

THE DEBILITATING EFFECTS OF CONCENTRATION MARKETS AFFECTING AGRICULTURE

*David A. Domina & C. Robert Taylor**

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* David A. Domina is an Omaha Nebraska trial lawyer with antitrust and agriculture-related experience. He is Senior Legal Fellow & General Counsel for the Organization for Competitive Markets, a nonprofit “think tank” devoted to efforts to restore balance in agriculture markets for farmers and ranchers. C. Robert Taylor, Ph.D. is the Alfa Eminent Scholar and Professor of Economics at Auburn University. Dr. Taylor is Senior Economics Fellow for the Organization for Competitive Markets. OCM’s web site is <http://competitivemarkets.com/>.

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I. SUMMARY

The U.S. agricultural economy is highly concentrated in the hands of too few processors of major agricultural products. In beef, chicken, pork, seed, and some grains, four or fewer firms dominate the market to the extent that competition is insufficient. Dangerously high levels of buyer market power, i.e., monopsony power, prevent America's food producers from receiving an appropriate and necessary fraction of the retail food dollar. At the same time, retail food costs are increasing and consumers too, are being hurt. The reason is simple: the same firms enjoy similar power, directly or after handoffs to concentrated retailers, before finished food products reach consumers.

The United States needs an economically viable food policy and an abundant supply to feed its people and others in the world. To do so, it must protect itself from economic risks of concentration and physical risks to food supplies generated by misplaced dependence on too few mega-processors. The acute need to end adverse impacts on competition from abuse of monopsony power is explored in this article.

II. INTRODUCTION: STRUCTURE

The status of competition in select markets for agricultural goods and seed is grim. Analysis of the markets and their levels of concentrated buyer power leads to a series of conclusions strongly supported by empirical evidence. These conclusions are diametrically opposite to the findings reported in the mid-2009 General Accounting Office's Report, GAO 09-746R, *Concentration in Agriculture* (GAO Report).¹ The actual impact of concentration and buyer power in selected markets for major agricultural products is detailed in this Article. The authors' findings as reported to the United States Congress and the public are included *infra*. Also included herein, is an analysis of the legal and economic issues raised by the dangerous concentration of market power in the hands of too few firms with a need to acquire raw goods for food production. Four distinct concerns are addressed:

1. What are the trends in concentration levels within the food marketing chain's major agricultural sectors?

Our Finding: Concentration has achieved alarming levels in American agriculture.

1. See GEN. ACCOUNTING OFFICE REPORT, GAO 09-746R, CONCENTRATION IN AGRICULTURE, (2009) [hereinafter GAO REPORT].

2. What are the trends in prices farmers receive for major agricultural commodities?

Our Finding: Farmers and other producers do not receive a fair share.

3. What are the views of experts on the effects of concentration on agricultural commodity and food prices?

Our Finding: History, and experts in the field, converge on this conclusion: Monopsony power leads to abuse of market power. Producers and consumers are both hurt.

4. Does the GAO Report fairly use available data concerning the consequences of concentration in agricultural markets on the price of consumer goods and the producers' share of that price?

Our Finding: The GAO Report's methodologies are flawed. The GAO Report's conclusions are incorrect.

III. SEPARATE FINDINGS SUMMARIZED

Major markets in American agriculture are highly concentrated and competition is stultified by concentration and vertical integration. Both producers and consumers are hurt as a result.

Careful examination and survey of critical data, review of recognized publications, interviews of knowledgeable witnesses, review of sworn testimony, and inspection of USDA Economic Research Service data serve as empirical data sources for this Article.² Analysis of this data led to conclusions diametrically contrary to those contained in the General Accounting Office ("GAO") Report and to identification of serious flaws in the GAO methodologies and conclusions. Relevant available data establishes these points and does not support the GAO's findings.³

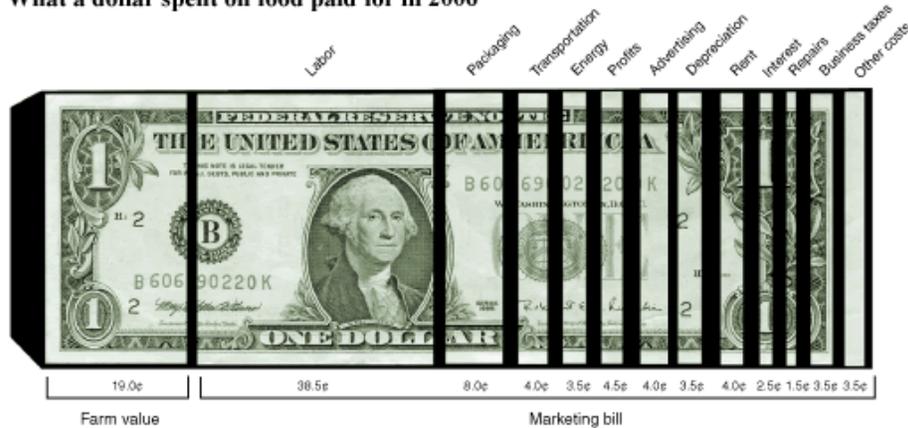
2. Data sources, as well as an additional discussion of marketing spreads, are available at: ECON. RESEARCH SERV., USDA, FOOD MARKETING SYSTEM IN THE U.S.: PRICE SPREADS FROM FARM TO CONSUMER, <http://www.ers.usda.gov/Briefing/FoodMarketingSystem/pricespreads.htm> (last visited April 30, 2010) [hereinafter FOOD MARKETING SYSTEM]. All nominal data used in this Report is converted to real (or inflation-adjusted) data using the Consumer Price Index ("CPI").

3. GAO relied on U.S. Department of Agriculture ("USDA") data on prices and margins for beef, poultry, pork, dairy and grains. GAO concluded, "[w]e assessed the reliability of these data and determined that they were sufficiently reliable for the purposes of this review—to illustrate broad trends in concentration and prices over time." Letter from Lisa Shames, Dir., Natural Res. & Env't, Gen. Accounting Office, to Sen. Herb Kohl and Sen. Charles E. Grassley, U.S. Senate (June 30, 2009) (introduction to GAO report). We agree with this conclusion and use the same nominal data used by GAO, but adjusted for inflation.

Concentration in major markets for agricultural products is now dramatic and the number of major food processing firms is restricted and concentrated among the hands of a few in each major agriculture sector. *Monopsony*⁴ status is present or threatened, competition⁵ and price are debilitated, and food producers face market power wielded against them.⁶ Concurrently, a *monopoly* exists in the hands of a single U.S. company which controls an anticompetitive, massive share of the genetic trait characteristics of corn, soybeans and cottonseed.

These concentrated levels squeeze producers, deny them a reasonable share of the retail food dollar, and boost prices to consumers.⁷ The U.S. Department of Agriculture (“USDA”) explains the problem in Figure 1:⁸

What a dollar spent on food paid for in 2006



Source: USDA's Economic Research Service.

As a fraction the drop is dramatic—from 41% of the retail food dollar down to 19% going to the farmer-producer during the period from 1950 through

4. ROGER D. BLAIR & JEFFERY L. HARRISON, *MONOPSONY: ANTITRUST LAWS AND ECONOMICS* 3 (1993) (“[M]onopsony is the structural condition of there being a single buyer of a well-specified good or service”).

5. The word “competition” has several meanings to lawyers and economists. In this instance the word is used to represent the outcome of a market in which there is a sufficient number of buyers and sellers so that no single person or firm can influence price and in which buyers and sellers have equal access to timely market information. This is the competitive norm. In contrast, a situation with only two sellers is called a duopoly. In some sense the duopolists may be “competing” but this does not mean the outcome will measure up to the truly competitive norm.

6. See BLAIR & HARRISON, *supra* note 4 (for a thorough discussion of the concept of monopsony).

7. See ECON. RESEARCH SERV., USDA., *STRUCTURE AND FINANCES OF U.S. FARMS: FAMILY FARM REPORT 7* (2007), <http://www.ers.usda.gov/publications/eib24/eib24b.pdf> (giving a general review of farm numbers and farm size).

8. FOOD MARKETING SYSTEM, *supra* note 2.

2006.⁹ This means food prices are up, not down, and the American food consumer is hurt, not helped by concentration among processors of raw agricultural products for human consumption.

IV. THE GOVERNMENT HAS NOT UNDERSTOOD, ANALYZED OR DESCRIBED THE CONCENTRATION OF BUYERS OF FARM GOODS

The GAO Report suffers from many flaws. First, it relies on largely debunked tools of measurement. These basic tools, the Herfindahl-Hirschman Index (“HHI”)¹⁰ and the four-firm concentration ratio (CR4),¹¹ are imbued with known flaws. GAO relied on the CR4.¹²

The HHI is calculated by adding the sum of the squared market shares of each firm in the market.¹³ If there were only one firm in the market, with a 100 percent share, the HHI would have a value of 10,000. If there are four firms with forty percent, thirty percent, twenty percent, and ten percent, the HHI is 3,000. If there are twenty firms with five percent each, the HHI is 500.¹⁴

For merger analysis and related antitrust analysis, the Federal Trade Commission (FTC) and the Department of Justice (DOJ) considers markets with an HHI below 1,000 to be non-concentrated, markets with an HHI between 1,000 and 1,800 to be moderately concentrated, and markets with an HHI above 1,800 to be highly concentrated.¹⁵

CR4 is the sum of the sales shares of the leading four suppliers in the market.¹⁶ HHI shows the composition of the entire market and gives a higher weight to a very large, dominant firm, whereas CR4 only shows the top four firms. The HHI is generally preferred over the CR4 ratio, but data necessary to compute it are not always available.

9. See ECON. RESEARCH SERV., USDA, PRICE SPREADS FROM FARM TO CONSUMER: MARKETING BILL AND FARM VALUE COMPONENTS OF CONSUMER EXPENDITURES FOR DOMESTICALLY PROVIDED FARM FOODS (2008), <http://www.ers.usda.gov/Data/FarmToConsumer/Data/marketingbilltable1.htm> [hereinafter PRICE SPREADS FROM FARM TO CONSUMER].

10. U.S. Dept. of Justice, *The Herfindahl-Hirshman Index*, <http://www.justice.gov/atr/public/testimony/hhi.htm> (last visited Apr. 30, 2010) [hereinafter *The Herfindahl-Hirshman Index*].

11. FLORIDA PUB. SERV. COMM’N., MARKET POWER IN A TRANSITIONING ELECTRIC INDUSTRY 3 (2001), <http://www.psc.state.fl.us/publications/pdf/pai/markpwr.pdf>.

12. GAO REPORT, *supra* note 1, at 11.

13. *The Herfindahl-Hirshman Index*, *supra* note 10.

14. If data are not available for small firms, they may be omitted in computing the HHI, since the square of their market share is so small.

15. U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, HORIZONTAL MERGER GUIDELINES § 1.51 (1997), <http://www.justice.gov/atr/public/guidelines/hmg.pdf>.

16. FLORIDA PUB. SERV. COMM’N., *supra* note 11, at 3.

Using a seller's CR4 or HHI to increase buyer power is inappropriate and misleading. For example, GAO reports CR4=57% in broiler production.¹⁷ The HHI=1,200. Broiler processing concentration measures may be appropriate for assessing seller power in the wholesale market for poultry and poultry products, but they are inappropriate for analyzing buyer power of the poultry companies (known as integrators). The integrators have nearly absolute control of their respective growers.

In some areas of the United States, the relevant measure of buyer concentration in the poultry industry is CR1=100% and the HHI=10,000, the maximum value. Poultry processing may not only be moderately concentrated when viewed at the seller level, but it is also a powerful monopsony in the buyers' market.

The GAO reports CR4=79% in steer and heifer slaughter.¹⁸ The HHI is over 2,000. However, this is in the broad sellers' market. Feed cattle ready for processing are perishable commodities and cannot be hauled long distances economically. GAO overlooked the fact that perishability in captive draw areas means that many regions have only one or two buyers with the HHI on the buyer side of the market exceeding 5,000. Feed yard owners know they are involuntarily tagged as associated with one slaughter company or another because only one bidder offers prices for their cattle, and there is no real competition for the cattle they feed.¹⁹

University of Wisconsin Antitrust Law Professor Peter Carstensen has called for new metrics to assess buyer power. He wrote:

Enforcers need to develop a deeper understanding of the unique characteristics of the buying side of the market place. This calls for appropriate metrics. A mindless transposition of seller side criteria for market shares or competitive effects can result in a deeply flawed analysis of the buyer power implications of mergers.²⁰

A fundamental review of the metrics to study market concentration, particularly concentration in agricultural markets, is necessary. Distinguished

17. GAO REPORT, *supra* note 1, at 11.

18. *Id.*

19. The authors interviewed dozens of cattle feeders in connection with work on litigation involving the cattle industry. These interviews included cattle producers from the States of MT, CO, SD, NE, IA, KS TX, and WY. They occurred in 2003-04, initially, and many more occurred in 2008-08. Mr. Domina's contacts with cattle producers are a weekly part of his professional work.

20. Peter C. Carstensen, Young-Bascom Prof. of Law, Univ. of Wis. Law School, Address at the Workshop on Merger Enforcement held by the Anti-Trust Division and the Federal Trade Commission: Buyer Power and Merger Analysis—The Need for Different Metrics 33 (Feb. 17, 2004), available at <http://www.ftc.gov/bc/mergerenforce/presentations/040217carstensen.pdf>.

American economists from Galbraith to Milgrom, with many in between, have observed that agriculture involves market concentration and power that is unfair to farmers.²¹ The status of major agricultural markets, involving seed and genetic traits, beef, pork, chicken, and milk, are dealt with succinctly *infra*.

A. Auction Theory Supplies Useful Logic

Hundreds of articles by economists explore basic auction theory as part of the process of understanding monopsony. Few articles reach definitive conclusions.²² The range of auctions studied in the economics' literature is broad, and the auction's context varies. This variability creates a smorgasbord for inquiry by graduate students and mathematicians. Many of the publications are readable and thought-provoking.²³

However, the inquiry yields little proof about behavior and does not supplant the active auctioneer's intuition. Many academicians forget the proof that concentrated markets lead to abuse of market power, even at auctions, so readily furnished by history. Auction pooling to limit bidding is disfavored precisely because it is known to cause price deterioration. Blair and Harrison's volume on Monopsony documents the problem: "Antique auction pools seem to enjoy continuing popularity. No doubt, this is due in part to the collusive profits that may be earned and the fact that the practice is very difficult to police if the participants are clever."²⁴

Economist Eric Maskin observed that industrial organization theorists and other applied fields are constrained by a major lack of knowledge: the games engaged in by the players they study (e.g., firms or consumers) are unknown to them.²⁵

21. In addition to the concerns expressed *supra*, transportation costs greatly exacerbate the middleman's market power. A recent paper delves thoroughly into this subject. See Aya Suzuki & Richard J. Sexton, Transportation Cost and Market Power of Middleman: A Spatial Analysis of Agricultural Commodity Markets in Developing Countries (2005), available at <http://ageconsearch.umn.edu/bitstream/19329/1/sp05su03.pdf> (paper prepared for presentation at the Am. Agric. Econ. Ass'n Annual Meeting).

22. Auction theory actually began well before the 1970's when extensive scholarly writing began to appear. Perhaps the seminal contribution before then was William Vickrey (1961). However, until game theory came into its own fifteen years later, Vickrey's work—as well as that of other early pioneers such as James Griesmer, Richard Levitan, and Martin Shubik (1967), Armando Ortega Reichert (1968) and Robert Wilson (1969)—remained largely ignored.

23. See, e.g., PAUL MILGROM, PUTTING AUCTION THEORY TO WORK (2004).

24. BLAIR & HARRISON, *supra* note 4, at 5.

25. Eric Maskin, *The Unity of Auction Theory: Paul Milgrom's Masterclass*, 42 J. ECON. LITERATURE 1102, 1102-03 (2004).

[M]odels are at best approximations of reality. By contrast, auction theorists typically know the rules that *their* players follow *precisely*. If, for example, a high-bid auction is the object of study, the theorist *knows* that (i) the bidders submit nonnegative real numbers as sealed bids; (ii) the winner is the bidder submitting the highest bid; and (iii) the winner pays his bid (of course, there may still be uncertainty about how the buyers *behave* under these rules). This precision helps put the auction theorist's findings on a relatively strong footing; it also simplifies the job of the experimentalist or empiricist.²⁶

Auction sales can differ from negotiated ones. "Auctions" include "mechanisms that allow explicit and objective comparison of two or more competing offers" that are on the table simultaneously.²⁷ Bargaining more commonly involves "mechanisms in which offers are short-lived and evaluated one at a time."²⁸ Major agricultural products do not change hands by either pure auction or pure negotiation.²⁹ Producers must accept the offered price from the lone bidder who lays a proposal before them, or risk getting only salvage value by holding them. These producers are not sellers through auction or negotiation; they must sell for what the buyer will pay after wielding the full force of market power. This is monopsony.

American food producers sell goods that have rapidly declining marginal values, i.e., they must be sold when they are at optimal weight or ripeness. Concentrated buyers have incentives to reduce demand because they know producers have limited outlets for their goods, so buyers use secretive contracts, and the unequalizing tools of fear, retaliation and threats to leave the seller out if she or he does not accept the offered price. The "logic of this incentive is familiar to students of economics, because it is almost identical to the textbook logic explaining a monopsonist's withholding of demand."³⁰

To confirm suspicions, half a dozen randomly selected auctioneers were interviewed about their views of the crowd size necessary to make an auction effective. This research method might not be commonplace to economic literature, but, as Maskin observed after careful review of professional literature concerning auction theory: "The upshot is that giving advice on real auction design is, at this stage, far less a science than an art. And the essence of an art is far harder than a science to convey convincingly in writing."³¹

During these interviews, each auctioneer promptly observed that the number of goods offered, their variability, and their general price range all have

26. *Id.* at 1103.

27. MILGROM, *supra* note 23, at 213.

28. *Id.* at 213.

29. *Id.* at 212.

30. *Id.* at 258.

31. Maskin, *supra* note 25, at 1113.

an impact on the answer. Offering a range of goods from hand tools to a line of implements, traditional farm estate sales benefit from a large crowd of potential bidders with a variety of interests. An auction at which only mother cows, or only yearling calves, are sold commands a completely different crowd and one that may need fewer buyers because of the homogeneous nature of the goods being offered for sale. The same is true of bidders at an art auction, as contrasted with the bidding crowd sought and needed at an auction where hundreds of pieces of art, ranging from oil paintings to tapestries, are offered.³²

Auction theory requires a number of active bidders, and no auctioneer reported a belief, or any experience suggesting that few bidders make a better sale. All auctioneers interviewed reported the opposite; more bidders expressed interest in slightly different ways, but in common goods, produce a better price for the seller.

Twenty-five-year-old history with United States Treasury auctions supplies strong proof that monopsony power begets abuse of market power and wrongful profiteering. The scandal surrounding Salomon Brothers at Treasury auctions led to prosecutions and convictions.³³

Governmental agencies charged with antitrust enforcement must recognize complex and unique characteristics of each individual market chain, or system. For example, the ways in which market power is manifested in the poultry industry are considerably different than in the beef industry. Therefore, a single metric or “have model will travel” approach to competition analysis is woefully inadequate. This inadequacy includes reliance on a single index like the HHI.

The GAO Report relies heavily on “peer reviewed” publications. Peer review is important, but cannot be equated with objectivity, nor with weighing *all* evidence pertinent to a competition issue. Often, papers designed for academic, or industrial advocacy pass peer review. Care must be taken to point out that this is no guarantee of the author’s conclusion of general acceptance, peer approval, or objectivity. Peer review passes on methods, not conclusions.

Academic and legal standards for publication and proof are not interchangeable. Academic publication standards have no foundation in legal standards such as preponderance of evidence. In other words, the academic “scales” for peer review generally have no relationship to legal scales or public policy

32. Auctioneer interviews conducted for authors by independent investigator for the authors. These interviews were conducted in 2009 by paraprofessional with a set of questions and methodology directed by Mr. Domina. Results were reported to him and follow-up by him occurred where appropriate. Mr. Domina conducted additional auctioneer interviews in 2010.

33. See BNA, *Justice Dep’t Official Actions: September 26, 1991*, 61 ANTITRUST & TRADE REG. REP. 386; BNA, *Justice Dep’t Official Actions: July 11, 1991*, 61 ANTITRUST & TRADE REG. REP. 68; BNA, *Justice Dep’t Official Action: November 26, 1987*, 53 ANTITRUST & TRADE REG. REP. 846; see also BLAIR & HARRISON, *supra* note 4.

scales relevant to competition policy. Again, if the methods are correct, peer review passage is not a problem, even when outrageous conclusions are drawn.

Publicly-available data is often inadequate for analyzing complex market power issues in agricultural markets. Public agencies responsible for competition investigations must dig deeper than simply referring to academic studies based on publicly-available data. For example, with mandatory price (and captive supply) reporting data, federal agencies could compute the HHI and CR4 for beef packers in captive draw areas. This kind of data would give a far superior indicator of *buyer* power than inappropriate *seller* HHI and CR4 statistics.

The limited quantity of publicly available data for analyzing competition issues led academics to create simulation models and experimental games to try to mimic complex markets. One experimental analysis is the *Fed Cattle Market Simulator*, dubbed by Oklahoma State University students as the *Packer-Feeder Game*.³⁴ Carlberg and Ward used this simulator to analyze competition and captive supply issues. They found:

“. . . beef packing firms were able to achieve various levels of successful tacit collusion in the experimental market . . . it was further discovered that the level of collusive behavior in such a framework varies according to supply conditions for fed cattle. Even at its most competitive, however, industry conduct was still substantially more collusive than would be the case under perfect competition. The most competitive behavior discovered followed a Cournot pattern, which lies midway between perfectly competitive and (pure) monopsonistic behavior.³⁵

Carlberg and Ward also found:

A second (experimental) model, the first of its kind applied to the beef packing industry, examined the strategic interaction among individual beef packers. For this, packer conduct was modeled at the firm level using a reaction function framework. Results of that model also indicated collusive behavior on the part of packers.³⁶

Ward subsequently used the Fed Cattle Market Simulator to analyze the effects of the number of buyers on price. He found, “[h]alving the number of

34. See Ag Econ Extension, Okla. State Univ., Fed. Cattle Market Simulator, <http://agecon.okstate.edu/fcms/> (last visited Apr. 30, 2010).

35. Jared G. Carlberg and Clement E. Ward, *Applying Game Theory to Meatpacker Behavior in an Experimental Market: Implications for Market Regulation*, RES. BULL. 2-2002 (Research Institute on Livestock Pricing, Agricultural and Applied Economics, Virginia Tech University), November 2002.

36. *Id.*

buyers from 4 to 2 . . . had a significant negative effect on prices paid [for slaughter cattle]. . . .³⁷

GAO did not cite or consider Ward and Carlberg. It also failed to cite any other similar experimental research. “Inconvenient truths” should not be indulged, and facts proven empirically, analytically, and logically, should not be ignored when studying the impact of market structure on our nation’s basic industries.

B. *Actual Market Disparities Cannot be Ignored*

Professionals thinking through the monopsony problem recognize exploiting economies of size engenders a major adverse impact due to market concentration.³⁸ In agricultural markets, farmers and ranchers who are suppliers to packers and processors have excess capacity and little ability to control or reduce capacity in the aggregate. A rancher cannot let his ranch go un-grazed and a farmer cannot ignore the need to farm her land. Yet, processors can allow plants temporarily to sit, or to run slowly, in order to push down the cost of goods. When packers or processors have more capacity to manipulate the flow of product from the field to the table than producers, they have market power.

Abused market power drives costs down and prices up for the processor. This means prices go down for farmers and costs go up for consumers. Blair and Harrison recognized this most predictable business behavior “appears to be abusive.”³⁹ GAO did not recognize this phenomenon. Much evidence tends to prove producers’ claims that packers use cattle committed to them under future delivery arrangements, or captive supplies, to manipulate cash market prices for slaughter cattle.⁴⁰

GAO did examine some USDA Economic Research Service (“ERS”) data concerning markets for beef or pork, but not all of it.⁴¹ It did not examine

37. Clement E. Ward, Professor & Extension Economist, Okla. State Univ., Address at the Western Agricultural Economics Association Annual Meeting: *Feedlot and Packer Pricing Behavior: Implications for Competition Research* (July 29-Aug. 1, 2007), available at <http://ageconsearch.vmn.edu/bitstream/7365/2/spo7wa01.pdf>.

38. BLAIR & HARRISON, *supra* note 4, at 88.

39. *Id.* at 90.

40. See *Review of the Market Structure of the Livestock Industry: Hearing Before the Subcomm. on Livestock, Dairy and Poultry of the H. Comm. on Agriculture*, 110th Cong. 21 (2007) [hereinafter *Review of the Market Structure of the Livestock Industry*] (statement of Robert Taylor, ALFA Eminent Scholar, Auburn Univ.) (additional facts submitted with the statement can be found at http://uscattlemen.org/Library/Marketing/2007_Marketing_Competition/7-5TaylorTestimony.htm).

41. The author’s market-by-market analysis of markets for major agricultural products appears *infra* § VIII(B).

dairy products and looked only superficially at poultry—but not thoroughly. GAO accepted peer-reviewed articles, though they do not explore publicly available data for manifestations of market power exertion that are too subtle and complex to be captured by aggregate time-series data of the kind that typify published academic studies. Academic studies tend to generate false negatives because academic and statistical criteria may be inappropriate; yet the studies tend to rely only on quantitative data, and to ignore qualitative evidence of market power exertion and causation factors.

GAO was unable to conclude that concentration in agriculture markets adversely affects price.⁴² GAO reported it could not find clear proof that market concentration reduced the producer's fraction of the retail dollar.⁴³ Perhaps GAO asked the wrong question. Why is it important to know if the producer's fraction of the retail dollar is increasing or declining if the producer's level of profitability is unknown? In other words, the focus must be on profit, not on a fraction of gross income.

Even responding to the wrong question, the answer given by GAO's report is incorrect. GAO's interpretation of available, aged data is incorrect. The producer's costs escalated, particularly in the last few years, while its fraction of the retail dollar undeniably fell. GAO data did not include current information, and it did not include information from a longer term.⁴⁴ GAO relied heavily on data from 1992 through 1997, a dozen and more years ago and a snapshot only of five years duration.⁴⁵

Farmers and ranchers are going out of business and their operations are being consolidated.⁴⁶ The consolidated survivors try to achieve economies of size to continue because profits are generally not improving. In row crop production, government payments are increasingly important. As the 2009 Farm Bill proved, crop production subsidies are central to agriculture in the United States. As a result, production of corn, as a staple input for beef and pork production is extensive. Corn is available to livestock producers at relatively low costs.⁴⁷

42. GAO REPORT, *supra* note 1, at 3.

43. *Id.*

44. *Id.* at 33.

45. *Id.*

46. Secretary Vilsack routinely cites agriculture census data showing the loss of farmers and ranchers exceeding 80,000 during the past decade. See Tom Vilsack, U.S. Sec'y of Agric., Keynote Address at the U.S. Dept. of Agriculture's "Agricultural Outlook Forum 2009" (Feb. 26, 2009) (transcript available at <http://www.usda.gov/>. Type "Release No. 0048.09" into the search box).

47. JIM HOORMAN ET. AL., OHIO ST. UNIV. EXTENSION, USING CORN FOR LIVESTOCK GRAZING ANR-11-02, at 1 (2002), <http://ohioline.osu.edu/anr-fact/pdf/0011.pdf>.

Even so, low cost corn is still expensive compared to selling prices beef and pork producers realize for their finished products.

Auction theory, along with substantial empirical proof, explains this difference by demonstrating that the present day sale process as it now occurs is not occurring at arms length, with a willing buyer and a willing seller under relatively equal compulsions to act. This is objective and widely known, now and historically, to participants in the auction process. Victims of monopsonists' abuse of market power include farmers, ranchers, dairymen, but more broadly, as history proves, monopsony also harms art and antique markets, and even the market for U.S. Treasury Bills.

C. GAO Ignored the Impact of Cartels

The GAO Report ignores cartels, particularly international cartels, in agricultural and food industries. A study by Connor and Helmers of 516 modern private "hard-core" cartels that were subject to government or private legal action over 1990-2008 provides compelling evidence regarding the extent of collusion.⁴⁸ Each cartel had participants with headquarters in two or more nations. Known sales affected by international cartels convicted by 2008 rose from less than \$2 trillion in 2000-04 to almost \$14 trillion in 2005-08.⁴⁹

Median cartel overcharges were twenty-four percent of affected sales.⁵⁰ Connor and Helmers identified six cartels in the agricultural and forestry raw materials industry and nineteen in the food, beverage, and tobacco products industry.⁵¹ Many of the other cartels identified by Connor and Helmers indirectly impact food and agriculture in the United States.

Recent statistics reported by an American Antitrust Institute panel show that cartel discoveries are increasing, with 50 international cartels identified annually.⁵² Private cartels have been compared to economic cancer.⁵³ GAO was

48. John M. Connor & C. Gustav Helmers, *Statistics on Modern Private International Cartels, 1990-2005*, 3-4 (Am. Antitrust Inst., Working Paper No. 07-01, 2007); see also John M. Connor, *Cartels & Antitrust Portrayed: Private International Cartels from 1990 to 2008* (Am. Antitrust Inst., Working Paper No. 09-06, 2009), available at http://www.antitrustinstitute.org/archives/files/Working%20Paper%2009-06_090120091450.pdf [hereinafter *Cartels & Antitrust Portrayed*].

49. *Cartels & Antitrust Portrayed*, *supra* note 48, at 10.

50. Connor & Helmers, *supra* note 48, at 38.

51. *Id.* at 8.

52. Nikos Valance, Am. Antitrust Inst., Annual Conference Breakout Session Summary (2009), http://www.antitrustinstitute.org/archives/files/Breakout%20ReportInternational%20Cartels_081620091847.pdf.

53. John M. Connor, *Anti-Cartel Enforcement by the DOJ: An Appraisal*, 5 COMPETITION L. REV. 89, 89 (2008).

asked to study the effects of concentration, but failed to note collusion, much less its extent and alarming trends. Concentration statistics can mask collusive behavior. When firms collude, the industry HHI should be 10,000, the maximum value, and not the value based on individual market shares of colluding firms.

V. THE STATUS OF AGRICULTURAL MARKETS

When America's farmers and ranchers seek to buy needed inputs like seed and fertilizer, they are confronted with concentrated markets and exploitative sellers.⁵⁴ As sellers of harvested goods or market-ready livestock, they have few, or no, choices of prospective buyers. Both ends of the processing function—raw goods procurement and final food products—are concentrated. Both are debilitating to food production feasibility and both drive up consumer prices.

Consumers are poorly served by existing market structures and practices associated with the production and distribution of agricultural products. The spread between the price paid to the farmer and the price paid by the consumer increases as concentration confirms gains in both food processing and retailing,⁵⁵ even after adjusting for increased processing of food. Efficiencies, if any, are not reflected in lower food costs. Increased concentration in the chain of buyers, processors, and retailers has undoubtedly contributed to the increased cost of food even if some processors and retailers claim they are not making significant profits. This suggests increased concentration not only results in higher prices, but also produces economic inefficiency. Reducing the hidden food "tax" will not *eliminate* all upward pressure on prices. It will reduce *avoidable* pressures on prices and protect consumers from exploitation.

The American Antitrust Institute summarized the effects of concentration in agriculture markets, but cautions against ill-conceived and unstudied regulation:

Free and open markets are generally the best institutional structure for achieving all the important goals of economic policy: efficiency, dynamic growth, equitable allocation of resources and equal opportunity for all participants. Where markets are un-concentrated with many buyers and sellers, there is a strong tendency for efficient,

54. Seed prices have increased about 5% a year over the last several years. Mark Moore, *Trait Rates (Why Prices are Up)*, FARM INDUSTRY NEWS, Sept. 1, 2007, <http://farmindustrynews.com/seed/trait-rates-prices/index.html>. Potash is an important fertilizer and example. Its price increased almost 100% between January 2004 and January 2008. Potash One, Inc., Potash Prices, <http://www.potash1.com/s/prices.asp> (last visited Apr. 30, 2010).

55. ECON. RESEARCH SERV., USDA, MEAT PRICE SPREADS: ABOUT THIS PRODUCT (2009), available at <http://ers.usda.gov/data/meatpricespreads/about.htm>; see ECON. RESEARCH SERV., USDA, MEAT PRICE SPREADS: DATA SETS (2010), available at <http://www.ers.usda.gov/Data/MeatPriceSpreads/> [hereinafter DATA SETS].

workable, and fair methods to develop as a result of the interaction of many participants all seeking a neutral and open market place.

But no such inherent tendency exists in markets [with] a substantial difference in size between buyers and sellers and one side of the market is also highly concentrated. Moreover, when one side of the market has significant and persistent advantages in information or any other important element related to the transactions, there will be incentives for manipulative market conduct. Thus, there is a grave danger that strategic conduct will shape such markets and frustrate the goal of an efficient, open, fair and accessible marketplace.

When markets lack the inherent tendencies to create desirable conditions, the law can play a vital role in defining rules that reduce the capacity of some actors to engage in strategic conduct and restore greater balance among the participants. The statute books contain many such laws, including ones regulating credit, insurance, product safety, job safety, franchising of various kinds (e.g., gas stations, fast food, and automobile dealerships), energy markets, and securities markets.

The markets for agricultural commodities provide a textbook illustration of how law and regulations can either facilitate or frustrate the accomplishment of the goals of an efficient, transparent, and equitable market context. 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.⁵⁶

The decayed condition of American agriculture's major markets is difficult to grasp. Evidence of the decay is ubiquitous, but not intuitively perceived. Symptoms of distress are accumulating freely along the highways of America's food producing sector. For example, once among the nation's richest counties, now Nebraska's "cattle country" includes five of the top twelve poorest counties in America.⁵⁷ A generalized fear of reprisal against producers, who dare to speak about hostile market conditions, makes evidence hard to gather, and market power of a few easy to wield.⁵⁸

56. AM. ANTITRUST INST., THE NEXT ANTITRUST AGENDA: THE AMERICAN ANTITRUST INSTITUTE'S TRANSITION REPORT ON COMPETITION POLICY TO THE 44TH PRESIDENT OF THE UNITED STATES 282 (2008), available at www.antitrustinstitute.org/archives/files/Food%20Chapter%20from%20%20AAI%20Transition%20Report_100520082051.pdf.

57. Richard K. Perrin et al., *Poverty in Nebraska*, CORNHUSKER ECON. (Agric. Econ. Dep't, Univ. Nebraska-Lincoln), Oct. 20, 2004, available at http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1185&context=agecon_cornhusker.

58. The authors conducted interviews with potential witnesses harmed by beef and pork slaughterhouses and by poultry integrators. They have personal experience with the fears, phobias and unwillingness of prospective witnesses to "cross" the slaughterhouses that pay them too little for their livestock, but repress all alternative markets against them. These interviews included cattle producers from the States of MT, CO, SD, NE, IA, KS TX, and WY. They occurred in 2003-04, initially, and many more occurred in 2008-08. Mr. Domina's contacts with cattle producers are a weekly part of his professional work. Dr. Taylor's contacts with poultry growers are a weekly part

Central to the concentration evidence is a simple truth about farming's metaphor for economics. No one would drive a modern harvesting machine with only four moving parts across a field to gather the crop. Yet four or fewer processing firms are dominant in significant sectors of the agricultural economy. This is true of seed genetics, beef slaughter, pork slaughter, dairy processing, and poultry slaughter and production. Concentrated banking resources add to the problem. They hobble farmers, making it more complicated for small producers to finance operations and provide multiplicity, and necessary complexity, for a safe food supply system. USDA data, breaking down the cost of marketing farm goods, reflected in Table 1,⁵⁹ proves the point:

Year	Total consumer expenditures	Labor	Packaging materials	Intercity rail and truck transportation	Fuels & electricity	Corp. profits before taxes	Misc	Total marketing bill
Billion dollars								
1980	264.4	81.5	21.0	13.0	9.0	9.9	48.3	182.7
1985	345.4	115.6	26.9	16.5	13.1	10.4	76.5	259.0
1990	449.8	154.0	36.5	19.8	15.2	13.2	104.9	343.6
1995	529.5	196.6	48.2	22.3	18.6	19.5	110.5	415.7
2000	661.1	252.9	53.5	26.4	23.1	31.1	150.8	537.8
2001	687.5	263.8	55.0	27.5	24.1	32.0	155.1	557.5
2002	709.4	273.1	56.8	28.4	24.9	33.0	160.7	576.9

of his work. Work with swine producers is a less prominent, but important, part of the work of both authors.

59. ECON. RESEARCH SERV., USDA, PRICE SPREADS FROM FARM TO CONSUMER: COMPONENTS OF THE MARKETING BILL (2008), available at <http://www.ers.usda.gov/Data/FarmToConsumer/Data/componentstable.htm>.

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Effects of Concentration Markets on Agriculture

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2003	744.2	285.9	59.5	29.7	26.1	34.6	168.2	604.0
2004	788.9	303.7	63.1	31.6	27.6	35.5	171.9	633.4
2005	830.7	319.8	66.5	33.2	31.6	37.4	184.4	672.9
2006	880.7	341.0	70.5	35.2	33.5	39.7	197.6	717.5

-- = Not available.

¹Includes employee wages or salaries and their health and welfare benefits. Also includes estimated earnings of proprietors, partners, and family workers not receiving stated remuneration.

²Includes depreciation, rent, advertising and promotion, interest, taxes, licenses, insurance, professional services, local for-hire transportation, food service in schools, colleges, hospitals, and other institutions, and miscellaneous items. Data for 1967-69 also include fuels and electricity.

³The marketing bill is the difference between the farm value and consumer expenditures for these foods at both food stores and restaurants. Thus, it covers processing, wholesaling, transportation, retailing costs, and profits. Some historical data were revised.

Source: Calculated by ERS based on data from government and private sources.

To be sustainable, a transcontinental superpower's economic system requires thousands and thousands of moving parts—in each of its major sectors. None can be so large as to cripple the entire sector if it fails. Thousands of parts, with hundreds advancing quickly, others advancing apace, all while dozens fail, all on a continuous basis, keeps each economic sector crisp, sharp, and competitive. The U.S. Small Business Administration's Chief Economist supplies support:

“Small business drives the American economy,” said Dr. Chad Moutray, Chief Economist for the Office of Advocacy. “Main Street provides the jobs and spurs our economic growth. American entrepreneurs are creative and productive, and these numbers prove it.”

Small businesses are job creators. Office of Advocacy funded data and research shows that small businesses represent 99.7 percent of all firms, they create more than half of the private non-farm gross domestic product, and they create 60 to 80 percent of the net new jobs.

In 2004, there were an estimated 23,974,500 businesses in the U.S. Of the 5,683,700 firms with employees, 5,666,600 were small firms. . . .⁶⁰

Reducing any significant variable in the process to levels of concentration like those seen in America's major agricultural economic sectors brings down the entire system. Concentrated agriculture, food processing, and food retailing are serious threats to economic well being. Loss or destruction of the nation's largest beef slaughter company and chicken company would leave the nation with a woefully inadequate meat supply, likely resulting in mass panic by the public.

Failure to curb one firm's near monopolist hold upon perhaps 90% of genetic traits for seeds for major U.S. crops threatens to topple all sources of competing seed supply and place a single company in near absolute control. Even research about seed is controlled. In August 2009, *Scientific American* reported:

Research on genetically modified seeds is still published, of course. But only studies that the seed companies have approved ever see the light of a peer-reviewed journal. In a number of cases, experiments that had the implicit go-ahead from the seed company were later blocked from publication because the results were not flattering. "It is important to understand that it is not always simply a matter of blanket denial of all research requests, which is bad enough," wrote Elson J. Shields, an entomologist at Cornell University, in a letter to an official at the Environmental Protection Agency (the body tasked with regulating the environmental consequences of genetically modified crops), "but selective denials and permissions based on industry perceptions of how 'friendly' or 'hostile' a particular scientist may be toward [seed-enhancement] technology."⁶¹

Such a narrow genetic base, with control so tightly held that research is viewed by many as censored, creates overt vulnerability for U.S. food production, crop development, and consumer food prices. These same factors also make the U.S. more susceptible to bioterrorism. Semen for artificial insemination of cows and swine also suffers from controlled ownership in a highly concentrated market.⁶²

Uncovering the patterns underlying the market power realities and consequences of concentration, in addition to unmasking flaws in the GAO Report,

60. Press Release, Office of Advocacy, U.S. Small Bus. Admin., Small Business Drives The U.S. Economy (Aug. 4, 2005), <http://www.sba.gov/advo/press/05-37.html>.

61. *A Seedy Practice*, SCIENTIFIC AMERICAN (Aug. 13, 2009), available at <http://www.scientificamerican.com/article.cfm?id=do-seed-companies-control-gm-crop-research>.

62. ELANOR STARMER, THE AGRIBUSINESS ACCOUNTABILITY INITIATIVE, CORPORATE POWER IN LIVESTOCK PRODUCTION: HOW IT'S HURTING FARMERS, CONSUMERS & COMMUNITIES—AND WHAT WE CAN DO ABOUT IT, 3 (n.d.), http://www.nffc.net/Learn/Fact%20Sheets/AAI_CorporatePowerinLivestock.pdf.

are the principal tasks of this Article. Unlike the GAO Report, the distinguishing premise of this work is that the market structure problem now confronting American agriculture originates from policies that do not deal fully or fairly with producers or consumers.

VI. CONCENTRATION HAS ACHIEVED ALARMING LEVELS IN AMERICAN AGRICULTURE

In 2001, the USDA's Economic Research Service (ERS) reported, regarding certain definitions about "concentration," when it is a concern, and what constitutes an "efficient" market.⁶³ The report described the economic fallout resulting from a concentrated industry that restricts output.⁶⁴

As long as eight years ago, USDA reported "[a] remarkable trend in the U.S. commercial seed industry in the 1990s was rapid consolidation as smaller seed companies and plant-breeding operations were purchased by large agricultural concerns."⁶⁵ Since then, scores of additional acquisitions have occurred. Today a single company, Monsanto Corporation, dominates the seed industry.⁶⁶

USDA monitors trends in concentration in livestock production and meat processing and considers its implications for agriculture and rural America. The Packers and Stockyards Act of 1921 (P&S Act) prohibits anticompetitive behavior and unfair trade practices in the marketing and procurement of livestock and poultry and provides financial protections for livestock sellers.⁶⁷ High levels of concentration are not *per se* violations of the P&S Act. However, high concentration indicates a high level of market power in a few firms. High levels of concentration also establish that monitoring for anticompetitive behavior is warranted. USDA's Grain Inspection, Packers and Stockyards Administration (GIPSA) administers the P&S Act and the grain inspection service.⁶⁸

Although concentration among the industries that procure slaughter livestock increased in the last 25 years, it has remained relatively stable in recent years. Four-firm concentration in steer and heifer procurement rose from 36 percent in 1980 to 81 percent in 1993, but since 1993 has remained fairly constant. Four-firm concen-

63. JOHN L. KING, ECON. RESEARCH SERV., USDA, CONCENTRATION AND TECHNOLOGY IN AGRICULTURAL INPUT INDUSTRIES AIB No. 763, at 2-3 (2001).

64. *Id.*

65. *Id.* at 6.

66. See F. WILLIAM ENGBAHL, SEEDS OF DESTRUCTION: THE HIDDEN AGENDA OF GENETIC MANIPULATION 294 (2007).

67. See Packers and Stockyards Act, 1921 § 202, 7 U.S.C. § 181 (2006).

68. See Grain Inspection, Packers & Stockyards Admin., USDA, Laws & Regulations, <http://www.gipsa.usda.gov/GIPSA/webapp?area=home&subject=1r&topic=landing> (GIPSA authority and responsibility is defined in several distinct laws referenced on GIPSA's website).

tration in hog procurement rose from 34 percent in 1980 to 55 percent in 1996, remaining at about that level until moving to 64 percent in 2003 and 2004. Four-firm concentration in sheep and lamb procurement rose from 56 percent in 1980 to 77 percent in 1988, but decreased to 57 percent in 2004.⁶⁹

Figure 2⁷⁰ summarizes the data:

Industry	1980 (%)	1995 (%)	2003 (%)	2004 (%)
Steer and heifer slaughter	36	81	80	80
Hog slaughter	34	46	64	64
Sheep and lamb slaughter	56	72	65	57

These concentration statistics refer to *seller* side market concentration, which often grossly understate *buyer* concentration in regional markets for slaughter animals.

Concentration may increase because of mergers among independent firms, or because plants become larger. Over the last 25 years, large plants have become vastly more important in slaughter industries, as evidenced by two different measurement bases. GIPSA data sort cattle slaughter plants by size; the largest plants slaughter more than half a million cattle in a year, while large hog plants slaughter more than a million. The definition of “large” can change over time; the agency did not separately report cattle plants that slaughtered more than a million animals until 1987; by 1997, 14 plants were in that newly established category.⁷¹

What GAO and its cited academics have lumped into “economic efficiency gains” merits careful consideration. Part of what is called an efficiency gain—a decrease in unit cost—may not come about because of increased productivity, but because of lower inflation-adjusted wages paid by processors and re-

69. USDA, FARM BILL FORUM COMMENT SUMMARY & BACKGROUND, AGRICULTURAL CONCENTRATION 1 (2006), available at http://www.usda.gov/documents/agricultural_concentration.pdf [hereinafter AGRICULTURAL CONCENTRATION].

70. *Id.*

71. *Id.*

tailers. For livestock processing, plant efficiencies (of size) are often used to imply that multi-plant firms are efficient. Certainly, some of the larger beef and pork plants are more efficient if one does not consider adverse impacts on small communities, but this does not mean there are multi-plant efficiencies. Market power arises not only because of plant size, but because a single “head buyer”⁷² is responsible for all livestock acquired for all plants owned or controlled by a single packer, even if they are geographically distant from one another.

USDA’s data shows high levels of concentration in beef, slaughter, and sheep, and predicted in 2006 more concentration could be expected.⁷³ Concentration-related concerns included termination of subsidies for factory farms, a need to limit corporate farms and encourage entry into farming by young farmers, restrictions on agribusiness influence, reinstatement of the *Mandatory Price Reporting Act*, a national ban on packer ownership of livestock, an end to vertical integration, particularly in animal agriculture, and more stringent enforcement by GIPSA.⁷⁴

In beef alone, the dangerously shrinking share of the retail dollar to reach the farmer or rancher is discerned by the difference between what beef consumers pay at the retail meat counter and what the farmer actually receives. Values plotted by USDA ERS show the gross margin extracted by beef processors and meat retailers.⁷⁵

University of Missouri Sociologists described the concentration ratio for the top four firms in specific industries, namely beef and pork production, broiler and turkey productions, and dairy production, as displayed in Figure 3:⁷⁶

Industry	Concentration	Companies	Comments
Food Retailing	CR5=48%	Wal-Mart, Kroger, Albertson’s, Safeway, Ahold	
Beef Packers	CR4=84%	Tyson, Cargill, Swift & Co. (JBS), National Beef Pack-	

72. The “Head Buyer” coordinates buyer activities, establishes volumes of purchasers and sets price limits. This person often simply sets the price. There is much evidence that in today’s concentrated markets one firm is the price setter (leader) and others merely follow. *See, e.g.,* CLEMENT E. WARD ET AL., OKLA. COOP. EXTENSION SERV., FED CATTLE PRICING: LIVE AND DRESSED WEIGHT AGEC-556-1 (2010), available at <http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-2003/AGEC-556web.pdf>.

73. *See* AGRICULTURAL CONCENTRATION, *supra* note 69.

74. *Id.* at 2-3.

75. DATA SETS, *supra* note 55 (click on hyperlink for Beef Values and Price Spreads).

76. MARY HENDRICKSON & WILLIAM HEFFERNAN, CONCENTRATION OF AGRICULTURAL MARKETS (2007), available at <http://www.nfu.org/wp-content/2007-heffernanreport.pdf>.

		ing Co.	
Beef Feedlots	CR4=30%	Five Rivers (Smithfield and ContiBeef), Cactus Feeders Inc., Cargill (Caprock Cattle Feeders), Friona Industries.	Most are captive to Beef Packers
Pork Packers	CR4=66%	Smithfield Foods, Tyson Foods, Swift & Co. (JBS), Cargill	
Pork Production	CR4=32%	Smithfield, Triumph, Seaboard Corp., Iowa Select Farms	
Broilers	CR4=59%	Pilgrim's Pride, Tyson, Perdue, Sanderson Farms	
Turkeys	CR4=55%	Butterball LLC, Hormel Foods (Jennie-O Turkeys), Cargill, Sara Lee	
Soybean Crushing	CR4=80%	ADM, Bunge, Cargill, Ag Processing, Inc.	
Fluid Milk	CR4=43%		
Phosphorus Fertilizer (domestic)	CR1=60%	ICM	Cargill owns 67% of ICM
Corn Seed	CR2=58%	Monsanto, DuPont	
Seed Cotton	CR1=96%	Monsanto	

VII. FARMERS AND OTHER PRODUCERS DO NOT RECEIVE A PROPORTIONATE SHARE OF THE RETAIL DOLLAR

Farmers receive a shrinking share of the retail food dollar, and the portion they receive will not sustain them. USDA data indicates rapidly increasing farm retail price spreads along with deteriorating farm value for a fixed market basket of goods for at-home consumption. These indices are shown in Table 2.⁷⁷

77. ECON. RESEARCH SERV., USDA, TABLE 8-FARM RETAIL PRICE SPREADS (2009), <http://www.ers.usda.gov/Publications/AgOutlook/AOtables/> (click on "Table 8"); ECON. RESEARCH SERV., USDA, TABLE 9-PRICE INDEXES OF FOOD MARKETING COSTS, (2009), <http://www.ers>

Year	Farm-to-retail spread	Farm Value	Retail Value	Food Marketing Cost Index
1980	102.0	117.7	106.8	103.9
1985	100.4	89.2	96.7	99.8
1990	111.0	86.5	102.6	91.4
1995	114.8	67.6	97.8	84.8
2000	122.1	56.3	99.1	82.9
2005	122.5	62.6	101.5	82.4
2006	122.1	59.3	100.1	82.3
2007	119.7	68.6	101.8	82.7
2008	124.1	68.5	104.6	84.3
2009	132.5	57.5	106.2	83.4

The figures in Table 3⁷⁸ show inflation-adjusted farm value, retail cost and price spread for selected food groups.

.usda.gov/Publications/AgOutlook/AOtables/ (click on "Table 9").

78. *Id.*

TABLE 3: INFLATION-ADJUSTED FARM VALUE, RETAIL COST AND FARM-TO-RETAIL SPREAD FOR SELECTED FOOD GROUPS.

Year	Processed fruits and vegetables			Fats and oils			Cereals and bakery products		
	Retail cost	Farm value	Farm-to-retail spread	Retail cost	Farm value	Farm-to-retail spread	Retail cost	Farm value	Farm-to-retail spread
1980	100.7	117.7	95.9	108.0	116.5	105.6	102.0	134.7	98.3
1985	99.4	109.7	96.7	101.3	96.7	103.2	100.4	87.4	102.2
1990	101.8	110.2	98.7	96.4	81.9	101.8	107.1	69.6	112.5
1995	90.6	79.4	93.8	89.9	79.4	93.8	110.2	72.2	115.5
2000	89.2	61.8	97.7	85.6	47.0	99.8	109.4	43.7	118.5
2005	98.5	70.7	107.2	85.9	55.4	97.1	107.0	49.4	115.0
2006	99.8	69.5	109.3	83.2	50.5	95.3	105.7	55.1	112.7
2007	100.7	72.8	109.3	83.4	72.8	87.3	107.1	72.1	112.0
2008	106.2	76.6	115.4	91.4	96.3	89.6	113.8	88.8	117.2
2009	114.7	75.4	127.0	96.2	58.3	110.0	119.1	69.5	126.1

A. What Do These Numbers Mean? How Do They Take Their Toll?

Some scale for the problem might be helpful. A 1% change in the distribution of cash from live cattle sales represents a distribution of the money for enough cattle to feed about 3.1 million people. This is roughly 250,000 head of cattle, or 5% of the cattle furnished annually out of either Texas, or Kansas, or Nebraska, for slaughter. The 1% change occurs with the concentrated processors who control 81% of the market. In hogs, this means roughly 1 million animals, enough to meet the needs of roughly 3 million people, are impacted. These are small, incremental fractions, but huge volumes, and they have a massive impact on markets where active bidding has already come to a virtual standstill.

Simply put, concentration is occurring at a precipitous rate while the segment of the retail dollar passed back to U.S. food producers shrinks. This occurrence is undeniable. The GAO Report's tone tries to minimize the rate and level of concentration.

While this comparison is telling, and discloses a prominent weakness in the economy's structure, it proves more. Among the experiences of producers, the rest of the story is known. Concentration begets concentration. As the bottlenecks in the supply chain process become narrower and narrower, with monopoly power concentrated in the hands of fewer and fewer processors, more

and more pressure exists in the production and retail sectors to consolidate. This means family farms get bigger, ranches consolidate, and on the other side of the processor bottleneck, retailers also become more concentrated.

When an industry first starts to consolidate, economic efficiencies (economies of size) are often the driving force. But as the industry reaches a certain level of consolidation, further consolidation is often driven by market power gains, not by efficiency gains. Few family-sized businesses can coexist where market conditions forcefully challenge the production level of commodity suppliers to funnel their raw goods through the remarkably concentrated controls of the companies identified above in each major agricultural product sector. The decline in numbers of farms and the limited countervailing growth in hobby farm numbers, yields these undisputed facts:

Changes in the counts of farms by constant—dollar sales class—from 1982 onward—are consistent with the trends in the counts by acreage class that were discussed earlier. Only one sales class grew consistently over the 16-year period. Large farms increased their numbers by 53,000, growing from 104,000 in 1982 to 157,000 by 1997. The share of all farms in this group also grew, from 5 percent to 8 percent over the same period. Most farms in the large farm group had sales between \$250,000 and \$499,999, but the number of farms with sales of at least \$500,000 grew more rapidly.

The number of farms in the other sales classes declined in each inter-census period, with the exception of farms with sales less than \$10,000. . . . There, the number of farms declined from 1982 to 1987 and from 1987 to 1992, but increased from 1992 to 1997. . . . [M]ost of the increase from 1992 to 1997 occurred among “point farms,” or farms with sales less than \$1,000 that might normally have sales that high and satisfy the criteria necessary to be considered a farm. Because of this growth, farms with sales less than \$10,000 now account for half of all U.S. farms.⁷⁹

As an economic paradigm, ultimately this means huge farms, operated by an overseer in close contractual contact with a processor, are more and more likely to employ workers for wages priced at a level sufficient to maintain the family minimally, but not allow it to accumulate wealth. Wealth accumulation occurs only in ownership hands. A new farmer needs to make friends with a packing plant executive to get a contract, or have no market for his or her goods.

This economic phenomenon is orchestrated by commitment to efficiency, even at the expense of security for American’s food sector. The efficiency-first philosophy leads to a system of limited redundancies and significant size in which firms function in order to supply basic food needs. It encourages circumstances in which a major firm failure risks catastrophic destruction. Recent expe-

79. USDA, AGRICULTURE FACT BOOK 2001-2002, at 26-27 (2003), available at <http://www.usda.gov/factbook/2002factbook.pdf>.

rience in American banking proves this. In food processing, as in banking, the parts of the economic machine are so big that a failure damages the entire machine to the point of limited utility and discernable instability.⁸⁰ This is not the American historical model. There is much evidence the nation's founders expected many small farms, ranches, and firms to compete, assuring that one's failure would give rise to another's birth, and the transformative power for the nation's growth would be change begotten by competition, not modification birthed by newly discovered efficiencies.⁸¹ Recalling their goals is useful.

Many "basic freedoms" are consistent with the small and even the mid-sized business economic model of free enterprise, but are entirely inconsistent with the big business model.⁸² The GAO Report fails to recognize any tension at all between the basic freedoms model that defines American political idealism, and the size and concentration paradigm that typifies American economics.⁸³ Recent evidence suggests that whole scale efforts by concentrated businesses are eradicating these freedoms because they introduce inefficiency. Consider the growth of arbitration and the ubiquity of contractual provisions waiving the right to trial by jury and providing for arbitration, choosing governing law, or selecting a venue disconnected with the transaction as the place to arbitrate.⁸⁴

Consider the reawakening of the dormant commerce clause to prevent local governmental rule as an alternative to federal control. Indeed, with one remarkable fell swoop of congressional lobbying success, the *American Arbitration Act*, coupled with the supremacy clause⁸⁵ and the dormant commerce clause, eradicated fifty state constitutional open courts and jury trial guarantees.⁸⁶

80. See F. WILLIAM ENGDahl, *supra* note 66 (focusing on the seed industry and single firm dominance over seed for crops). The "Big Food" problem is multi-faceted; it also poses health risks and the public is aware of this.

81. See George Washington, Inaugural Address of 1789 (Apr. 30, 1789) (transcript available at http://www.archives.gov/exhibits/american_originals/inaugtxt.html); Letter from Thomas Jefferson to Jean Baptiste Say (Feb. 1, 1804), available at <http://etext.virginia.edu/etcbin/toccernew2?id=JefLett.sgm&images=images/modeng&data=/texts/english/modeng/parsed&tag=public&part=159&division=div1>.

82. The term "efficient" and its forms do not appear in the U.S. Constitution. Many have observed that basic freedoms, like speech, religion, press, trial, are not conducive to "efficiency." See Bernard H. Siegan, *Economic Liberties and the Constitution*, 24 BUS. ECON. 23, 24 (1989).

83. See GAO REPORT, *supra* note 1.

84. The Iowa Attorney General collects and posts contracts packers and processors demand with producers, and cautions producers to try to help them negotiate terms. See, e.g., Office of the Attorney General: Contracts, http://www.iowa.gov/government/ag/working_for_farmers/contracts/index.html (last visited April 30, 2010)

85. *Perry v. Thomas*, 482 U.S. 483, 489-90 (1987).

86. *United Haulers Ass'n v. Oneida-Herkimer Solid Waste Mgmt. Authority*, 550 U.S. 330, 345 (2007) (referring to dormant commerce clause jurisprudence).

Groups like the American Chamber of Commerce, trade organizations of food processors, and organizations with lobbyists have effectively conspired together to discuss their needs on levels previously thought to be utterly monopolistic. These groups assure Business will get its way by flaunting its contracts, combinations, and conspiracies to pass laws restraining trade in the halls of the United States Congress.⁸⁷

The Center for Responsive Politics reported, on January 29, 2009, that U.S. companies spent a record \$3.2 billion on lobbying in 2008, while losing record amounts of money and laying off workers.⁸⁸ Among the largest spenders were finance, insurance, and real estate companies and their associations, namely: The National Association of Realtors, American Bankers Association, Private Equity Council, Mortgage Bankers Association of America, Financial Services Roundtable, U.S. Chamber of Commerce, Alliance of Automobile Manufacturers, Pharmaceutical Research Manufacturers of America, and American Hospital Association.⁸⁹ Other large spenders were organizations exemplifying accumulated industry interests by expressing sentiments designed to achieve collective congressional results by pooling competitive information to procure lobbying objectives. These include: National Meat Institute, National Chicken Council, American Auto Manufacturers Association, American Bankers Association, National Cattlemen's Beef Association (an organization consisting originally of producers, but now dominated by packers), Meat and Poultry Promotion Coalition, and National Meat Association.⁹⁰

Trade Associations serve as meeting halls for "competitors" to exchange ideas, plots, secrets, and to pool funds for political reasons. These associations become shared accounts and shared staffs, used by dominant interests to address issues in concert.

VIII. THE MONOPSONISTIC BUYERS WHO CARVE UP AGRICULTURE MARKETS DO NOT ENGAGE IN HEALTHY COMPETITION

The few companies dominating the agriculture markets discussed throughout this paper claim to compete against one another. They do not. In

87. See generally, COMMON CAUSE, CAMPAIGN FINANCE REFORM: A NEW ERA (2009), <http://www.commoncause.org/atf/cf/%7Bfb3c17e2-cdd1-4df6-92be-bd4429893665%7D/COMMONCAUSECAMPAIGNFINANCEREFORMAGENDA2009.PDF> (discussing problems with America's current campaign finance system).

88. Washington Lobbying Grew to \$3.2 Billion Last Year, Despite Economy, <http://www.opensecrets.org/news/2009/01/washington-lobbying-grew-to-32.html> (Jan. 29, 2009, 14:09 EST).

89. *Id.*

90. *See id.*

fact, they use their power, nationally and internationally, to drive their costs of goods down. Costs are driven down with their absolute control over knowledge of their needs and their ability to supply needs from sources outside the sphere of knowledge immediately accessible by American producers. The imbalance of knowledge, coupled with control of the procurement process and dominance in the balance of market power, creates the problem of monopsony. This is a dangerous problem. It threatens domestic producers, it drives them from business, and it increases consumer prices. At the same time, monopsony power is a threat to political stability.

The lessons of monopsony can be learned from history, although the GAO and regulators of agriculture markets have not exhibited awareness of historical precedent as they forge and execute policy. More than 2000 years ago, corn farmers in Athens were regulated by the Athenian Senate to protect local farmers against transportation of cheap corn from Egypt.⁹¹ The problem was posed by the monopoly power of the Egyptian seller of corn, Cleomenes, satrap of Egypt.⁹² As fabled American historian Will Durant commented: “The danger lurking in this prosperity is the growing dependence of Athens upon imported grain; hence her insistence upon controlling the Hellespont and the Black Sea . . . and her disastrous expeditions to Egypt[.]”⁹³

Ancient cultures’ monopsonists provide the example economists need to identify the presence of a thin market for produce and market entrance with insufficient incentive to purchase available products. Monopsony power was perceived,⁹⁴ and the need to combat it became a driving force in the adoption of America’s antitrust laws—the first in the world.⁹⁵ Regulation of livestock packers was a direct response to prevalent monopsony power in markets far less concentrated than now.⁹⁶ In our nation’s third century, concentration among packers and processors in most agricultural sectors threatens to disrupt production, starve out producers, and constantly escalate costs.

“Efficiency,” however, continues to be the justification to allow monopsonies to exist. This rationale requires examination. Sometimes, when food

91. CECIL TORR, RHODES IN ANCIENT TIMES 49 (1885).

92. *Id.*

93. WILL DURANT, THE STORY OF CIVILIZATION: PART II: THE LIFE OF GREECE 276 (1939).

94. James May, *Antitrust in the Formative Era: Political and Economic Theory in Constitutional and Antitrust Analysis, 1880–1918*, 50 OHIO ST. L. J. 257, 283 (1989).

95. See TONY FREYER, REGULATING BIG BUSINESS: ANTITRUST IN GREAT BRITAIN AND AMERICA 1880–1990, 20-26 (1992); RUDOLPH J.R. PERITZ, COMPETITION POLICY IN AMERICA 1888–1992, 13-20 (1996).

96. See generally JON LAUCK, AMERICAN AGRICULTURE & THE PROBLEM OF MONOPOLY 42-57 (2000).

prices do not rise as fast as the overall cost of living index, the monopsonists claim “efficiency” justifies their behavior. This claim does not withstand scrutiny.⁹⁷

The “efficient” food supply system today employs fewer people, furnishes fewer pensions, and provides less redundancy. “Just in time” inventory has become sacrosanct in the food sector. All grocery store backrooms shrink to nothing and grocery wholesalers practice inventory turns at dramatically high levels. At the same time, the nation’s slaughter plants, particularly in beef, generate more profit per animal by owning a steer three days than the cattle feeder can make in six months, or the rancher, who owns the mother cow, can make in two years.

When beef reaches the consumer, the processor’s “value added” steak, roast, or loin might cost nominally less than ten years ago, as a percentage of total living costs. However, the margins it commands for the retailer and the processor are significantly enhanced. The farmer, rancher, and factory worker pay dearly for this enhancement. The U.S. Department of Justice (DOJ) recognizes suppliers and consumers are both losers:

Consider first how a merger may lower the true economic cost of purchasing. An example might be where a merger enables the firm to commit to larger orders and thereby permits its supplier to save on its costs by scheduling longer and less costly production runs. These cost savings typically will benefit both the merged firm and its suppliers, and to the extent they lower the buyer’s marginal cost of production, will tend to be passed along to some extent to final consumers. The case where a merger lowers input prices for no reason other than that the merged firm can now exercise monopsony power is entirely different. If a buyer obtains market power through merger, and thereby is able to depress prices for the inputs it purchases below competitive levels, then producers of those inputs will have depressed incentives to produce, which will result in too few resources utilized to produce the inputs compared to what would be available in a competitive market. This is likely to harm both suppliers and consumers.

While we often speak of consumers as the targeted beneficiary of antitrust enforcement, suppliers also benefit, by having healthy incentives to provide the best products and services they can, with the expectation that they will be able to do so free from anticompetitive interference. And the overall U.S. economy benefits, as the products and services desired by consumers are produced more efficiently, in greater quantities, and at competitive market prices. A focus on promoting competition

97. A 1996 paper by a Nebraska agricultural economist attempts mathematical assessment of the impact from market concentration. The paper reaches dubious conclusions, but displays an intense mathematical methodology. See generally Azzedine Azzam, *Testing the Monopsony-Inefficiency Incentive for Backward Integration*, 78 AM. J. AGRIC. ECON. 585 (1996); HENDRICKSON & HEFFERNAN, *supra* note 76.

goes hand in hand with our taking enforcement action in a monopsony case when the facts warrant.⁹⁸

In the latter instance, the factory worker's hours may not have elongated, but performance standards commanded more work. As the piece count demand increased, the number of employees decreased as did the cost per piece. This multiplied the monopsonist processor's profits.⁹⁹

The problems do not end here. Monopsonists know what quantities of raw goods are needed for production during the next production cycle. Producers might know only how many inputs, i.e., head of cattle, hogs, poultry, or pounds of milk, are used in a year and perhaps even what fraction is handled by each processor.

However, producers do not know how much of the processor's supply is committed with marketing agreements, forward contracts, or "captive supplies" reducing processor participation in the market for raw goods. Additionally, producers do not know the processor's immediate need. This is a critical information imbalance since the producer must sell a perishable product. Packers can use the threat of captive supplies, which they may or may not have, to subtly influence the psychology of the market and cash price. Processor arrangements for future delivery of raw goods are not reported as public market activity; these private contracts move animals or crops to market without any transparent price discovery. Thus, in a given week, month or season, processors may be in the cash market for only a small fraction of their need. This allows them to control markets by creating uncertainty, actually withdrawing from purchasing, and wielding market power against sellers of perishable goods.¹⁰⁰

Recognizing the high cost of transporting many raw agricultural commodities to market, the DOJ introduced the concept of "captive draw areas" for analyzing buyer power.¹⁰¹ In a given captive draw area, there may be only one or two viable buyers, yet at the national level there may be many. In some in-

98. Douglas Ross, Special Counsel for Agric. Antitrust Div., Dep't of Justice, Address at the R-CALF USA Annual Convention: Antitrust Enforcement and Agriculture (Jan. 19, 2007).

99. See KYLE W. STIEGERT, FOOD AND AGRIC. ORG. OF THE UNITED NATIONS, IMPERFECT COMPETITION, AGRICULTURE AND DEVELOPMENT, COMMODITY MARKET REVIEW 36 (2008).

100. Meat bearing animals are "perishable goods." They must be slaughtered within a short time period or their optimum weights and values are surpassed, and their maintenance costs eradicate all profits.

101. See Complaint at 7-9, *United States v. Cargill, Inc.*, No. 1:99CV01875 (D.D.C. July 8, 1999) available at <http://www.justice.gov/atr/cases/f2500/2552.pdf> (introducing the term "Captive Draw Area" in a case where the Department of Justice, Antitrust Division, was challenging Cargill's proposed acquisition of Continental Grain's Commodity Marketing Group and was also analyzing the economic impact that the acquisition would have on grain farmers in the upper Midwest who were within the Captive Draw Areas of the competing companies' grain elevators).

stances, such as with contract poultry production, the buyer *defines* the captive draw area.¹⁰² For example, the GAO Report reports a four-firm (CR4) concentration of 57% for broiler production, but this is in the market for processed birds; in the market for grower services, the poultry company has a pure monopsony in some areas, making the buyer CR1 = 100%.¹⁰³

Cash transactions are generally recorded by USDA and made available to the public. However, most agricultural contracts are not publicly available. Wisdom of ancients led them to a particular practice that facilitated simple and practical enforcement. They lacked a massive police force with an enforcement mandate, but relied instead on the simplest and least intrusive of all enforcement methods—the light of day. “When a significant contract was to be made, it was transacted at the gate of the city where the entire public could view and scrutinize the agreement.”¹⁰⁴

Modern competition requires that contracts see the light of day. Lack of market transparency is a problem neglected in the GAO Report.¹⁰⁵

A. Monopsony Power Leads to Abuse of Market Power: Producers and Consumers are Both Hurt

Human dynamics and the science of economics both offer strong evidence that the presence of monopsony leads to abusive wielding of market power by those in control of the market. John Kenneth Galbraith observed in *American Capitalism: The Concept of Prevailing Power* what he called “the case of agriculture”¹⁰⁶ Galbraith wrote:

The contention that the farmer’s market position and hence his market power is broadly different from that of his suppliers and customers has been denied or put down as unproven by a number of critics, not all of them men who have conditioned themselves to hear nothing that is evil or inconvenient about the price system. This follows partly from a tendency to see market power only when it is obtrusively exercised and to assume that what is invisible is inevitably benign. It is partly the re-

102. Poultry companies, known as integrators, contract with growers to provide labor and physical facilities for growing birds owned by the integrator. Often these grower complexes are small geographic areas, typically a 40 mile radius around the integrator’s feed mill and poultry processing facility.

103. GAO REPORT, *supra* note 1, at 11.

104. Terry Stevenson, *Economic Morality*, ORG. FOR COMPETITIVE MARKETS NEWSLETTER, Sep. 2004; ISAAC TAYLOR, HEADLAND, COURT LIFE IN CHINA 331-333 (1909) (describing transactions in China over a century ago).

105. See GAO REPORT, *supra* note 1.

106. JOHN KENNETH GALBRAITH, *AMERICAN CAPITALISM: THE CONCEPT OF PREVAILING POWER* 154 (Transaction Publishers 1993) (1952) (beginning his academic career as a dairy marketing economist, Galbraith is particularly well qualified to comment on agricultural markets).

sult of a failure to reflect fully on the evidence. None of these critics would deny that when aggregate demand in the economy falls, the terms of trade turn against the farmer and that his prices also fall much more sharply than do the prices he pays or the margins of those who handle or process his products. Those patterns of economic behavior are as nearly taken for granted as anything in economics. Yet they can be only explained by a broad difference in market structure which gives the farmer's suppliers and customers the power to control the adjustment of their prices to the fall in demand. This power, of course, the farmer does not have.¹⁰⁷

The predilection to engage in misperception about demand produces classical monopsony behavior. Celebrated economists recognize that monopsony empowers the controlling monopsonist to reduce prices, and wield market power:

As in classic monopsony, the ability to reduce the price paid for infra-marginal units by reducing marginal bids creates an incentive to reduce demand. In [the case illustrated by the theorem commented upon] we are evaluating the bid for the second unit, and the first unit is the inframarginal unit. It follows that the optimal bid for the second unit is less than [the value of the second unit].¹⁰⁸

According to auction theory economist Paul Milgrom, the concept of reducing demand can be understood either: "(A) as reducing the total number of units demanded at or above any price or, equivalently, or (B) as reducing the price bid for each unit after the first."¹⁰⁹ Milgrom explained: "from perspective (A), the preceding analysis looks very much like the traditional theory of monopsony: the incentive to reduce the quantity demanded depends on the number of units being purchased and the price elasticity of expected supply at that price."¹¹⁰

Of course, there is no elasticity in agricultural markets where perishable goods are under-demanded by the monopsonist who knows the seller must sell. The under-demanding is a ploy to purchase goods, especially goods with limited shelf life, at a lower price than would be obtained if the actual number of goods sought were demanded. This is classic monopsonist market power. It is a weekly event for producers of America's meat supply. Those same producers are constant victims of the same process practiced against them by suppliers who are easily able to increase the price of farming inputs using manipulated or feigned shortages.

107. *Id.* at 164 n. 8.

108. MILGROM, *supra* note 23, at 260.

109. *Id.* at 261.

110. *Id.* at 262.

B. *Specific Markets and Their Condition Proves that Concentration Affects Price*

A brief overview of problems in select major markets for agriculture brings to life the problems of concentration in their specific markets.

1. *Slaughter Beef Sales*

The beef industry suffers from significant lack of meaningful competition and market manipulation. It is sometimes subtle and often not apparent to analysts who lack intimate familiarity with unique attributes of cattle and beef markets.

For a market to work, the buyers of a particular commodity must be distinct from the sellers. In a sense, a fence separates buyers from sellers, and the market works as a gate to pass goods and money from one side of the fence to the other. This should work in transactions involving buyers and sellers with relatively equal compulsions to engage in an exchange of goods for funds. Merger standards and antitrust analyses, in general, consider the possibility that buyer power can be exerted from either side of the fence, or that monopoly power can be asserted from one to create imbalance. But, economics, industrial organization, and antitrust theory do not apply very well where a firm jumps routinely back and forth across the fence, acting as both buyer and seller.

In the cattle business, a sector in which a fence is a stereotypical fixture of the industry, fences have historically separated buyers of slaughter cattle from their sellers. The paradigm for the cattle business has been simple: producers breed and feed cattle to market weight. Slaughterers kill, cut up, and box cattle carcasses for sale to the public. The two do not mix.

However, the fence between the two has been torn down by vertical integration and consolidation of market power during the past two decades. This has happened, in part, because major packers own and feed cattle. Their ownership comes in more forms than a simple, specific, direct, and outright procurement of cattle as calves so they can be fed to market weight. Packers have developed ownership arrangements to gain control over cattle long before they pay for them. Their primary tools are contract arrangements whereby the cattle are sold to the packer well in advance of slaughter, either at a committed price or a formula price to be determined after delivery, but with stringent requirements that delivery must occur. In this way, the packer procures the cattle even without paying for them, long before the slaughter date and in many instances even before the

calf is in a feedlot. Thus, the packer need not participate in the cash market to the extent it has already captured the supplies it needs well in advance.¹¹¹

By the middle of the current decade, captive supply arrangements were thought to account for at least forty percent of all animals slaughtered. No current studies of the level of captive supply arrangements are reported, though generally the magnitude of animals controlled through such supplies are thought to be much, much higher.¹¹²

Captive supply gives the processor an additional incentive to depress the cash price since the ultimate formula price to be paid for cattle may be impacted by the cash price. As one representative of a packer said to a feeder upon declining to pay a premium price for premium quality cattle: "In the old days I would have been able to offer you \$67.50 for these cattle (on a \$66 market), but now paying more would screw up 20,000 formula cattle."¹¹³

Suppose the base price for the 20,000 head of formula cattle was the top-of-the-market price. Such contracts exist. Also suppose another packer—maybe a very small packer—already established the weekly top-of-the-market price at \$66.00. If the packer's buyer pays the feeder an additional \$1.50/cwt (\$18/head) for his pen of 1,000 high quality cattle, then the "additional cost" is the extra \$18,000 for the feeder's cattle, *plus an extra* \$360,000 on the 20,000 head of formula cattle. Paying the feeder an extra \$1.50 on 1,000 head would have cost the packer an extra \$378,000. Obviously, the packer would not bid \$67.50 in a \$66.00 market. Looked at another way, offering \$67.50 for the feeder's pen of high quality cattle would have been the equivalent of offering \$117.00/cwt in a cash market without the captive arrangement.

Such arrangements lower bids, in this illustration costing the feeder \$18,000. In the jargon of economics, the marginal cost of slaughter cattle is higher to the buyer because of the marketing agreements tied to cash price, causing cash price to be lower than it would be without such captive arrangements.¹¹⁴

Packers, with their contract supplies of cattle, are on both sides of the weekly cash market. They procure a few cattle in the cash market as buyers. But, they push the cash market down because they already control other cattle at a more favorably price. In that sense, they are suppliers motivated to drive price

111. See C. Robert Taylor, Alfa Eminent Scholar of Agric., Auburn Univ., Presentation at the DOJ/FTC Workshop on Merger Enforcement: The Many Faces of Power in the Food System (Feb. 17, 2004) [hereinafter *Power in the Food Systems*].

112. See generally USDA MARKET NEWS SERV., NATIONAL WEEKLY DIRECT SLAUGHTER CATTLE REPORT-FORMULATED AND FORWARD CONTRACT (2010), http://www.ams.usda.gov/mnreports/lm_ct151.txt.

113. *Power in the Food Systems*, *supra* note 111, at 3.

114. This hypothetical is based on an example given in C. Robert Taylor, Legal and Economic Issues with the Courts' Rulings in *Pickett v. Tyson Fresh Meats, Inc.*, a Buyer Power Case XX (Am. Antitrust Institute Working Paper No. 07-08).

downward. A packer with excessively-committed captive supply cattle is a seller of the extra cattle.

Price discrimination occurs in the fed beef industry. Feeders willing to contract their supplies in advance are generally assured their price will allow them some premium on the cash price. This is necessary because forward sellers know their arrangements will encourage the feed yard to depress the cash price against other cattle sellers.

In a competitive market, one would expect net returns averaged over a long time period, such as a twelve to thirteen year cattle cycle, to be the same for different cycles. Ignoring the negative returns for the past year, net returns to cattle feeding averaged \$36 per head over the 1981-1994 period, but only \$14 per head over the 1995-2008 period. Taking out the spike due to a ban on importation of Canadian cattle in 2003, returns to feeding averaged a *loss* of \$4 over the 1995-2008 period. This comparison suggests that prices paid for slaughter cattle have been depressed in the past decade.

Specific data, compiled in tabular form, is supplied by the Department of Agriculture's Economic researchers. USDA ERS data in Table 4¹¹⁵ discloses these facts.

Date	Re-tail value	Wholesale value	Gross farm value	By-prod. al-low.	Net farm value	Total	Whl. to retail	Farm to whl.	Farmers' share
	Cents per pound of retail equivalent								Per-cent
	Annual averages								
2004	406.5	218.9	203.5	19.8	183.7	222.8	187.6	35.2	45.2
2005	409.1	226.1	211.3	19.6	191.7	217.4	183.0	34.4	46.9
2006	397.0	228.0	206.6	19.3	187.3	209.7	169.0	40.7	47.2
2007	415.8	231.0	222.6	24.8	197.8	218.0	184.8	33.2	47.6
2008	432.5	234.7	223.2	26.2	197.0	235.5	197.8	37.7	45.5

115. Econ. Research Serv., USDA, Choice Beef Values and Spreads and the All-Fresh Retail Value (2010) <http://www.ers.usda.gov/Data/MeatPriceSpreads/Data/beef.xls> (updated monthly; last updated April 14, 2010).

As can be seen, the gross farm-to-retail margin declined during the 1980s. This downward trend is consistent with a competitive market in which there are efficiency gains or lower real wages paid to packing plant and retail meat counter employees. Beef packers achieved efficiency gains in the 1980s as they switched to larger plants.

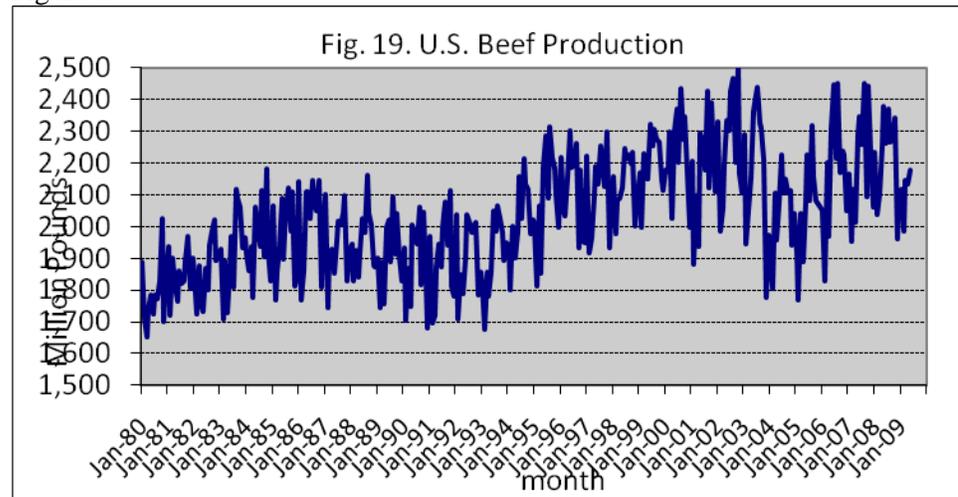
These flaws are particularly troubling when added to the GAO Report's failure to even mention captive supply in the beef industry.¹¹⁶ Empirical studies all show a strong, statistically significant negative relationship between captive supply and cash price.¹¹⁷

Packers have often claimed that they need captive supplies "to be assured of a dependable supply of slaughter animals."¹¹⁸ The figure below shows domestic beef production. It reveals the amplitude of production changes is greater with extensive captive supply than during the 1980s when captive supplies were small or nonexistent. Actual production data suggests the packers' claims that captive supplies assure a dependable supply are nothing more than pretext. In fact, the supply of animals to slaughter is consistently sufficient; rather, the packer's issues are price and market power, not the availability of raw goods.

116. See *Review of the Market Structure of the Livestock Industry*, *supra* note 40.

117. *Id.*

118. See *Economic Challenges and Opportunities Facing American Agricultural Producers Today: Hearing Before the Sen. Comm. on Agric., Nutrition, & Forestry*, 110th Cong. 123 (2007) (testimony of the Ranchers-Cattlemen Action Legal Fund, United Stock growers of America) ("... we believe that some of those who are feeding cattle and using forward contracting are creating aberrations within the market place by coming in and out of the market; that is not reflecting the true value of the cash market. But with the packers in the feeding business and forward contracting, there's going to be a major, major shift against the leverage system. In my opinion the feeder can't win against the packer in the real fair play if we go into the feeding and the hedging program.").

Figure 4¹¹⁹

The GAO Report's consideration of beef is far from comprehensive.¹²⁰ In fact, it fails to demonstrate a grasp of the beef industry.

2. Dairy Processing

The GAO's consideration of the dairy industry also discloses superficiality and misunderstanding. The GAO Report does not deal with separate market order areas, the federal milk marketing order's oligopsonistic consequences, the problem of imports of milk protein concentrates and casein supplies, or other fundamentals impacting dairy farming and dairy products offered to consumers.¹²¹

The GAO Report concluded: "Overall, four studies found that concentration in dairy processing had little or no adverse impact on commodity or food prices."¹²² The GAO Report did not consider all of the evidence. USDA documents the farm to retail spread for milk. This data discloses a substantial upward trend in the inflation adjusted farm-to-retail price spread for a gallon of whole milk beginning in 2000.¹²³ Major U.K. retailers accepted fines amounting to

119. See, PRICE SPREADS FROM FARM TO CONSUMER, *supra*.note 9. This data is from the USDA Economic Research Service.

120. See GAO REPORT, *supra* note 1.

121. See generally *id.* at 29-31.

122. *Id.* at 29.

123. ECON. RESEARCH SERV., USDA, PRICE SPREADS FROM FARM TO CONSUMER: AT-HOME FOODS BY COMMODITY GROUP (2009), available at <http://www.ers.usda.gov/Data/Farm>

£116 million, which the U.K. Office for Fair Trading imposed “for price collusion with milk and dairy product processors during the early 2000s.”¹²⁴ The global economy for dairy products affects domestic prices. Domestic prices have a known impact on dairy markets.

As early as 2001 and again in 2002 the DOJ found concentration in dairy markets to be a serious problem, even though the concentration involved producer-owner cooperatives. In December 2002, DOJ challenged Suiza Foods’s proposed acquisition of Dean Foods. In April 2003, it challenged Dairy Farmers of America’s acquisition of Southern Belle Dairy Co., LLC.¹²⁵ DOJ required Suiza Foods to change its originally-proposed acquisition of Dean Foods in two ways. First, it was required to divest 11 processing plants in eight states to try to preserve some competition for milk.¹²⁶ Second, it was required to modify its supply contract with DFA.¹²⁷

Since these events occurred, matters have worsened. The American Antitrust Institute observed in 2004:

While the reach of antitrust law with regard to agricultural cooperatives has been limited by certain statutory exemptions, it appears to us that antitrust can fairly clearly reach the type of agreements involved in the DFA/NDA/Hood transaction. This, then, means it will be up to the Department of Justice . . . to determine if the transaction is anticompetitive on . . . vertical foreclosure grounds

Events in the dairy industry appear to be rushing toward an end-game and antitrust intervention at this point, if it occurs, will undoubtedly come late in the game.¹²⁸

The dairy industry’s problems are many. In addition to market concentration, the price of cheese is based upon the Chicago Mercantile Exchange’s cheese trading. The cheese futures market trades carlot units of cheddar cheese in sessions lasting approximately 30 minutes per week.¹²⁹ Fluid milk, milk powder concentrate, and casein, do not trade on the CME.¹³⁰ The cheese trade is

ToConsumer/pricespreads.htm#dairy.

124. Tim Lloyd et al., *Buyer Power in U.K. Food Retailing: A ‘First-Pass’ Test*, 7 J. AGRIC. & FOOD INDUS. ORG. at 26 (2009).

125. *Antitrust Enforcement in the Agricultural Marketplace: Hearing Before the S. Comm. on the Judiciary*, 108th Cong. 9 (2003) (statement of R. Hewitt Pate, Assistant Att’y Gen. of Antitrust Division, DOJ).

126. *Id.*

127. *Id.*

128. HIROMITSU MIYKAWA, *COMPETITIVE ISSUES IN THE DAIRY INDUSTRY: THE PENDING DFA/NBH/HOOD TRANSACTION* 3 (2004).

129. LARRY G. HAMM & ROBERT MARCH, CORNELL PROGRAM ON DAIRY MARKETS AND POL’Y, *THE NATIONAL CHEESE EXCHANGE: IMPACTS ON DAIRY INDUSTRY PRICING* 1 (1995), available at <http://dairy.cornell.edu/CPDMP/Pages/publications/Pubs/M7.pdf>.

130. *See id.* at 1-6.

believed to involve forty or fewer traders who market eighty percent of the cheese in the United States.¹³¹ The cheese trade is dominated by no more than a half dozen trading firms.¹³² The GAO Report did not investigate the identity and role of processing firms in the cheese market.¹³³

The USDA data *supra* shows the farm-to-retail marketing margin for a gallon of whole milk, expressed in 2009 dollars. From the chart, it can be seen that there was essentially no trend to the spread in the 1980s, but that it has been trending upward strongly for about twenty years. Studies referenced by the GAO Report did not use data shown in the right half of this chart. Since inflation adjusted wage rates in food processing and retailing have been constant and productivity trending upward, exertion of market power is the only plausible explanation for the farm-to-retail spread increasing by about thirty percent.

The GAO Report did not consider this data. However, the daily impact of this data could be confirmed readily by randomly interviewing financially struggling dairy farmers. As demand holds steady and supply of raw milk declines, prices remain below production costs month after month, even after government buyouts of cows. Even as American cow numbers declined,¹³⁴ milk fat imports and substitutes have increased by dominant milk processors.¹³⁵

3. *Poultry Markets*

Poultry was vertically integrated in the 1950s, a half century ago.¹³⁶ Since then, there has been no viable cash market for broilers in the United States. Instead, processors, called integrators in the chicken industry, contract with growers to provide production facilities (chicken houses) and labor for day-to-day management and care of growing birds.¹³⁷ Poultry packers, called “integrators,” supply and own the birds throughout the birds’ lives. They pay farmers to

131. *Id.* at 1.

132. *See id.* at 2.

133. *See* GAO REPORT, *supra* note 1.

134. ECON. RESEARCH SERV., USDA, USDA AGRICULTURAL BASELINE PROJECTIONS TO 2019, at 83 (2010) <http://www.ers.usda.gov/Publications/OCE101/OCE101.pdf>.

135. Pete Hardin, *Imports. Imports. Imports. U.S. Dairy “Surplus”—A Complete Lie*, THE MILKWEED, Aug. 2009, at 8, http://www.themilkweed.com/Feature_09_Aug_02.pdf. Senator Bernie Sanders and Senator Chuck Schumer recognized this with demands for investigations in August 2009. GAO used aged dairy data.

136. STEVE W. MARTINEZ, ECON RESEARCH SERV., USDA, THE ROLE OF CHANGING VERTICAL COORDINATION IN THE BROILER AND PORK INDUSTRIES 2 (1999), *available at* <http://www.ers.usda.gov/publications/aer777/aer777.pdf>.

137. *See* DATA SETS, *supra* note 55 (follow “Summary of Retail Prices and Price Spreads” hyperlink).

add weight, requiring they be paid based on the pounds delivered at the end of the growing season.

Chicken producers make huge investments in houses that may cost from \$500,000 to \$1,000,000, have a twenty to thirty year economic life, and have no practical alternative use. Once built, the producer is at the integrator's mercy. The integrator controls the breed, quality of chicks, feed deliveries, quality of feed, timing of deliveries of both chicks and feed, and the pay system for the grower. Economists call this a "tournament pay system." Due to variable feed and chick quality, it is more of a "lottery."

Growing chickens is a family business. Yet, one becomes a contract producer now "by invitation." Someone who wants to produce chickens must have a contract with an integrator. Deliveries of sickly or underweight chicks, late deliveries, bad feed deliveries, bad advice from the integrator's field representative, or simple pricing power can all ruin the producer's business. This can occur quickly. It is well known in the chicken industry that producers dare not speak out against integrators.¹³⁸

Despite these facts, the chicken industry does not appear to be excessively concentrated based on calculations of the HHI and the four firm concentration statistics. The CR4 for the broiler industry may be only 57%.¹³⁹ Standing alone, this suggests concentration is not a problem. But a single merger could leave a cluster of growers in a particular region without a contracting alternative, even at the end of a contract term. Simply, the CR4 statistics comment on the macro market, but ignore regionality, transportation restrictions, and other access barriers to distant markets.¹⁴⁰ Economists' warnings of this development went unheeded by producers, who could not believe the Government would allow their way of life to be taken.¹⁴¹

The GAO Report's inability to find direct data to support the impact of concentration on poultry farmers is understandable. Once a market is destroyed, useful data cannot be gleaned from it, just as a house cannot be inhabited once it has burned to the ground. The GAO Report states: "We did not identify reliable information on prices poultry farmers received."¹⁴² USDA does not report the prices that contract poultry producers receive. Most poultry integrators participate in a private reporting service, known as AgriStats, and share information on

138. C. Robert Taylor, *Restoring Economic Health to Contract Poultry Production*, AGRIC. AND RESOURCE POL'Y FORUM, May 2002, at 2, <http://www.auburn.edu/~tayloct/topics/poultry/poultryproduction.htm> [hereinafter *Restoring Economic Health*].

139. GAO REPORT, *supra* note 1, at 11.

140. *Restoring Economic Health*, *supra* note 136, at 2.

141. See HAROLD F. BREIMYER, *INDIVIDUAL FREEDOM AND THE ECONOMIC ORGANIZATION OF AGRICULTURE*, 213-214 (1965).

142. GAO REPORT, *supra* note 1, at 15.

contract grower pay by month.¹⁴³ They do not share this information with growers or outsiders.

Contract growers have not received a competitive return for labor, management, capital, and risk for over ten years.¹⁴⁴ This results in growers going out of business in droves.

4. *Hog Markets*

Meat packers have robbed the pork industry of its competitiveness. Hog producers fear their business is being “chickenized,” but even now, they fear taking affirmative action before the industry’s agonal competitive breaths are exhaled. Nearly all swine are now bought and sold under exclusive contracts, formula pricing, and other captive supply arrangements that “marry” a single producer with a single packer for a long term. Departure from one packer to another is seen as disloyalty and is seldom permitted to occur within the industry.

The pork industry has suffered from dramatic problems as far back as ten years ago. In a report entitled *Killing Competition with Captive Supplies*, the Land Stewardship Project found that in 1999 about 70% of all hogs were sold through contracts, bypassing the open market; 60% of pork slaughter was controlled by four firms.¹⁴⁵

Purdue University reported, after a comprehensive three-year research study conducted between 2002 and 2005, that the U.S. pork industry experienced substantial structural changes.¹⁴⁶ Purdue’s study found four slaughter firms, by the end of the twentieth century, killed “60 percent of the pigs in the U.S. and produced nearly 30 percent of them on company owned or contracted farms.”¹⁴⁷ The study empirically modeled the industry and evaluated it, making findings. The study concluded there was a dramatic restructuring of the U.S. pork industry. Purdue’s researchers noted that government traditionally inquiries into anti-competition in the U.S. pork industry centered on the relationship between pork slaughter firms and hog producers. However, results indicate that it might be better to focus on pork product pricing. Future research may analyze interactions

143. See generally Agri Stats, Inc., <http://www.agristats.com> (last visited Apr. 30, 2010).

144. See *Restoring Economic Health*, *supra* note 133, at 1-2.

145. Brian DeVore, *Report: Packers are Killing Competition with Contracts, Other “Captive Supply” Arrangements*, MOTION MAG., May 3, 1999.

146. K.A. FOSTER, PURDUE UNIV., ESTIMATING THE CHANGING MARKET CONDUCT IN THE U.S. PORK SLAUGHTER INDUSTRY (2005), <http://www.reeis.usda.gov/web/crisprojectpages/192873.html>.

147. *Id.*

between retailers and pork wholesalers to give better understanding of retail pork and pricing wholesale.¹⁴⁸

The Purdue study concluded that hog farmers lack market power. Current USDA data discloses the swine trade actually proves there is no real “trade” at all as the cash market for hogs is nearly gone, as shown by Figure 5.¹⁴⁹

USDA Data Showing Limited Cash Trading in Hogs					
IOWA/MINNESOTA DAILY DIRECT PRIOR DAY HOG REPORT BASED ON STATE OF ORIGIN					
PLANT DELIVERED PURCHASE DATA FOR Thursday, August 27, 2009					
CURRENT VOLUME BY PURCHASE TYPE BARROWS & GILTS LIVE AND CARCASS BASIS					
	Actual Prior Day	Actual Week Ago	Actual Year Ago		
Producer Sold					
Negotiated	11,499	13,067	11,844		
Other Market Formula	7,821	11,055	14,093		
Swine or Pork Market Formula	88,134	85,136	65,915		
Other Purchase Arrangement	6,905	8,525	11,394		
Packer Sold (all purchase types)	13,640	9,682	11,887		

	NEGOTIATED	OTHER MARKET FORMULA	SWINE OR PORK MARKET FORMULA	OTHER PURCHASE ARRGMENT	TOTALS/ WTD AVG
Barrows & Gilts (carcass basis):					
Producer Sold					
Head Count	8,197	7,821	85,939	6,905	108,862
Base Price	45.65	45.30	46.35	50.64	46.49
Packer Sold					
Head Count					12,380
Base Price					50.81

NEGOTIATED PURCHASE (Including Packer Sold)					

148. *Id.*

149. USDA's Agriculture Marketing Service updates these figures weekly; to see the current statistics visit http://www.ams.usda.gov/mnreports/lm_hg204.txt.

Barrows & Gilts (carcass basis): 8,197
 Compared to Prior Day's closing weighted average (LM_HG204), 0.04 lower
 Base Price Range \$39.00 - \$46.96, Weighted Average \$45.65
 Base Price is the price from which no discounts are
 subtracted and no premiums are added.

This USDA data makes it clear that packers control the swine market and are able to manipulate as little as 9% of the total trade in order to control procurement and procurement prices. Hog prices, unfortunately, have been at an ebb.¹⁵⁰

At the same time, grocery store pork prices remained remarkably high. As Reuters reported on August 5, 2009, "the price at the grocery store was up but the cost to groceries was down and what farmers were getting paid for hogs was down." Reuters quoted Ron Plain, a livestock economist at the University of Missouri.¹⁵¹

There is more economic evidence of this fact readily available, but it was not cited in the GAO Report. USDA data proves an unmistakable downward trend in the farm-to-wholesale price spread for pork.¹⁵² Like beef, there is a downward trend in this spread during the 1980s that is consistent with efficiency gains and lower packing plant wages in a competitive market.¹⁵³ For the 1990s, the trend is flat as it was during the last decade. But, the average spread increases about 10% for the 2000s compared to the 1990s.¹⁵⁴ Producers cannot withstand this adverse impact on their share of product value.

5. *Seed and Seed Traits (Traits and Genetics Differ)*

Seed traits, often confused with genetics, are dominated by one U.S. company. Traits are characteristics added to seed to make the plant have certain features, such as the ability to withstand certain herbicides while retaining the plant's reproductive genetics. USDA data led its researchers to comment as follows, identifying one seed to exemplify dominance:

150. See generally *Lowest Hog Prices Seen in Two Years*, FARM FUTURES, Aug. 7, 2009, <http://farmfutures.com/story.aspx/Lowest/hog/prices/seen/in/two/years/17/30117>.

151. Reuters, *U.S. Pork Prices High Despite Slump in Hog Values*, Aug. 5, 2009, <http://news.alibaba.com/article/detail/food/100149974-1-u.s.-pork-prices-high-despite.html>.

152. DATA SETS, *supra* note 55 (follow "Historical monthly price spread data for beef, pork, broilers, turkeys, and eggs").

153. *Id.*

154. *Id.*

Recent studies of the world commercialization of the Monsanto-owned Bt insect-resistance trait in cotton provide some idea of the empirical relevance of these scenarios. In India, where no IPRs for varieties or traits had been available prior to 2005, Bt cotton was introduced in hybrid cotton and Qaim (2003) found that in 2001 the Bt hybrid seed cost farmers 287% more than a non-Bt counterpart. As a hybrid, there would have been little incentive for farmers to save seed, so this premium is essentially a lease rate on the trait, allowing the seed company to reap normal monopoly rents equal to about half the potential social benefits. But Tripp et al. (2007) report that by 2004, the monopoly was substantially eroded by clandestine breeding to incorporate the Bt gene.¹⁵⁵

Economic benefits such as the intangible advantages of economic activity do not justify or explain the Monsanto hold on the seed traits market. Perrin and Fulginiti data discloses specifics about sales, time, and prices for seed and traits.¹⁵⁶

There is growing concern that seed companies control genetic modification of gene trait research, and even scientific publications.¹⁵⁷ A coalition of twenty-four corn insect scientists, speaking through Cornell University entomologist Elson J. Shields, expressed significant concern:

Because the scientists rely on the cooperation of the companies for their research—they must, after all, gain access to the seeds for studies—most have chosen to remain anonymous for fear of reprisals. The group has submitted a statement to the EPA protesting that “as a result of restricted access, no truly independent research can be legally conducted on many critical questions regarding the technology.”

It would be chilling enough if any other type of company were able to prevent independent researchers from testing its wares and reporting what they find—imagine car companies trying to quash head-to-head model comparisons done by *Consumer Reports*, for example. But when scientists are prevented from examining the raw ingredients in our nation’s food supply or from testing the plant material that covers a large portion of the country’s agricultural land, the restrictions on free inquiry become dangerous.¹⁵⁸

The seed industry’s dominant single firm is clearly the commanding market presence and power in the seed industry. Seed pricing forces buyers to endure and pay prices reflecting monopoly market power in the seller’s hands.

155. Richard K. Perrin & Lilyen E. Fulginiti, *Pricing and Welfare Impacts of New Crop Traits: The Role of IPRs and Coase’s Conjecture Revisited*, 11 AG BIOFORUM 134, 142 (2008) (finding that the Tripp findings were not consistent with market conditions and ongoing consolidation of the marketplace).

156. *Id.*

157. Scientific American Editors, *Do Seed Companies Control GM Crop Research?*, SCIENTIFIC AMERICAN, Aug. 13, 2009, available at <http://www.scientificamerican.com/article.cfm?id=do-seed-companies-control-gm-crop-research>.

158. *Id.*

IX. INCREASINGLY PROBLEMATIC BUSINESS PRACTICES

Two increasingly prevalent business practices that merit detailed and objective economic analyses as potentially unfair and anticompetitive are: (a) partial vertical integration of food processors backward into livestock and crop production; and (b) long-term fixed-price contracts between food retailers and food processors.

The domestic poultry industry vertically integrated in the 1950's. In more recent years, beef, pork and other agricultural commodities have been integrating backward into raw material production, but only partially. It is doubtful that these industries will fully integrate like the poultry industry.

Limited evidence suggests that the food processors are integrating backward to cover predictable high probability demand. In other words, if a processor has a prime contract with a retailer for 60% of its production, then it integrates backward for 60% of its production. The processor obtains the other 40% of its production, which may be marketed with less certainty than with prime buyers from the cash market. The concern is that when demand shifts, such as the recent decline in demand for meat and poultry, the processor may cut back purchases on the cash market but continue full production with integrated operations. This makes the cash market the shock absorber for the industry, which raises issues of fairness.

Partial vertical integration through marketing agreements—the dominant captive supply arrangement in the beef industry—raises issues of market access. Marketing agreements generally insure the feeder a market, an assurance not given to feeders selling on the cash market. Thus, marketing agreements raise fairness issues over both market access and competition issues about how they distort buyer incentives and are used to manipulate the cash market.

Long-term fixed-price contracts between food processors and retailers also raise competition concerns. Public data on the extent of these contracts are not available, but indications are that they account for 50 to 80% of the meat and poultry products sold on the domestic retail market. The problem is that when demand shifts in the short term these contracts will limit market adjustments. In a truly competitive market, a shift in demand will result in both price and quantity adjustments at all market levels, i.e., retail, wholesale and farm. With a fixed price contract, however, retail purchasers adjust the quantity bought but not the price paid. This transfers the entire downward adjustment back to the farm level, leading to price and quantity variations larger than experienced in a competitive market.

Ultimately, concern must focus on the basic theory and purposes of anti-trust laws. The GAO Report does not reach this issue either. Reference to *The Antitrust Legacy of Thurman Arnold*, by Spencer Weber Waller, is enlighten-

ing.¹⁵⁹ Arnold was a highly regarded Columbia University economist and author of the celebrated work, *The Folklore of Capitalism*.¹⁶⁰ Arnold believed in a number of non-economic justifications for antitrust. He included these justifications as part of the attack on concentrated economic power in an inefficient democracy that both destroyed local business and drained away local capital. Arnold wrote:

The most significant evil at which the antitrust laws are aimed is the evil of absentee ownership and industrial concentration that makes for such depressions. We were slow to learn after 1929 that great corporate organizations cannot continue to take money out of local communities without somebody putting it back.¹⁶¹

In a letter Arnold wrote to Alfred Friendly, he continued:

The purpose of the antitrust laws is to [e]nsure freedom of business opportunity. They are not designed to protect small business from larger and efficient competitors. They are not designed to prevent the growth of nationwide business enterprises so long as that growth is a product of industrial efficiency. Even if, through greater efficiency in operation and distribution, a corporation achieved a monopoly, that in itself would not violate the Sherman Act. But this has never yet happened. Monopolies have been built up by using financial strength to buy out competitors or force them out of business. It is this sort of growth and only this sort that the antitrust laws are designed to penalize. . . .

. . . This process repeated in industry after industry during the period between the first World War and the depression created a system of absentee ownership of local industries which made industrial colonies out of the West and South, prevented the accumulation of local capital and siphoned the consumers' dollars to a few industrial centers like New York and Chicago.¹⁶²

The need to rediscover the purposes for antitrust laws and their enforcement has never been more acute than now. Agriculture's markets are besieged by lack of competition and monopsony power. Transparent, vibrant markets with no dominant buyer or seller wielding inappropriate, manipulative power are essential. Without balance being restored, market gyrations will continue, concentration will end with an unacceptable accumulation of more and more wealth in fewer and fewer hands, and both producers and consumers will continue to suffer.

159. See Spencer Weber Waller, *The Antitrust Legacy of Thurman Arnold*, 78 ST. JOHN'S L. REV. 569 (2004).

160. See THURMAN ARNOLD, *THE FOLKLORE OF CAPITALISM* (Beard Books 2000) (1937).

161. Thurman Arnold, *The Economic Purpose of Antitrust Laws*, 26 MISS. L. J. 207, 208 (1955).

162. Letter from Thurman W. Arnold to Alfred Friendly (Aug. 9, 1961), in *VOLTAIRE AND THE COWBOY: THE CORRESPONDENCE OF THURMAN ARNOLD*, 439, 439-40 (Gene M. Gressley ed., 1977).

X. CONCLUSION

Weighed fairly and appropriately the evidence proves excessive market concentration exists in all major agricultural and food markets. The concentration creates market power in the hands of the concentrated few. Market power is prone to be abused. The packers and processors are engaged in the misuse, or abuse, of market power. Both producers and consumers of food are harmed as a result.

Care must be taken to avoid the seductive reassurance that the food processors who dominate, and abuse agricultural markets now pose no risk to the public because they are “too big to fail.” America’s recent experience with big bank failures should be lesson enough that the nation cannot afford a similar mistake with its food supply. We might be able to survive without bankers, but we cannot survive without food.

It is worth noting that, in 2005 persons no less distinguished than the President and Vice President of the Federal Reserve Bank in Minneapolis wrote a book length warning directed to policy makers about the risks of public expectations for a federal bailout following large bank failures.¹⁶³ Their book, Stern & Feldman, *Too Big To Fail: The Hazards of Bank Bailouts*, enjoyed a favorable forward by Paul Volcker, an economist currently providing direct advice to President Obama.¹⁶⁴ However, its warning was not taken seriously enough to turn the tide against the thought that the banking system was safe because its big entrants were “too big to fail.” A similar mistake with food could have dire consequences to health and domestic stability; history proves such consequences are predictable among populations suddenly faced with food shortages.¹⁶⁵

Immediately, abuse of market power threatens our family farms and ranches, and forces concentration of lands and agriculture production in fewer hands. Major firms in each of our top food sectors are so large that a failure by any one of them would have major ripple effect across the entire sector, and all of agriculture. These risks make agricultural market structure, in concentrated hands, a risk to everyone.

In the long run, the concentration and integration risk will continue to drive food prices up, bring an end to the nation’s affordable food policy and contribute to a rapidly deteriorating agricultural and rural economy. The GAO Re-

163. GREG H. STERN & RON FELDMAN, *TOO BIG TO FAIL: THE HAZARDS OF BANK BAILOUTS* vii-ix (2004).

164. *Id.*

165. Professor Sir John Beddington, Chief Scientific Adviser to HM Government, Speech at SDUK 09, available at <http://www.govnet.co.uk/news/govnet/professor-sir-john-beddingtons-speech-at-sduk-09>.

port's conclusion that market concentration does not adversely impact prices is unfounded. To the contrary, market concentration in too few corporate hands poses price, biosecurity, and lack of redundancy risks to all American consumers. Corrective action is an urgent national need.