2008 Farm Bill Livestock Title Regulations:** The 2008 Farm Bill made significant, historic progress in starting to address the lack of competition in the livestock sector by directing USDA to finally implement regulations governing “unfair and undue preference,” reform unfair capital investment requirements in poultry and hog contracts, provide reasonable poultry and hog contract termination notice, and offer contract growers and operators that have made significant capital investments the opportunity to remedy any contract breach before termination.<sup>380</sup> Strong rules to implement these Farm Bill reforms should be promulgated and finalized promptly.
- **Increased Enforcement by the Grain Inspection, Packers & Stockyards Administration:** The Packers & Stockyards Act gives USDA the authority to pursue anticompetitive actions on the part of meatpackers and processors. But GIPSA failed to initiate any significant prosecutions under the P&SA over the previous eight years and overestimated the meager oversight that has actually occurred. GIPSA needs to both issue necessary rules and regulations to more actively pursue anticompetitive actions, as well as undertake more and more vigorous enforcement of the P&SA.

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<sup>380</sup> Food & Water Watch joined a dozen farm groups in endorsing the rapid enactment of livestock reforms contained in the 2008 Farm Bill in a submission to the 2008 transition team. *See* “Transition Issues: Agricultural Competition and Contract Fairness Issues (USDA and Department of Justice). December 2008.

- **Ban on Packer and Processor Ownership of Livestock:** Both beef packers and pork processors own and control pools of livestock that allow them to effectively manipulate market prices by slaughtering their own stock when prices are high and buying on the open market when prices are low. USDA should ban the packer ownership of cattle or hogs more than 14 days before slaughter. This reform could be pursued through administrative rulemaking or legislation.
- **Captive Supply Reforms:** A proposal to reform captive supply arrangements in the beef cattle and hog sectors has been at USDA since the 1990s and has been part of legislative proposals during the last two farm bill debates. The reforms would only allow production and forward contracts if they were based on pre-agreed, set prices, firm dates of delivery, and if the contracts are transparently and publicly offered. This would prohibit meatpackers from using a formula pricing system that could provide unfair advantage to some producers and disadvantage others. This reform could be pursued through administrative rulemaking or legislation.
- **Merger Review and Lookback:** Over the past decade, the U.S. Department of Justice has approved several mergers between large companies that have increased consolidation in the sector. Some of the mergers required companies to divest facilities or business lines or to alter the corporate relationships with other market participants. Once the mergers were modified and approved, the Department contended that the combined companies would not reduce competition in the marketplace. It is time to assess that prediction. The U.S. Department of Justice should re-examine the major agricultural mergers that have been approved in the past decade to determine what empirical effect the mergers had on the marketplace, farmers and consumers. The Department should consider redressing any anticompetitive conditions through further administrative and judicial actions, including, but not limited to, divestitures.
- **Stronger Horizontal Merger Guidelines to Account for Buyer Power:** Buyers can exert more anticompetitive market power at lower levels of market concentration than is seen with monopoly seller power. As the U.S. Department of Justice revisits its horizontal merger guidelines, appropriate and effective metrics that truly account for the disproportionate impact of buyer power in mergers are essential to ensure that meatpackers and processors, food manufacturers and processors, dairy companies and retail grocery chains do not leverage anticompetitive buyer power over farmers. The U.S. Department of Justice should give special consideration to the regional and local impacts of buyer concentration on farmers.
- **Coordinate with the Federal Trade Commission (FTC) on Grocery Retail Consolidation:** Meatpackers and processors, food manufacturers and dairy companies all report that the pressure they exert over farmers is the result of the consolidated power held by the largest retail supermarket chains and supercenters. Dividing the antitrust enforcement between two agencies minimizes needed regulatory oversight when the anticompetitive impacts of consolidated retail market power spans the entire food chain. Moreover, the distinction between meat processors

and food manufacturers is now largely an artificial one, so having FTC oversee food manufacturers but the U.S. Department of Justice oversee meatpackers may be outdated. The U.S. Department of Justice and FTC must coordinate their investigations and antitrust enforcement efforts over the retail grocery industry and revisit the Memorandum of Understanding that establishes outdated divisions between jurisdiction over processed food sectors and other sectors.

- **More Inclusive Packers & Stockyards Act Oversight and Streamlined Poultry Enforcement:** Currently, USDA's enforcement of the Packers & Stockyards Act applies unevenly to all livestock, especially poultry. The P&SA only partially covers broiler production, and violations are referred to the U.S. Department of Justice for enforcement, where many cases appear to slip through the cracks. Breeder hens, pullets and layers have been excluded from P&SA enforcement. All poultry production should be covered under the P&SA and the enforcement should be coordinated and streamlined between the agencies.
- **Investigation Into Production Contract Terms in Crops:** USDA has studied the role, terms and impact of production, marketing and forward contracts on livestock, but to date there has been little analysis of the terms of contracts and their impact on crop production. The majority of processed produce, fresh fruit, fresh vegetables, sugar beet and tobacco production is done under some form of contract and a significant percentage (about a fifth) of many commodity crops are grown under contract. USDA should survey and study contract crop producers, their contracts and the impact of vertical integration on farmers and the marketplace, with special emphasis on the crops with the highest shares of contract production.

The 2010 Agricultural Concentration Workshops are a tremendous opportunity for the U.S. Department of Justice and USDA to begin the arduous process of re-energizing antitrust enforcement in the food and agricultural sectors. Consumers and farmers have been directly impacted by the indifferent federal attention to consolidated market power in the grocery aisle and on the farm. These workshops should help to set the agenda for a more rigorous enforcement of the spirit and principles of federal antitrust laws.

Sincerely,



Wenonah Hauter  
Executive Director  
Food & Water Watch