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Public Policy Implications of Recent  
Changes in the Livestock Industry

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PUBLIC POLICY IMPLICATIONS OF RECENT  
CHANGES IN THE LIVESTOCK INDUSTRY

Willard F. Mueller

Since World War II, numerous American manufacturing industries have experienced increased competition, both domestically and internationally. Among the most prominent exceptions are the grocery products manufacturing industries, where average concentration has grown in every post-war decade. This increasing market power resulted in increasing profitability. By the mid-1980s, the profit rates of grocery manufacturers exceeded those of all manufacturing industries except drugs.<sup>1/</sup>

Until the early 1970s, however, the livestock industries marched to a different tune. Indeed, from the 1920s until the 1970s beef packing underwent declining concentration. As recently as 1977 the U.S. Census reported that the top four beef packers controlled only 25% of beef packing nationally. This made it one of the least concentrated sizable American industries. For decades, many economists (including this one) pointed to beef packing as an example of a highly competitive industry. Its continuing competitive structure was attributed partly to successful antitrust enforcement (the meat packers decree of 1920 and the enactment of the Packers & Stockyards Act in 1921) and the U.S.D.A. fresh meat grading system that prevented successful product differentiation--the main source of market power in most consumer product industries.<sup>2/</sup>

Between 1977 and 1987, the top four beef packers' share of fed steer and heifer slaughter, measured nationally, more than doubled, from 32% to 68%.<sup>3/</sup> But while beef packers may sell in a national market, they procure cattle in as many as 13 separate geographic markets.<sup>4/</sup> Buyer concentration in these markets was already quite high in the 1970s. On average, the top four packers

in each regional market bought about 48% of steer and heifers in 1971; 56% in 1978; and over 80% by 1986. In some markets the top packers' share was well above 90%.<sup>5/</sup> Indeed, the industry is well on the way to becoming a triopoly.

What does this increasing concentration mean for farmers and consumers? Insofar as it increased packer margins, I expect it affects farmers more than consumers: Buyer concentration among beef packers is higher than seller concentration, and packers buy from fragmented sellers (farmers) but sell to quite powerful buyers (large supermarket chains and buying groups). Economics teaches that in this situation farmers are most likely to feel the brunt of the new-found market power of beef packers. Based on economic theory and empirical evidence,<sup>6/</sup> I expect beef packers in highly concentrated markets hold substantial market power in buying livestock from cattlemen. This expectation is borne out by a large number of studies specifically examining the relationship between buyer concentration and livestock prices paid and several studies that examined buyer market power in live cattle markets.<sup>7/</sup> I'll not burden you with the details of these dreary, though statistically significant economic studies. Although a few are inconclusive and all splendidly qualified, an objective reading of the evidence reveals it to be totally consistent with the expectations of economic theory and empirical studies in other industries. Simply put, after controlling for other factors that influence prices, cattlemen are paid lower prices in highly concentrated markets than in less concentrated ones.

Not surprisingly, given the difficulties facing academicians conducting research without the power of subpoena, the studies differ over just how much high concentration decreases prices to farmers. Importantly, all of the studies may well understate the full impact of the high levels of

concentration reached by the 1980s. First, the studies either involve cross sectional analyses of regional markets or examine developments in a national market over time (the studies covered periods in the 1970s and early 1980s). Both approaches may well understate significantly the magnitude of the effects of power in some very highly concentrated regional markets. Second, the industry has not yet adjusted fully to its market power. It is not unusual for several years to pass before an industry adjusts fully in exploiting new-found market power.

Several factors have caused the recent sharp increase in concentration. Certainly, economies of large scale-processing have played a part. Obviously it is impossible to have numerous efficient-size beef packers today. But it seems unlikely that imperatives of efficient processing dictate the large share held by the leading packer in each of the large regional markets in which packers buy their livestock. Hence, we need to look elsewhere for the cause of high concentration.

While there doubtless are a variety of other causes, today I'll address only those that have implications for antitrust policy. Among the most important such cause is recent merger activity among beef packers. Among other potentially anticompetitive practices are price fixing, vertical market foreclosure and predatory pricing practices. I now turn to how the antitrust laws apply to such practices.

Application of the Antitrust Laws  
to the Beef Industry

The antitrust laws are an essential part of a capitalistic system: they spell out the legal rules governing competitive conduct. Without such rules, individuals and businesses could engage in practices that distort the competitive process and create monopoly power not dictated by economic efficiency. This results in reducing economic efficiency and distorting income distribution.

The antitrust laws do not involve direct regulation of business conduct: They do not tell businessmen what they must do, but, like the Decalogue, tell what they shall not do. The great virtue of this approach is that by maintaining effectively competitive markets, it is unnecessary to engage in direct public regulation and planning of business decisions.

But the antitrust laws must be enforced to be effective. The 1980s marked the nadir of federal enforcement in our lifetime. The current antitrust authorities appear to have reversed the anything goes philosophy of the last decade, though how much so is not yet clear. I now turn briefly to three areas in which the antitrust laws may have relevance for the beef packing industry<sup>8/</sup>

Restraints of Trade: Sherman 1

Section 1 of the act prohibits "every contract, combination in the form of a trust or otherwise, or conspiracy in restraint of trade." This general language has been most commonly applied to price fixing conspiracies, although it also has successfully challenged a variety of other practices restraining trade.

The increasing concentration in the food industries has created greater opportunities for successful conspiratorial behavior. Since 1950, the federal antitrust authorities have issued over 200 complaints challenging such behavior in the food industries.<sup>9/</sup> Many state and private parties also have challenged such behavior. For example, in 1982 several large beef packers charged Eli Lilly and Company with fixing prices in the purchased pancreas glands used in the manufacture of insulin.<sup>10/</sup>

#### Potential Restraints of Trade in Meat Packing

Let's now consider possible applications of Sherman 1 in beef packing. An industry that has become highly concentrated has greater opportunities for successful collusion than when it was less concentrated. Some economists believe that when concentration becomes very high, collusion is no longer necessary and, indeed, probably does not exist. While true to a degree, industrial experience teaches that independent price leadership and similar arrangements among oligoplasts do not work as well as explicit collusion in avoiding competition. Competitive rivalry, the joy of beating one's competitors, is a powerful force not easily squelched. Hence, the recurrent reliance on schemes to suppress competition by cartels even in industries with few rivals. It is not necessary to have explicit agreements among rivals to control price. For example, those buying from farmers may agree to restrain trade by dividing territories, thereby making it unnecessary to compete with as many rivals.

The concept of an "agreement" under Sherman 1 also can be satisfied with circumstantial evidence of agreements.<sup>11/</sup> It is often difficult to distinguish between lawful and unlawful agreements with only circumstantial

evidence. It can best be accomplished by using a two-stage process. First, an economic analysis is made that identifies whether the industry is predisposed to successful collusion, e.g., few sellers, high entry barriers, a homogeneous product, a relatively inelastic demand, many buyers, and static or declining demand. Second, the practices are analyzed to determine whether they are those which one would expect firms to engage in if they were independent competitors. For example, a competitive firm does not inform its rivals of its competitive strategies, like where it will buy, or what price it will be willing to pay. Nor would one expect all buyers to pay identical prices to all suppliers, even in an oligopoly.

Clearly, today beef packers operate in a market predisposed to successful collusion. As a result, certain business practices of packers may well be more vulnerable to challenge under Sherman 1 than when the industry was more competitively structured. These include price fixing arrangements, division of territories in procurement, and vertical foreclosure through contracts. When proven with either circumstantial or explicit evidence, horizontal price fixing is unsafe at any speed; it is unlawful per se. Division of procurement territories could be used among packers to avoid competition, as has been done in buying some other farm products. If proven, it also is unlawful per se.

Sherman 1 also may be applicable to anticompetitive vertical foreclosure through long-term procurement contracts. For example, a California district court found a long-term supply contract between Heublein, Inc. and Allied Grape Growers unlawful, in part, because it foreclosed about 25 percent of the market.<sup>12/</sup> Proving unlawful vertical foreclosure may require a full-blown rule of reason analysis. The direct effect of foreclosure may first be felt



at the packer level, but it would also affect livestock producers if it increased buyer concentration or raised entry barriers.

Attempts to Monopolize and Monopolization: Sherman 2

Section 2 of the Sherman Act proscribes monopolization, attempts to monopolize, and combinations and conspiracies to monopolize. In recent years, enforcement of this statute has involved increasingly complex economic analyses focusing on so-called predating pricing. Such pricing involves selling below cost in the short run with the expectation of increasing market power in the long run, either by destroying or disciplining competitors.

The legal-economic standards of what constitutes unlawful predatory pricing are in disarray. In 1975, Phillip Areeda and Donald Turner wrote a highly influential article advocating a purely economic rule for identifying predation.<sup>13/</sup> They argued that predation does not occur unless a firm sells below short-run marginal costs (measured by average variable cost) in a market that lends itself to successful monopolization.

Seldom has an untested economic theory had such an immediate and far reaching effect on antitrust policy. In record time, most appellate courts embraced the Areeda-Turner rule in varying degrees, resulting in dismissal of virtually all predatory pricing cases<sup>14/</sup>

Almost immediately, most prominent industrial organization economists took serious exception to the Areeda-Turner rule,<sup>15/</sup> so that by about 1985 many appellate courts held that violation of the rule was a sufficient but not necessary condition for predation. But the law is still in disarray. For example, in Rose Acre (1989)<sup>16/</sup> the Seventh Circuit rejected all cost-based rules and all evidence of intent, setting forth instead a so-called recoupment theory. On the other hand, in McGahee (1988)<sup>17/</sup> the Eleventh Circuit, which

until then had embraced the Areeda-Turner rule, discarded that rule for one based on pricing below average total cost (including normal profits) plus evidence of intent to monopolize an industry lending itself to successful predation.

These conflicting opinions indicate that a prospective plaintiff's success may depend on where a case is tried, at least until the Supreme Court resolves this conflict among the appellate courts.

#### Applications to Meat Packing

Although the state of Sherman 2 law leaves much to be desired, cases continue to be brought. The current structure of the beef packing industry lends itself to successful monopolization. Hence, a packer with a share exceeding 50 percent in a relevant procurement market is vulnerable to challenge should it practice predation. The most suspect practice would be where a dominant packer narrowed its margins below an appropriate cost standard as part of an attempt to destroy or discipline a rival packer. A plaintiff's complaint would be strengthened if there also were collaborative evidence such as mergers with competitors or market foreclosure by vertical integration or long-term supply contracts. The latter practices also may be challenged separately under Sherman 1 (see above) or Section 7 of the Clayton Act (see below). However, when occurring in the context of an overall predation scheme, such evidence would greatly enhance a Sherman 1 claim by demonstrating both intent to monopolize and the likelihood of success.

Finally, if the evidence demonstrated that such practices were taken in combination by two or more packers they might well qualify as an unlawful monopolization scheme under Sherman 2. Of course, the economic evidence would

have to be more persuasive, or perhaps heard by a more receptive court, than happened In re Beef Industry Antitrust Litigation (1990)<sup>18/</sup>.

In sum, the rumors that Sherman 2 is dead are greatly exaggerated, though the economic evidentiary burden has become increasingly heavy and complex.

#### Section 7 of the Clayton Act: Mergers and Acquisitions

Section 7 of the Clayton Act, as amended by the Celler-Kefauver Act of 1950, provides that no business engaged in commerce may acquire another company when the effect of the acquisition "may be substantially to lessen competition, or to tend to create a monopoly." This act, unlike section 2 of the Sherman Act, does not require evidence that a firm already has, or very nearly has, monopoly power. This makes amended section 7 a potentially powerful weapon against mergers that threaten competition. Its authors clearly intended it to greatly strengthen the law against anticompetitive mergers, not merely close the asset loophole that had rendered original Section 7 sterile.<sup>19/</sup>

This is not to say a section 7 case is a piece of cake. The lax antitrust philosophy of the 1980s became embedded in the Justice Department Merger Guidelines of 1984 and have been embraced by some courts. These guidelines are much more permissive than earlier Justice Department merger guidelines or pre-1984 court decisions. Indeed, most of the mergers found unlawful by the Supreme Court in the 1960s would not pass muster under the 1984 merger guidelines.

The Cargill decision<sup>20/</sup> greatly limited the power of private parties to challenge horizontal mergers. It did not, however, limit the legal

standing of livestock producers who are adversely affected by mergers among beef packers. Likewise, the American Stores<sup>21/</sup> decision gives State Attorneys General legal standing to challenge mergers when farmers and/or consumers are adversely affected by a merger.

Litigating a section 7 case involves (1) identifying the relevant markets within which to evaluate the competitive effects of the merger and (2) analyzing the probable impact of the merger on competition. These issues have brought economic analysis into full flower in section 7 enforcement.

Market definition is a necessary predicate of mergers analysis. The statutory terms, line of commerce and section of the country, have come to mean relevant product markets and geographic markets. Viewed from the point of procuring livestock, the relevant product market may consist of various combinations of livestock, e.g., all cattle bought by beef packers, or some "submarket," e.g. fed cattle, as was done in Cargill.

More difficult to identify in livestock procurement are relevant geographic markets. Various analytical techniques for identifying geographic markets have been developed and found appropriate by the courts. One commonly used method is the so-called Elzinga-Hogarty test, which uses objective criteria in measuring shipment patterns.<sup>22/</sup> This method has been used successfully quite often, including a recent merger case involving two Minnesota fluid milk processors.<sup>23/</sup> Other sorts of evidence include perceptions of buyers and sellers, costs of transportation, price behavior in different geographic areas, and other factors useful in determining geographic substitutability among buyers or sellers. In addition to the above standards, all of which have been used in litigated cases, the Department of Justice Merger Guidelines (1984) developed its own approach.<sup>24/</sup>

In general, the Department seeks to identify a geographic area such that a hypothetical firm that was the only present or future producer of a relevant product in that area could profitably raise price.

As a first approximation, the Department hypothesizes a 5 percent price increase, though in practice in the 1980s it often has used a 10 percent increase.<sup>25/</sup> This method of identifying a relevant geographic market often results in excessively large geographic markets, which explains, in part, why the antitrust agencies found so few mergers unlawful in the 1980s. When a market already is very concentrated, it is inappropriate to apply this five percent standard since the price may already be elevated above a competitive level. To require the ability to elevate prices further in such a market is to commit what Professor (now Judge) Posner has correctly characterized as the "cellophane error."<sup>26/</sup>

Having defined the relevant markets, the next step is to determine whether the merger unlawfully reduces competition. Especially important is the impact of the merger on market concentration and whether barriers to entry exist.

The Merger Guidelines provide a useful starting point. One innovation in the guidelines was the substitution of so-called Herfindahl indexes for market shares in measuring concentration. Prior to 1984, market concentration was typically expressed as the share of business controlled by the top four firms. Beginning in 1984, the Justice Department began using the Herfindahl-Hirschman Index (HHI), which is calculated by summing the squares of the individual market shares of all firms in the market. The HHI is preferred by some economists because it gives relatively more weight to large market shares than to small shares. For example, if there are 10 firms in a market, each

with a 10% share, the sum of their individual shares squared would be 1000. In general, an HHI of 1,000 is about equal to a four-firm share of about 50% to 55%, and an HHI of 1,800 is about equal to a four-firm share of 65% to 70%.

The Justice Department has declared a market with an HHI below 1,000 as a safe harbor for mergers. Where the HHI in a post-merger market is between 1,000 and 1,800 the Department is unlikely to challenge a merger that increases the HHI by 100 points. It is "more likely than not" to challenge such mergers if they increase the HHI by more than 100 points. When the post-merger HHI exceeds 1,800, the Department is likely to challenge a merger increasing the HHI by more than 50 points.

Perhaps most significant for evaluating some mergers in the packing industry in regional procurement markets is the Department's standards for "leading firm" mergers: The Department is likely to challenge the acquisition of any firm with a market share of at least 1 per cent where the acquiring firm has a market share "that is at least 35 percent and is approximately twice as large as that of the second largest firm in the market."

In addition to the above criteria, the Department also considers other kinds of evidence.<sup>27/</sup> However, when dealing with "leading firm" mergers, the only other consideration is the "ease of entry"; in other mergers, ease of entry is the major other consideration. The condition of entry is important because if entry is easy, it is impossible to achieve long-run market power. Section 3.3 of the Merger Guidelines states:

In assessing the ease of entry in a market, the Department will consider the likelihood and probable magnitude of entry in response to a "small but significant and nontransitory" increase in price.

This provision of the guidelines has provided an economically unsound escape hatch for many mergers in highly concentrated markets. It is unsound

for the same reasons noted in using this approach in defining relevant markets (see above). So long as the agencies continue to use the five percent (ten percent) approach in evaluating entry barriers in highly concentrated markets, they will not challenge some mergers that are anticompetitive.

During the 1980s, the Federal Trade Commission embraced the Chicago School definition of entry barriers. The top Chicagoan, Professor George Stigler, believes barriers exist only when "additional long-run costs must be incurred by an entrant relative to the long-run costs faced by incumbent firms."<sup>28/</sup> This definition rules out virtually all entry barriers but differences in capital costs, legal barriers, and the existence of a scarce resource. The Commission majority embraced this definition in Echlin Manufacturing Co. (1985).<sup>29/</sup> In her dissent, Commissioner Baily insisted that entry barriers in this market do not "depend simply on the existence or absence of Stigler's entry barriers."<sup>30/</sup>

Under the Bush administration, the antitrust agencies have announced their intention to enforce more aggressively the antitrust laws, including the merger law. In doing so, they have chosen not to rewrite the Merger Guidelines but to reinterpret them, including the way in which they identify entry barriers.

Kevin Arquit, Director of the FTC's Bureau of Competition, recently rejected the Chicago School entry barrier theory, opting instead for the kind of empirical analysis long favored by mainstream industrial organization economists.<sup>31/</sup> James Rill, Assistant Attorney General for antitrust, also apparently favors rejecting the narrow approach to barriers followed during the 1980s<sup>32/</sup> Ironically, although the present federal antitrust enforcers have taken a more aggressive enforcement posture than they did in the 1980s,

they are constrained because they have been unwilling to repudiate the Department's Merger Guidelines of 1984. Private parties are not so constrained because they need not apply this standard, which clearly is inappropriate in certain market structures.

#### Mergers in Meat Packing

We now apply the above standards to the meat packing industry. Consider first mergers viewed within a national market in selling beef products, where the top four packers currently make about 70% of all sales. Mergers played little role in restructuring beef packing before the 1980s. But during 1980-87 over 20 beef packing plants were acquired, which Marion and Kim estimate increased packer concentration by nearly 20 percentage points.<sup>33/</sup> The largest acquirer was ConAgra, which acquired 11 plants; these acquisitions made it the nation's second largest packer by 1988. The third largest packer, Excel (Cargill), also achieved its current share largely by acquisitions.

When viewed in a national market, only ConAgra's acquisition of SIPCO-ValAgri fell within the Justice Department Merger Guidelines.<sup>34/</sup> Of course, all five of ConAgra's acquisitions could have been challenged on a cumulative effect theory.

The picture is entirely different when mergers are viewed in relevant procurement markets, where the "leading firm rule" may become applicable. For example, a firm with a share of 35% could be challenged for making virtually any merger. Only if the acquirer could raise successfully the failing firm defense might it be home free. But there is little possibility of raising this defense successfully when a leading firm is involved.

I have not used the Merger Guidelines in assessing a merger because I believe they constitute a definitive statement of the law. Rather, I use them



because they represent a quite conservative statement of the law's reach. Supreme Court decisions have declared unlawful many mergers that would have fallen far short of violating the Department's 1984 guidelines. For example, the Justice Department did not challenge Cargill's acquisition of Spencer Beef. Yet, when Montfort challenged the merger, the lower courts found it unlawful. The Supreme Court, although dismissing on other grounds, did not rule on whether the merger injured competition. However, the Tenth Circuit Court of Appeals agreed with the lower court on this issue. It said,

The market share statistics are impressive: the court found that in 1982 four firms accounted for 52% of the fed cattle slaughtered in the relevant geographic market....If the acquisition of Spencer is permitted, Excel would have a market share of 20.4% and the top two firms, IBP and Excel, would have 47.7%.<sup>35/</sup>

The appellate Court also let stand the lower court's finding that significant entry barriers existed, including high capital costs.

Excel argued that the lower court should have applied the Justice Department's Merger Guidelines. In rejecting this argument, the appellate Court said that "these guidelines are more useful for setting prosecutorial policy than delineating judicial standards."

In conclusion, I expect the merger enforcement environment of the 1990s to be considerably more hospitable for plaintiffs than in the 1980s. Recent antitrust decisions, especially Cargill and American Stores,<sup>36/</sup> teach important lessons for private parties and state attorneys general.

The main negative recent development was the Cargill decision declaring that only parties affected directly had standing to challenge mergers. On a positive note, in American Stores (1989) the Supreme Court stated that private parties and states can challenge mergers directly affecting them and may seek relief involving divestiture as well as treble damages. This permits states

to challenge mergers directly affecting their citizens and permits farmers to challenge mergers in industries which buy directly from farmers.

American Stores teaches that a merger challenged by a federal antitrust agency and settled with a consent decree may also be challenged by a state seeking greater relief than that provided by the decree.

These developments create opportunities for state and private actions to challenge anticompetitive mergers. The increasingly aggressive and creative initiatives of state attorneys general have contributed to creating these opportunities. The Merger Guidelines issued by state attorneys general in 1986 helped expose shortcomings in the Justice Department guidelines. By successfully challenging mergers (and other antitrust violations) neglected by the federal authorities, the states have helped stimulate more aggressive enforcement by the federal agencies.

Had a state challenged the Cargill acquisition of Spencer Beef, it may well have affected significantly the future structure of the beef industry. Perhaps it is not too late to act even now. One or more states might consider whether their farmers would be served by a case challenging one or more mergers by a leading packer, including the Cargill-Spencer merger, especially where it has increased greatly concentration in relevant procurement markets. The law clearly permits challenging mergers many years after their consummation.<sup>37/</sup>

## ENDNOTES

- 1/ Willard F. Mueller, "An Overview of the Competitive Organization and Performance of the Food Manufacturing Industries," Subcommittee on Monopoly and Commercial Law, Committee on the Judiciary, May 11, 1988.
- 2/ Willard F. Mueller and Richard T. Rogers, "The Role of Advertising in Changing Concentration of Manufacturing Industries," Review of Economics and Statistics (February 1980).
- 3/ John Connor, "Concentration Issues in the U.S. Beef Subsector" NE-165, Working Paper WP-16, Purdue University, September 1989.
- 4/ Bruce W. Marion, F. E. Geithman, "Monoposony Power in an Industry in Disequilibrium, 1971-1986," Food System Research Group, Department of Agricultural Economics, University of Wisconsin-Madison, p. 18.
- 5/ Bruce W. Marion, "Restructuring of Meat Packing Industries: Implications for Farmers and Consumers," Working Paper 92, Food Systems Research Group, Department of Agricultural Economics, University of Wisconsin-Madison, December 1988.
- 6/ Leonard Weiss, Concentration and Price, (1989).
- 7/ These studies are summarized in Bruce W. Marion, Frederick E. Geithman and Gwen Quail, "Monoposony Power in an Industry in Disequilibrium: Beef Packing, 1971-1986," Working Paper, Food Systems Research Group, Department of Agricultural Economics, University of Wisconsin-Madison (1990).
- 8/ Several other statutes are relevant. The Federal Trade Commission Act of 1914 covers all practices covered by the Sherman Act as well as other "unfair" methods of competition. It can only be enforced by the Federal Trade Commission. Section 2 of the Clayton Act of 1940, as amended by the Robinson-Patman Act of 1936 prohibits anticompetitive price discrimination. It may be enforced by the Federal antitrust agencies and private parties. Section 3 of the Clayton Act of 1914 prohibits tying and other anticompetitive vertical restraints. It may be enforced by the Justice Department and private parties.
- 9/ Willard F. Mueller and Thomas W. Paterson in Bruce Marion, The Organization of the U.S. Food system (1985), p. 379.
- 10/ Wilson Foods Corporation, et al. v. Eli-Lilly and Company. No. 81C1812 (N.P. Ill. 1982).
- 11/ Harkins Amusement Ent. v. General Cinema where the court said, "Viewed collectively, this circumstantial evidence tends to exclude the possibility of independent action," citing Monsanto v. Spray - Rite Corp., 104 S.Ct. 1464 (1984).

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- 13/ Phillip Areeda and Donald F. Turner, "Predatory Pricing and Related Practices Under Section 2 of the Sherman Act," Harvard Law Review 88 (February 1975).
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- 15/ Richard Posner, "Antitrust Law. An Economic Perspective" (1976), pp. 184-96; Paul L. Joskow and Alvin K. Klevorik, "A Framework for Analyzing Predatory Pricing Policy," 89 Yale Law Review 213 (1979); Douglas F. Greer, "A Critique of the Areeda and Turner Standard for Predatory Pricing," Antitrust Bulletin 233 (1979).
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- 18/ In re Beef Industry Antitrust Litigation, CA 5, No 2 Dkt. No. 248; Meat Price Investigators Assn. v. Iowa Beef Processors, Inc., CA 5, No. 89-1493 (1990).
- 19/ Willard F. Mueller, The Celler-Kefauver Act: The First 27 Years, Subcommittee on Monopolies and Commercial Law, Committee on the Judiciary, House of Representatives, November 7, 1979, p. 1.
- 20/ Cargill, Inc. v. Montfort of Colorado, Inc. 479 U.S. 104 (1986).
- 21/ State of California v. American Stores, --U.S.--(1990).
- 22/ Kenneth Elzinga and Thomas Hogarty, "The Problem of Geographic Market Delineation Antimerger Suits", 18 The Antitrust Bulletin, 45(1973).
- 23/ United States vs. Country Lake Foods and Superior-Dairy Fresh Milk Co., United States District Court of Minnesota, Third Division, Civil No. 3-90-101(1990), Findings of Fact, Conclusions of Law, Order for Judgment and Memorandum.
- 24/ U.S. Department of Justice, Merger Guidelines, (1984) op cit., Section 2.31.
- 25/ Stephen Calkins, "Developments in Merger Litigation: The Government Doesn't Always Win," 56 Antitrust Law Journal (1988), p. 868, note 7.
- 26/ Richard A. Posner, supra note 15, (1976), pp. 127-28. United States v. E.I. DuPont de Nemours & Co., 351 U.S. 377 (1956) (the cellophane monopoly case). The Supreme Court majority reasoned that since substitution was occurring at the margin, there was high cross elasticity of demand between cellophane and other packaging material.

As Posner pointed out, "[a] monopolist always tries to sell in the elastic portion of his demand curve." The minority opinion in Cellophane accepted the analysis of George W. Stocking and Willard F. Mueller, which concluded that DuPont did have a monopoly despite the substitution among wrapping materials that occurred at the margin. "The Cellophane Case and the New Competition," 45 American Economic Review, 29 (March 1955).

- 27/ Among the other considerations are the homogenous nature of the product; degrees of difference between the products and locations in the market and the next-best substitutes; similarities or differences in the products of the merging firms; conduct of firms in the market, e.g., prior history of collusion; market performance, e.g., stable relative shares of the leading firms, declining market shares, and profitability of the leading firms. Merger Guidelines (1984). Section III C.
- 28/ George Stigler, The Organization of Industry (1968), p. 67.
- 29/ 105 F.T.C. 410, 485 (1985).
- 30/ Id. p. 500.
- 31/ Kevin Arquit, Statement to the Cleveland Chapter of the Federal Bar Association, December 14, 1989.
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- 33/ Bruce Marion and Donghwan Kim, "Concentration Changes in Selected Food Manufacturing Industries," NC194 Occasional Paper 19, October 1990.
- 34/ Id. p. 30
- 35/ Montfort of Colorado v. Cargill, Inc. and Excel Corp., (10th Cir. 1986).
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- 37/ U.S. v. E.I. du Pont de Nemours & Co., 353 U.S. 586 (1957).