View metadata, citation and similar papers at core.ac.uk

brought to you by CORE

provided by University of Denver

Denver Law Review

Volume 61 | Issue 4 Article 5

February 2021

The Use of Erroneous Expert Testimony in Antitrust Cases and Its Establishment as Precedent: The Case of the Pevely Dairy Company

Walter J. Primeaux

John Warren Kindt

Follow this and additional works at: https://digitalcommons.du.edu/dlr

Recommended Citation

Walter J. Primeaux & John Warren Kindt, The Use of Erroneous Expert Testimony in Antitrust Cases and Its Establishment as Precedent: The Case of the Pevely Dairy Company, 61 Denv. L.J. 749 (1984).

This Article is brought to you for free and open access by the Denver Law Review at Digital Commons @ DU. It has been accepted for inclusion in Denver Law Review by an authorized editor of Digital Commons @ DU. For more information, please contact jennifer.cox@du.edu,dig-commons@du.edu.

The Use of Erroneous Expert Testimony in Antitrust Cases and Its Establishment as Precedent: The Case of the Pevely Dairy Company

Walter J. Primeaux*
John Warren Kindt**

I. Introduction

Section 1 of the Sherman Antitrust Act[1] prohibits any combination between market participants which results in restraining interstate commerce. Although either criminal prosecution[2] or a civil cause of action[3] may be initiated due to an express agreement to restrain trade, more often little or no direct evidence exists to prove a conspiracy. Instead, the finder of fact must usually draw inferences based substantially on circumstantial evidence, primarily witness testimony and written commentary on current economic theories of market structure and price behavior. Unfortunately, the nature of economics as a social science whose fundamental theories are frequently disputed only accentuates the indefinite character of this circumstantial evidence. Finally, the difficulty and complexity of this dilemma increases when courts fail to obtain and properly apply predominate economic theory in their antitrust economic analysis.

This article will discuss this dilemma as it relates to the Eighth Circuit Court of Appeals' decision in *Pevely Dairy Co. v. United States*.[4] First we will demonstrate that the court of appeals did not fully understand the economic theories of the 1940's and, in fact, misapplied them in *Pevely* by failing to examine the effect of tight oligopoly or duopoly market structure on price behavior. Second, through the use of empirical studies, we will discuss pricing behavior of market competitors in a tight oligopoly or duopoly given a standardized product, and given this scenario, the presumption of antitrust violation which should operate where uniform pricing is present. Finally we will point out subsequent cases which incorrectly followed or deftly sidestepped the erroneous economic theories articulated in *Pevely*, and how

---

* Professor of Business Administration, University of Illinois; B.S. 1951, University of Southwestern Louisiana; M.A. 1966, Ph.D. 1967, University of Houston (economics).

** Associate Professor, University of Illinois; A.B. 1972, William & Mary; J.D. 1976, M.B.A. 1977, University of Georgia; LL.M. 1978, SJD 1981, University of Virginia.

1. 15 U.S.C. § 1 (1982). "Every contract, combination . . . or conspiracy, in restraint of trade or commerce among the several States . . . is declared to be illegal. Every person who shall make any contract or engage in any combination or conspiracy hereby declared to be illegal shall be deemed guilty of a felony. . . ." *Id.*
2. *Id.*
3. 15 U.S.C. § 16 (1982).
4. 178 F.2d 363 (8th Cir. 1949), *rev'g sub nom.* United States v. St. Louis Dairy Co., 79 F. Supp. 12 (E.D. Mo. 1948), *cert. denied* 339 U.S. 942 (1950).

courts should be cautious in citing *Pevely* as precedent.[5]

II. *PEVELY DAIRY CO. V. UNITED STATES* AND ECONOMIC THEORY AS CIRCUMSTANTIAL EVIDENCE

A. *The Case*

In 1948 the Pevely Dairy Company and the St. Louis Dairy Company were convicted in U.S. District Court for the Eastern District of Missouri for violating section 1 of the Sherman Antitrust Act[6] by conspiring to fix the wholesale and retail prices of grade *A* regular milk in the St. Louis area.[7] Following the convictions, separate motions by the defendants for an acquittal notwithstanding the verdict, and alternatively, for a new trial and an arrest of judgment were all denied.[8] The defendants' separate appeals were addressed in one opinion by the United States Court of Appeals for the Eighth Circuit which held in *Pevely Dairy Co. v. United States*[9] that, although the indictment had sufficiently alleged that the defendants had conspired to restrain interstate commerce, the evidence was insufficient to sustain their conviction.[10] The court of appeals reversed the lower court's judgment and remanded for a new trial.[11] The U.S. Supreme Court denied the government's writ of certiorari.[12]

The court of appeals decision reversing the convictions was based substantially[13] upon expert witness testimony about economic theory, particularly price uniformity in a market with standardized products, and its relation to the Sherman Antitrust Act.[14] The record with respect to expert economic testimony in *Pevely* is incomplete. It appears, however, that the court of appeals did not limit itself to considering only the economic testimony by witnesses, but introduced, *sua sponte*, writings by economic theorists as additional evidence.[15]

---

5. These cases and the problems raised by their citation to *Pevely* are addressed in several articles. *See* Note, *Conscious Parallelism—Fact or Fancy?*, 3 STAN. L. REV. 679, 693-98 (1951) [hereinafter cited as Conscious Parallelism]. *See also* Turner, *The Definition Of Agreement Under The Sherman Act: Conscious Parallelism And Refusals To Deal*, 75 HARV. L. REV. 655 (1962) [hereinafter cited as Turner]; Note, *Antitrust Liability For An Exchange Of Price Information—What Happened To* Container Corporation?, 63 VA. L. REV. 639 (1977) [hereinafter cited as *Antitrust Liability*].

6. *See supra* note 1 and accompanying text.

7. United States v. St. Louis Dairy Co., 79 F. Supp. 12 (E.D. Mo. 1948), *rev'd sub nom.* Pevely Dairy Co. v. United States, 178 F.2d 383 (8th Cir. 1949), *cert. denied* 339 U.S. 942 (1950). Before the convictions, the court had denied the defendant's preliminary motion to dismiss the indictment. United States v. St. Louis Dairy Co., 77 F. Supp. 853 (E.D. Mo. 1948).

8. 79 F. Supp. at 12, 20.

9. 178 F.2d 363 (8th Cir. 1949).

10. *Id.* at 366, 371.

11. *Id.* at 371.

12. 339 U.S. 942 (1950).

13. *See* 178 F.2d at 368-69.

14. *Id.* For a general analysis of the need for an interdisciplinary approach to judicial decision-making, *see* Kindt, *An Analysis Of Legal Education And Business Education Within The Context Of A J.D./MBA Program*, 31 J. LEG. ED. 512, 518-19 (1982) [hereinafter cited as *Legal Education*].

15. *See* 178 F.2d at 378. *See also Legal Education*, *supra* note 14, at 518-19.

B. *Expert Testimony and Documentary Evidence Relied on in* Pevely

In *Pevely*, the court noted that the two defendant dairies sold and distributed approximately 63 percent of the fluid milk consumed within the St. Louis geographic area.[16] Specifically, the indictment alleged that the defendants had conspired to fix wholesale and retail milk prices during the previous ten years by an agreement under which only identical price changes would be made.[17] The expert testimony and determinative evidence cited by the court in *Pevely*, however, failed to draw any connection between the particular market structure in which the defendants operated and the alleged conspiracy.

The court cites economic testimony from three expert witnesses to the effect that in markets where there are standardized cost factors, such as St. Louis, price uniformity is expected.[18] First, an expert witness identified only as the Director of Dairy Marketing for the Illinois Agricultural Association testified that the homogeneity of the milk made it a standardized product for sellers.[19] Second, an unidentified Professor of Economics at St. Louis University testified that milk was an extremely standardized product in the St. Louis market, and that in fact, the product was essentially fungible between dealers.[20] Finally, another unidentified expert economist testified with reference to the St. Louis milk market that uniform prices and simultaneous price changes should be expected.[21]

Despite the indefinite references in the opinion to this expert testimony, and, consequently, the considerable difficulty in analyzing the decision, the court of appeals accepted the testimony of expert witnesses and other expert authority to the effect that: a) the milk as a product was highly standardized; b) the milk product of one dealer was the same as the product of another dealer; c) with slight exceptions, uniformity of price was to be expected; and d) practically simultaneous price changes were also to be expected.[22] These first two assertions constitute statements of facts; determinations which were true not only when the appellate case was decided in 1949, but also today. The second two statements were theoretical, however, and did not represent either the prevailing viewpoint of economists in 1949, or the current economic thought in this area. The Eighth Circuit Court of Appeals should have documented this expert economic testimony with authority, instead of assuming its accuracy. The absence of citation to supporting authority or relevant documentation imposes extreme difficulty upon commentators examining *Pevely* and the court's *ratio decidendi*.

The court does eventually give a citation to expert authority. A then current treatise[23] by E. Chamberlin, a Harvard Professor of Economics, is set

16. 178 F.2d at 364.
17. *Id.*
18. *Id.* at 368.
19. *Id.*
20. *Id.*
21. *Id.*
22. *See id.*
23. E. CHAMBERLIN, THE THEORY OF MONOPOLISTIC COMPETITION (1948) [hereinafter cited as Chamberlin 1948]. All of the editions of "The Theory of Monopolistic Competition"

forth to support the position that uniform prices do not have to imply price or other market collusion.[24] The court's reliance upon Mr. Chamberlin's antitrust economic analysis is, however, misleading. First, the court seizes upon an excerpt from Chamberlin, but then ignores its context. Second, the court's use of Chamberlin's quote constitutes an oversimplification of his analysis.

The Chamberlin quote utilized by the Court of Appeals stated specifically that in a duopoly, which was essentially the case in *Pevely*, there must be "complete independence of the two sellers."[25] The Eighth Circuit clearly misconstrues the context of Chamberlin's analysis. The analysis is predicated upon complete independence of market participants; that is, there could be no express or actual agreement. The court, however, does not focus on the distinction Chamberlin's analysis draws between policy independence and independence from actual agreements. To be sure, when a small number of participants sells a substantial percentage of a product in a market, their fortunes are not independent to the extent that each competitor must take into account what the other companies are doing. Indeed, this distinction is fundamental to the definitions of both a monopoly and duopoly. By economic definition, an agreement between two or more companies in a duopolistic situation changes that situation into a monopolistic one.[26]

Thus, although Chamberlin's work, which the court relies upon explicitly, emphasizes at least twice[27] that independence of market participants does not mean policy independence, but rather an absence of express or tacit agreement,[28] the court fails to consider this adequately. This failure be-

---

between 1938 and 1950 read basically the same in the chapter dealing with "duopoly and oligopoly." The quotes utilized by the Court of Appeals in *Pevely* are identical in all of the respective editions—even as recently as 1965.

24. 178 F.2d at 368.

25. *Id.*; *see* E. CHAMBERLIN, THE THEORY OF MONOPOLISTIC COMPETITION 31 (1965) [hereinafter cited as Chamberlin 1965]:

> One of the conditions of the problem must be the complete independence of the two sellers, for obviously, if they combine, there is monopoly. This independence must, however, be interpreted with care, for, in the nature of the case, when there are only two or a few sellers, their fortunes are not independent. There can be no actual, or tacit, agreement—that is all. Each is forced by the situation itself to take into account the policy of his rival in determining his own, and this cannot be construed as "tacit agreement" between the two.

26. 178 F.2d at 368 (citing Chamberlin 1948, *supra* note 23, at 31.)

27. *See* Chamberlin 1948, *supra* note 23, at 31; Chamberlin 1965, *supra* note 25, at 31, 46-47.

28. In his book, Chamberlin distinguishes policy independence from independence involving actual collusion or agreements. In many oligopolistic situations, companies will be aware of the policies of competing companies without the presence of any actual or tacit agreement. Chamberlin states that:

> [T]he assumption of independence cannot be construed as requiring the sellers to compete as though their fortunes were independent, for this is to belie the very problem of duopoly itself. It can refer only to independence of action—the absence of agreement or of "tacit" agreement. For one competitor to take into account the alterations of policy which he forces upon the other is simply for him to consider the indirect consequences of his own acts.

Chamberlin 1948, *supra* note 23, at 46-47. *See also* Turner, *supra* note 5, at 672-73:

> Even in markets with few sellers, a fairly sudden change in pricing patterns is ground for suspicion. Agreement is indicated if prices have suddenly become much more stable, over the same range of conditions, than in past years or months. . . . And in general, any facts which would indicate uncertainty as to how competitors would determine their price quotations make the appearance of identical prices strong evidence

comes extremely important in connection with the fact that in *Pevely* the evidence shows there was tacit—and probably express—agreement between representatives of the Pevely Dairy Company and the St. Louis Dairy Company.[29] The sales manager for St. Louis Dairy, Mr. Gee, and the sales promotion agent for Pevely Dairy, Mr. Wasser, met regularly over a ten year period and considered several proposed price changes.[30] In fact, the Eighth Circuit notes that the management of both defendant dairies "thoroughly and analytically"[31] considered proposed price changes. This pattern of cooperation and agreement constitutes more than competitors accounting for each others' actions, and is clearly inconsistent with the idea of complete independence of express or tacit agreement set forth in Chamberlin's antitrust economic analysis.

Chamberlin's economic analysis of duopoly and oligopoly behavior was also oversimplified by the court. Chamberlin asserted that both duopoly and oligopoly represented an amalgam of problems and not just a single issue;[32] moreover, that based upon material assumptions and varying conditions, different solutions were required.[33] Because not one of the duopolistic examples he presented in his work fit precisely into the factual situation in *Pevely*,[34] the Eighth Circuit should have turned its attention to the inherent uncertainties in duopoly economic theory set forth by Chamberlin.[35] Had the court focused upon these uncertainties in *Pevely*, such as the individual behavior of the market participants, Chamberlin's analysis would be more applicable, and would demonstrate that a duopoly—and perhaps a *de facto* monopoly—was operating in *Pevely*.

The only other expert evidence cited[36] by the court is an article entitled "Collusion,"[37] which appeared in the December 1948 issue of *Farm Economics*, published by the Department of Agricultural Economics of the New York State College of Agriculture. The Court cited to "Collusion" to show

---

of intercommunication, if not actual agreement, and thus of plainly unlawful conspiracy. The immunization of pure oligopoly pricing from the Sherman Act which I have argued for here does not extend to agreements or understandings designed to convert an imperfect oligopoly pricing pattern into a perfect one by eliminating uncertainties.

29. *See* 178 F.2d at 367. The Court notes that there is:

> [U]ndisputed evidence that the matter of price changes was thoroughly and analytically considered by the management of appellants, consisting of certain of their officers, at regular meetings, at which the economic factors bearing upon costs were ascertained, scrutinized and discussed, and that the [price] changes made occurred only after a complete evaluation of the economic conditions and factors going into the cost of production.

Id. See also 79 F. Supp. at 13-14.

30. 178 F.2d at 367.

31. *Id.*

32. *See* Chamberlin 1965, *supra* note 25, at 53.

33. *Id.*

34. *Id.* at 30-55.

35. Chamberlin states that:

> Uncertainty, where present, as to (*a*) whether other competitors will hold their amount or their prices constant, (*b*) whether they are far-sighted, (*c*) the extent of the possible incursions upon their markets, (*d*) in the case of a time lag, its length, renders the outcome indeterminate . . . .

Id. at 54.

36. 178 F.2d at 368-69.

37. *Collusion*, FARM ECONOMICS, Dec. 1948 at 42-43 [hereinafter cited as *Collusion*].

that uniform price changes in milk were to be expected. The article indicates that wheat and cotton markets experience simultaneous changes in all cities as prices fluctuate as competition forces all market participants to buy at the same price.[38] This behavior reflects what economists expect in a perfectly competitive market. As this article will demonstrate, however, the two defendants in *Pevely* operated in a tight oligopoly. Even in the 1940's, economists recognized that there was a distinct difference between farm produce markets and exchanges where uniform prices were set by market forces,[39] and oligopoly markets where the participants established prices and dictated price changes. Economists would not expect identical behavior in both situations. There is also considerable doubt whether the "Collusion" article is authoritative. The article is a two page editorial whose *only* footnote admits to the editorial's fictitious assumptions.[40]

The court also relies heavily on the U.S. Supreme Court decision in *Cement Manufacturer's Protective Association v. United States*[41] as authority that price uniformity was to be expected between the defendant dairies in *Pevely*.[42] Perhaps the Eighth Circuit felt constrained by *Cement*; however, without challenging the Supreme Court's reasoning, the court of appeals could have distinguished *Cement* by focusing on the factual differences present in *Pevely*.

First, the response time between a price change by one company and the subsequent similar price change by a competing company is greater in *Cement* than in *Pevely*.[43] In *Cement* the corresponding price changes allowed enough time for common knowledge of changed market conditions and prices to operate, while in *Pevely* the price changes were either immediate or

38. *Id.*; 178 F.2d at 368-69.

> There is nothing peculiar in the fact that a change in the price of wheat or cotton occurs simultaneously in all markets. If the price of No. 1 Northern Spring Wheat in Minneapolis rises 5 cents a bushel, it advances 5 cents in Baltimore, 5 cents in Buffalo, 5 cents in Chicago and 5 cents in all the small towns in Minnesota, North Dakota and Montana. These prices not only all advance by the same amount, but they advance on the same day. This is as it should be. There is no collusion. Under the free enterprise system, competition forces all handlers to pay the same price.

178 F.2d at 368-69.

39. *See e.g.*, P. SAMUELSON, ECONOMICS 432, 488-89 (10th ed. 1976).

40. *Collusion*, *supra* note 37, at 42-43 n.1. "The percentages are, of course, fictitious, but the principle is not." *Id.* In fact, the "Collusion" editorial is so full of inaccuracies and imprecise terminology that any court should have questioned its authoritativeness.

41. 268 U.S. 588 (1925); *see* 178 F.2d at 369; *see also* Antitrust Liability, *supra* note 5, at 661 n.89.

42. *See* 178 F.2d at 369. Justice Stone set forth the Court's reasoning in *Cement*:

> It appears to be undisputed that there were frequent changes in price, and uniformity has resulted not from maintaining the price at fixed levels, but from the prompt meeting of changes in prices by competing sellers.
>
> It is urged by the defendants that such uniformity of price as existed in the trade was due to competition. . . . A great volume of testimony was also given by distinguished economists in support of the thesis that, in the case of a standardized product sold wholesale to fully informed professional buyers, as were the dealers in cement, uniformity of price will inevitably result from active, free and unrestrained competition, and the government, in its brief, concedes that "undoubtedly the price of cement would approach uniformity in a normal market in the absence of all combinations between the manufacturers.

178 F.2d at 369 (quoting *Cement*, 268 U.S. at 605-06).

43. 268 U.S. at 605. In *Cement* the price changes were prompt.

simultaneous.[44] Unreasonably short response times between competitors is one factor suggesting an anticompetitive conspiracy exists. Second, the Supreme Court concluded in *Cement* that no agreement existed between the manufacturers and no information regarding sales contracts had been exchanged.[45] In *Pevely*, however, the Eighth Circuit acknowledged that representatives of the defendant dairies had repeatedly discussed price policy and proposed changes.[46] Third, in *Cement*, a standardized product was wholesaled to dealers,[47] whereas in *Pevely*, the milk product was sold directly to consumers.[48] In combination, these factual differences constitute enough to distinguish the market situation and factual circumstances in *Cement* from those in *Pevely*. Therefore, the court's citation to *Cement* as supporting authority for economic theory is less than helpful.

III. THE CATEGORIZATION OF ST. LOUIS DAIRY MARKET AS A TIGHT OLIGOPOLY

Following the reasoning of the U.S. Supreme Court in *Cement*, the court of appeals in *Pevely* held that given a standardized product such as milk, uniform prices and price changes do not by themselves constitute a violation of the Sherman Antitrust Act.[49] Without more, this statement is supported by current economic thought.[50] It must be kept in mind, however, that in *Cement* the defendants successfully argued that the uniformity in price reflected competition in the market, free from collusion or agreement.[51] The *Pevely* case involved tacit, if not actual, agreement[52] which was made more probable by the tight oligopolistic or duopolistic situation in which the Pevely Dairy and the St. Louis Dairy operated.[53]

44. 79 F. Supp. at 13. In *Pevely* the price changes occurred on the "next day" or the "same day." *Id.*

45. 268 U.S. at 593.

46. *See* 178 F.2d at 367.

47. *See* 268 U.S. at 605; *see also* 178 F.2d at 369. In *Cement* "a standardized product [was] sold wholesale to *fully informed professional buyers*." 268 U.S. at 605. (emphasis added).

48. *See* 178 F.2d at 364.

49. *Id.* at 369.

50. Turner, *supra* note 5, at 659. Specifically:

> A large number of producers of a *standardized commodity* selling under stable market conditions might be expected to charge the same price, a price set not by agreement but by market conditions. None could charge more and make any sales, and there would be no point in charging less because, under competitive assumptions, each could sell at the established market price all that his costs made it profitable to sell. But identical prices become suspicious if, for example, price has remained stable despite a substantial decline in demand, if price has risen in the face of excess supply, or if a large number of hungry producers with excess capacity have submitted identical sealed bids in response to a large buyer's solicitation.

Id. (emphasis added).

51. *See* 268 U.S. at 605-06.

52. *See* 178 F.2d at 367; 79 F. Supp. at 13-14.

53. Turner, *supra* note 5, at 664 (quoting Kaysen, *Collusion Under The Sherman Act*, 65 Q.J. ECON. 263, 268 (1951)):

> There are indeed many cases of completely or almost completely standardized products; but sellers will always have some differences in cost structures, face somewhat different demand conditions, and be in ignorance of some relevant market facts. Moreover, conditions are not static, they change; and change breeds uncertainty. In short, in real life the "best" price for each seller in even the oligopolistic market will never be the same; and even if it were, individual calculations by each seller based on

B. *The Categorization of the Pevely Dairy and the St. Louis Dairy as a "Tight Oligopoly"*

By definition, an oligopoly exists in a particular industry when a significant portion of the entire product output is controlled by only a few or several firms.[54] Economists typically classify oligopolies as either loose or tight.[55] A tight oligopoly exists when the market concentration held by the four largest producing companies is 50 percent or greater.[56] By contrast, in a loose oligopoly the market concentration held by the four largest producing companies is between 15 and 40 percent.[57] A loose oligopoly tends to

---

> imperfect and usually different information would normally lead, in the absence of fully recognized interdependence, to different decisions as to price. For a pattern of noncompetitive pricing to emerge in such a situation requires something which we could, not unreasonably, call a "meeting of minds," or to use Professor Kaysen's phrase, an "agreement to agree."

In addition, Turner points out that:

> Even if some explicit communication at *some* time was not involved, though in reality it probably always has been, explicit communication seems hardly a logically necessary ingredient of the kind of agreement that is an element in the legal concept of conspiracy. Considered purely as a problem in linguistic definition, there is no reason to exclude oligopolistic behavior from the scope of the term agreement simply because the circumstances make it possible to communicate without speech. It is not novel conspiracy doctrine to say that agreement can be signified by action as well as by words. And of course if there is agreement in the legal sense, the agreement seems inescapably an unlawful conspiracy in restraint of trade because a price-fixing agreement is unlawful per se.

Turner, *supra* note 5, at 665 (quoting United States v. Socony-Vacuum Oil Co., 310 U.S. 150, 223-24 (1940)).

54. L. SULLIVAN, HANDBOOK OF THE LAW OF ANTITRUST § 116 (1977). But what number of firms or companies, controlling what percentage of a market, is sufficiently concentrated to constitute an oligopoly is not a matter susceptible for precise calculation. *Id. See generally* C. KAYSEN & D. TURNER, ANTITRUST POLICY ch. 2 (1959) (developing a system of oligopolistic classification: Type I oligopoly exists in markets in which the largest eight firms make greater than fifty-percent of the total output and the largest twenty firms make more than seventy-five-percent of the total output; Type II oligopoly exists in markets in which the largest eight firms make one-third the total output and the largest twenty firms make seventy five-percent of the total output) [hereinafter cited as Kaysen & Turner].

55. W. SHEPHERD, THE ECONOMICS OF INDUSTRIAL ORGANIZATION 62-64 (1979) [hereinafter cited as Shepherd].

56. *Id.* at 63. Specifically:

> [T]he high concentration enables the leading firms to coordinate well, much as if they were really just parts of one dominant firm. Such "shared-monopoly" behavior may not reach the scope and power of full monopoly or of a dominant firm, and it may break down occasionally. Yet it does involve such intense fewness and interdependence that a "joint maximizing" of profits can crystallize and last. The rewards of coordination are great, compared with the penalties of fighting; and the high concentration makes it possible. Tight oligopoly may include, at the upper border, a dominant firm. And it shades down into loose oligopoly. But the key feature still is: joint behavior by a few leaders, able to make their cooperation stick.

Id. at 63-64. A tight oligopoly is also referred to as a highly-concentrated oligopoly. *See* F. SCHERER, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 155 (2d ed., 1980) [hereinafter cited as Scherer]; E. SINGER, ANTITRUST ECONOMICS 109 (1968) [hereinafter cited as Singer]; Esposito & Esposito, *Excess Capacity And Market Structure*, 56 REV. ECON. & STATISTICS 188, 190, 190 n.12, 193 (1974) [hereinafter cited as Esposito].

57. Shepherd, *supra* note 55, at 64. *See* Scherer, *supra* note 56, at 60 (When a manufacturing industry has a four-firm concentration of 40 percent or more there is an implication of oligopoly); Kaysen & Turner, *supra* note 54, at 27-35 (1959) (In 1954, 59 percent of U.S. sales by manufacturers were by oligopolistic manufacturers); Esposito, *supra* note 56, at 190 n.12 (A four-firm concentration ratio of 70 or more indicates a tight oligopoly, while a ratio between 40 and 69 indicates a "partial" (loose) oligopoly, and a ratio below 40 indicates an atomistic industry). *See generally* R. POSNER, ANTITRUST LAW: AN ECONOMIC PERSPECTIVE 54-55 (1976).

lead to independent, effectively competitive behavior[58] where price coordination becomes sporadic and weak. Once stabilized, prices tend to remain at competitive levels and excess profits are small.[59]

The situation in *Pevely* clearly constituted a tight oligopoly or duopoly. The two defendant dairies distributed approximately 63 percent of the milk sold in the St. Louis area.[60] As commentators have noted, this type of market structure enables the largest companies to coordinate policies extensively and effectively—competition is virtually absent.[61] Although a tight oligopoly market structure would theoretically lead to parallel pricing, approaching price uniformity, it would not result in the identical pricing which occurred in *Pevely* absent collusion.

B. *Empirical Studies of Price Behavior in Oligopoly Markets with Standardized Products*

The evidence in *Pevely* provided by expert economic testimony and the court's interpretation of an article and a treatise permitted the Eighth Circuit to conclude that given a standardized product, simultaneous price changes were to be expected in an oligopoly market. At least two economic studies reported during the 1970's indicate that pricing behavior in situations similar to that in *Pevely* is inconsistent with the court's reasoning.

1. The 1974 Study of Homogeneous Electricity Markets in Oligopolistic Situations

In 1974, the pricing behavior of electric utilities was examined in markets where two utility firms existed in a single city,[62] and consumers could choose to be served by either Firm. This study provides a useful comparison with *Pevely*. The market structure constitutes tight oligopolies or duopolies and electricity, as a product, is standardized similar to the milk handled by the two defendant dairies in *Pevely*.

Table *A* demonstrates that out of a sample of 23 duopoly firms there were 84 price changes which were not followed within 3 years by a competitor's price change. This behavior is quite inconsistent with the reasoning in *Pevely*, in which the court concluded that simultaneous price changes were a natural result. In fact, the economic conclusions accepted by the court in *Pevely* supported the concept of a kinky demand curve for oligopolies, a theory discredited as early as 1947.[63] The study corrected for any time-lags due

58. *See* Shepherd, *supra* note 55, at 64.

59. *See id.*

60. 178 F.2d at 364; 79 F. Supp. at 14.

61. *See supra* note 55 and accompanying text. *See also* Scherer, *supra* note 56, at 155-60, 513-14; Singer, *supra* note 56, at 74-103. *See generally* K. CLARKSON & R. MILLER, INDUSTRIAL ORGANIZATION 137-51, 156-65 (1982).

62. Primeaux & Bomball, *A Reexamination of the Kinky Oligopoly Demand Curve*, 82 J. POL. ECON. 851 (1974) [hereinafter cited as Bomball].

63. *See generally id.* at 855-60 (results from study comparing pricing behavior of monopoly electric firms and duopoly electric firms failed to support the kinky demand curve theory); Simon, *A Further Test of the Kinky Oligopoly Demand Curve*, 59 AM. ECON. REV. 971 (1969); Stigler, *The Kinky Oligopoly Demand Curve and Rigid Prices*, 53 J. POL. ECON. 439 (1947), *reprinted in* G. STIGLER, THE ORGANIZATION OF INDUSTRY 208 (1968) [hereinafter cited as Stigler]. The

TABLE A

STATISTICAL DATA REPRESENTATIVE PRICE INCREASES AND DECREASES FOR A STANDARDIZED PRODUCT IN A DUOPOLY: THE ELECTRIC UTILITY INDUSTRY

1.	Price increases *not followed* (within 3 years)		42
2.	Price decreases *not followed* (within 3 years)		42
3.	Simultaneous price changes		48
	Increases	20	
	Opposite	10	
	Decreases	18	
4.	Delay in following price increases		18
	1 year	18	
5.	Delay in following price decreases		15
	1 year	10	
	2 years	5	
6.	Delay in changing in the opposite direction		11
	Municipal initiated a decrease 1-year delay in increasing	2	
	Private initiated a decrease 1-year delay in increasing	4	
	Private initiated a decrease 3-year delay in increasing	5	

Price data is from the 1959-1970 time period. 1963 was excluded because the rate categories were different for that one year, so comparisons could not be made.
Source: Bomball, *infra* note 62, at 858.

to regulation of prices in the electric industry.[64] The table also shows that during the same period there were 48 simultaneous price changes, but ten of these were in the opposite direction, indicating that when one firm raised prices, the other lowered prices. Additionally, although the 33 price changes indicated on lines 4 and 5 of Table *A* tend to support the court's position in *Pevely*, the 11 other changes on line 6 occur in the opposite direction and are in conflict with that position.

2. The 1976 Study of the Prescription Drug Industry in Oligopolistic Situations

In a 1976 article the pricing behavior of the prescription drug industry was studied.[65] In the study, a duopoly was selected where only two drugs

kinky demand curve theory was independently and almost simultaneously advanced in 1939 by Paul M. Sweezy of the United States and R. L. Hall and C. J. Hitch of the United Kingdom. Stigler, *infra*, at 208; Sweezy, *Demand Under Conditions of Oligopoly*, 47 J. POL. ECON. 568 (1939); Hall & Hitch, *Price Theory and Business Behavior*, OXFORD ECON. PAPERS, May 1939, at 12.

64. Bomball, *supra* note 62, at 853, 859.

65. Primeaux & Smith, *Pricing Patterns And The Kinky Demand Curve*, 19 J.L. & ECON. 189

were competing in a market. Additionally, extreme care was taken to classify the two drugs as substitutes for one another, thereby making the product standardized. Thus, the competitive conditions resembled the fluid milk market in *Pevely*. Table *B* presents price data for the prescription drug duopolies. The data is annual, so a delayed response of less than a year is considered to be simultaneous. The table shows that of the 28 price changes in the prescription drug industry, 15 supported the theory of simultaneous price change reached by the court in *Pevely*, however 13 did not. The price behavior suggested by results from the two studies discussed above strongly suggests that the simultaneous price behavior observed in the St. Louis milk market was not due to the particular market structure or the standardized nature of the product, but rather to collusion between the defendants.

TABLE B

STATISTICAL DATA REPRESENTING PRICE INCREASES AND DECREASES FOR STANDARDIZED PRODUCTS IN A DUOPOLY: THE PRESCRIPTION DRUG INDUSTRY

Pricing Behavior supporting the theory of uniform price change	
Simultaneous price changes - decreases	2
Lagged response to price decrease - delay 1 year, decreased prices	3
Simultaneous price changes - increases	4
Lagged response to price increases - delay 1 year, increased prices	6
Total Number of price changes	15
Pricing Behavior inconsistent with the theory of uniform price change	
Price increases not followed in one year	5
Price decreases not followed in one year	3
Simultaneous price changes in opposite direction	2
Lagged response to price increases - delay 1 year, decreased prices	1
Lagged response to price increases - delay 1 year, one increase, one decrease	1
Lagged response to price decrease - delay 1 year, increased prices	1
Total Number of price changes	13

Source: Smith, *infra* note 65, at 193-94.

(1976) [hereinafter cited as Smith]. This study of the pharmaceutical industry was undertaken because a 1958 essay implied, without data, that the kinky demand curve theory applied to this industry, and the 1958 essay was later read into the record of a Congressional Hearing on the industry. *See* McEvilla, *Pricing Determination Theory in the Pharmaceutical Industry*, 82 DRUG & COSMETIC INDUSTRY 34 (1958); *Administered Prices in the Drug Industry: Hearings on S. 238 Before the Subcomm. on Antitrust and Monopoly of the Senate Comm. on the Judiciary*, 86th Cong., 2d Sess. 10,959 (1960).

IV. THE EFFECT OF THE UTILIZATION OF *PEVELY* AS PRECEDENT

A. *Conspiracy Inferred from Uniform Actions: "Conscious Parallelism" and* Pevely

In 1939, the U.S. Supreme Court, in *Interstate Circuit, Inc. v. United States*,[66] set forth the doctrine of conscious parallelism, under which a Sherman Act conspiracy could be inferred from uniform action between competitors.[67] The Court held that if market competitors tacitly agree to participate in a course of conduct which restrains interstate commerce, it constitutes a prohibited conspiracy under the Sherman Act.[68] In 1954, the U.S. Supreme Court clarified its *Interstate Circuit* decision when it held, in *Theatre Enterprises, Inc. v. Paramount Film Distributing Corp.*,[69] that conscious parallelism constituted circumstantial evidence which could assist the finder of fact in inferring an agreement;[70] however, conscious parallelism, by itself, would not constitute evidence sufficient to find a conspiracy.[71] There have been several analyses of conscious parallelism since *Interstate Circuit* which cite Chamberlin as authority.[72]

Although neither party in *Pevely* invoked the doctrine of conscious parallelism, the reasoning of the Eighth Circuit has become erroneously entwined with the doctrine. For example, with respect to nonstandardized products, price uniformity creates a presumption that the Sherman Act has been violated, pursuant to the U.S. Supreme Court decision in *C-O-Two Equipment Co. v. United States*.[73] As precedent, however, *Pevely* supports the opposite presumption with respect to standardized products: that is, that there is no Sherman Act violation. This difference is reflected in the anti-

---

66. 306 U.S. 208 (1939).

67. For analyses of conscious parallelism and related issues, *see* P. AREEDA & D. TURNER, 3 ANTITRUST LAW 359-63 (1978); P. AREEDA, ANTITRUST ANALYSIS 217-23 (1967); R. POSNER & F. EASTERBROOK, ANTITRUST: CASES, ECONOMIC NOTES, AND OTHER MATERIALS 306-07, 330 n.1 [hereinafter cited as POSNER]; Scherer, *supra* note 56, at 513-25. *See generally* Monroe & Hill, *The Predatory Pricing Controversy: Academic Theories Enter The Courtroom*, 13 U. TOLEDO L. REV. 539 (1982) (discussion of proving element of predatory intent to monopolize or to destroy competition within some relevant market); Note, *Antitrust Law—Restraint Of Trade—Antitrust Implications of the Exchange of Price Information Among Competitors: The Container Corporation Case*, 68 MICH. L. REV. 720 (1970) (discusses historically how the court has treated the practice of exchanging statistical pricing data among competitors) [hereinafter cited as *Price Information*]. *Conspiracy Inferred from Uniform Action: Conscious Parallelism*, ANTITRUST ADVISOR § 1.10 (C. Hills ed. 1978) [hereinafter cited as ANTITRUST ADVISOR 1978].

68. *Interstate Circuit*, 306 U.S. at 227.

69. 346 U.S. 537 (1954) (citing cases).

70. *Id.* at 540.

71. *Id.* at 541; *see* Joseph E. Seagram & Sons, Inc. v. Hawaiian Oke & Liquors, Ltd., 416 F.2d 71, 84-85 (9th Cir. 1969) (citing cases); *see also* ANTITRUST ADVISOR 1978, *supra* note 67, § 1.10 at 9.

Theatre Enterprises has become noted for the fact that the Supreme Court held "not that conscious parallelism was an insufficient basis for finding of an unlawful contract, combination, or conspiracy, but only that the plaintiff was not entitled to a directed verdict—i.e., that conscious parallelism was not sufficient *as a matter* of law to support a finding of unlawful conspiracy." Posner, *supra* note 67, at 330 n.1 (emphasis in original).

72. *See, e.g.*, Price Information, *supra* note 67 at 727; Note, Conscious Parallelism, *supra* note 4A at 679-80; *but see* Note, *Antitrust Liability, supra* note 5 at 642-45.

73. 197 F.2d 489 (9th Cir.), *cert. denied*, 344 U.S. 892 (1952).

trust literature. For example, in the 1971 edition of the *Antitrust Advisor*,[74] *Pevely* is cited for the principle that with regard to a standardized product, uniform prices do not tend to prove a Sherman Act conspiracy.[75] Moreover, the 1978 edition of the *Antitrust Advisor* reinforces *Pevely* as precedent by including the case in a checklist for evaluating conscious parallelism.[76]

This distinction in antitrust literature is caused by the misinterpretation of economic theory with respect to a tight oligopoly or duopoly which was precipitated by the holding in *Pevely*. Although the Eighth Circuit in *Pevely* perhaps did not recognize, and certainly failed to discuss, the significance of the oligopoly market structure present, the prevailing economic theory, supported by substantial empirical evidence, suggests that *Pevely* was decided incorrectly and should not be used as precedent.

The presumption inherent in the distinction is that a uniform price tends to infer collusion regarding competitors who sell nonstandardized products, but not those who sell standardized products. This presumption is incorrect to the extent it fails to distinguish between tight and loose oligopolistic situations. In a tight oligopoly, such as *Pevely*, a uniform selling price for a standardized product should raise a presumption of collusion in violation of the Sherman Act. That is, if there is no evidence of an express agreement, and the plaintiff provides sufficient evidence of the following: (1) a tight oligopoly or duopoly; (2) a standardized product; and (3) uniform prices, it should be presumed that there is an implied agreement or an agreement to agree. The burden of proof should shift to the defendant to demonstrate that there was no agreement or collusion in violation of section 1 of the Sherman Act.

Although *Pevely* has received mild criticism,[77] legal commentators continue to cite it as authority, though usually only by way of qualified support or accompanied by a caveat.[78] Currently, *Pevely*'s use as precedent continues

74. ANTITRUST ADVISOR § 2.10 (C. Hills ed. 1971); *See* Note, Conscious Parallelism, *supra* note 5, at 697-98.

75. ANTITRUST ADVISOR § 2.10 (C. Hills ed. 1971).

76. ANTITRUST ADVISOR 1978, *supra* note 67, at § 1.10. Specifically, the ADVISOR states:

> The following criteria should be examined in determining whether uniformity of action is sufficient to permit an inference of conspiratorial action:
> 1. How pervasive is the uniformity?
> 2. Is the product involved standardized or differentiated? Compare, e.g., *C-O-Two Fire Equipment Co. v. U.S.* (9th Cir. 1952) 197 F.2d 489, cert. den. (1952) 344 U.S. 892. 73 S.Ct. 211, 97 L.E. 690 with *Pevely Dairy Co. v. U.S.* 8th Cir. 1949) 178 F.2d 366, cert. den. (1950) 339 U.S. 942, 70 S.Ct. 794, 94 L.E. 1358.
> 3. How nearly identical is the uniformity?
> 4. Is the market oligopolistic, containing few sellers? See e.g., *Wall Products Co. v. Nat'l Gypsum Co.* (Cal. 1971) 326 F. Supp. 295.
> 5. Does it extend to price alone or to all other terms and conditions of sale?
> 6. In the case of price uniformity, have the defendants raised as well as lowered prices in parallel fashion?
> 7. Can the conduct, no matter how uniform, be adequately explained by independent business justifications? See e.g., *North Carolina v. Chas Pfizer & Co. Inc.* (4th Cir. 1975) CCH 1975-2 Trade Cases ¶60.663.

Id.

77. *See* Note, *Conscious Parallelism*, *supra* note 5, at 693-98; *see also* Note, *Antitrust Liability*, *supra* note 5, at 651.

78. *See* Note, Conscious Parallelism, *supra* note 5, at 693-98.

Since the mere "fact" of uniformity, without more, cannot rationally give rise to any

to discourage a reexamination of price behavior in extreme oligopolistic situations, thereby indirectly thwarting thorough enforcement of the antitrust laws.

B. *The Major Cases Following* Pevely

The major federal cases utilizing *Pevely* as precedent refer to two principles: first, that uniform prices for a standardized product do not raise a presumption of a Sherman Act violation;[79] and, second, that where circumstantial evidence is employed to prove collusion, all circumstantial evidence must be consistent with the allegation.[80] As an aside, this requirement for circumstantial evidence appears reasonable when there is only circumstantial evidence and not direct evidence available and when the case involves a criminal prosecution rather than a civil cause of action.[81] Despite the lower standard of proof for civil as opposed to criminal cases, the presumption should be the same: that in a tight oligopolistic or duopolistic fact situation involving uniform prices and a standardized product, there is an implied agreement to conspire and that the defendant must affirmatively prove otherwise.

It should also be noted that the circumstantial evidence considered by the Eighth Circuit in *Pevely* excluded any consideration of that market structure. As this article points out, however, the presence of a tight oligopoly or duopoly significantly changes the economic assumptions regarding price behavior among competitors. Therefore, the use of *Pevely* by courts to support a particular interpretation of circumstantial evidence should be undertaken with this infirmity in mind. Additionally, although this presumption of conspiracy appears theoretical and therefore would be considered circumstantial evidence, there is a good argument for reclassifying it as direct evidence. First, the existence of a standardized product is usually readily provable. Second, that uniform pricing and simultaneous price changes exist are simi-

---

> one inference in preference to another, it will not be probative by itself. But an examination of the setting in which the uniformity occurred, such as the duration and extent of uniformity, the progressiveness of the industry, and other indicia of competition or the lack of it, may well give rise to an inference of conspiracy or conscious parallelism. If such factors are not presented to the trier of fact, then a verdict should be directed on grounds of insufficiency of the evidence. Even in the presence of added background, uniformity may give rise to conflicting inferences, upon which reasonable men could differ. In such a case, where enough probative evidence is before the court, the trier of fact should be free to draw the more reasonable inference. If proof of uniformity without more is to be rejected, it should be done only on the ground that the evidence is insufficient to sustain a finding of a certain behavior pattern.
>
> All courts do not seem to agree with this analysis. In *Pevely Dairy Co. v. United States* the Eighth Circuit Court of Appeals reversed the trial court and ruled that proof of uniform prices over a period of time did not constitute sufficient evidence to sustain a criminal conviction of conspiracy under Section I of the Sherman Act.

Id. at 694.

79. *See Pevely*, 178 F.2d at 369.

80. *See id.* at 367. Specifically:

> Where circumstantial evidence is relied upon to establish the conspiracy or any other essential facts, it is not only necessary that all the circumstances concur to show the existence of such conspiracy and facts sought to be proved, but such circumstantial evidence must be inconsistent with any other rational conclusion.

Id.

81. *See* Conscious Parallelism, *supra* note 5, at 696.

larly provable. Third, as demonstrated earlier, the existence of a tight oligopoly or duopoly can be defined numerically by the number of firms in a market and their total percent of market share.[82] Accordingly, the definiteness of proof inherent in this type of economic evidence lends itself to being categorized as direct rather than circumstantial evidence.

The 1981 case of *Weit v. Continental Illinois National Bank and Trust Company*[83] followed both of the standards in *Pevely* mentioned above; specifically, the erroneous doctrine that uniform prices involving a standardized product in a tight oligopoly or duopoly do not create a presumption of a Sherman Act violation, and the standard of proof required for economic circumstantial evidence. The *Weit* case reemphasizes the connection between *Pevely* and conscious parallelism. In *Weit*, it was argued that although parallel pricing itself was insufficient evidence to prove price collusion, such pricing combined with an opportunity to agree should be sufficient evidence to require a trial on the substantive issues.[84] This standard should have been applied by the court because the facts indicated the existence of a tight oligopoly or duopoly. In any event, the court rejected the standard based on the circumstantial evidence reasoning in *Pevely*, specifically that when a party pursues a claim or cause of action based solely on circumstantial evidence there must be a compelling suggestion of collusion.[85] *Weit* involved a standardized product similar to *Pevely* and, in fact, followed the erroneous standardized product reasoning of *Pevely* also.[86] Fourteen years after *Pevely*, the Eighth Circuit Court of Appeals had difficulty with another milk antitrust case, *Beatrice Foods Company v. United States*.[87] Although the economic scenario was substantially different from that in *Pevely*, the court had difficulty distinguishing *Pevely*'s standardized product reasoning in sustaining the antitrust conspiracy conviction.[88] In *Beatrice Foods*, the court sustained the conviction for conspiracy. Perhaps the court would not have encountered such difficulty with *Pevely* if it had recognized and applied the correct economic reasoning in 1949.

As precedent, *Pevely* constitutes a significant hurdle, but several courts have distinguished *Pevely* in a variety of ways. In the 1966 case of *Sanitary*

82. *See supra* notes 62-65 and accompanying text.

83. 641 F.2d 457 (7th Cir. 1981).

84. *See id.* at 463.

85. *See id.*

86. "Similarly, in civil anti-trust cases, courts have noted that parallel pricing or conduct lacks probative significance when the product in question is standardized or fungible." 641 F.2d at 463 (citations omitted). *See also* Bendix Corp. v. Balax, Inc., 471 F.2d 149, 160 (7th Cir. 1972), *cert. denied* 414 U.S. 819 (1973) (trial court's finding of improper price influencing overturned for lack of evidence); Independent Iron Works, Inc. v. United States Steel Corp., 322 F.2d 656 (9th Cir. 1963) (directed verdict for defendants on a concerted boycott claim affirmed).

87. 312 F.2d 29 (8th Cir. 1963), *cert. denied* 373 U.S. 904 (1963).

88. *See Beatrice Foods*, 312 F.2d at 43. In particular:

> We recognize, too, that fluid milk is a *highly standardized commodity* which provides little room, if any exists at all, for quality differences or for special or advantageous purchases of the raw product from suppliers and which, because of uniform labor contracts, encounters processing costs of rigid consistency. This court noted these very factors in Pevely Dairy Co. v. United States, . . . *These stubborn facts of the milk business, by their very existence, present difficulties in the prosecution of an antitrust case against commercial dairies*.

Id. at 42-43 (citations omitted, emphasis added).

Milk Producers v. Bergjans Farm Dairy, Inc. [89] the Eighth Circuit impliedly criticized *Pevely* by holding that an inference drawn by the jury and court from circumstantial evidence was sufficient to sustain finding that the defendant conspired to fix prices.[90] The court's rationale in *Sanitary Milk* is similar to that used by Chamberlin when referring to an oligopolistic scenario, and as such, provides a useful comparison to that of Chamberlin.[91] In 1965, the Eighth Circuit had already decided in *National Dairy Products v. United States* [92] that the circumstantial evidence rule articulated in *Pevely* was not determinative when there was direct evidence.[93] As suggested earlier, the numerical evidence, currently considered circumstantial evidence, establishing the existence of a tight oligopoly or duopoly should be recharacterized as direct evidence. The rigor of the circumstantial evidence principle established in *Pevely* was challenged as early as 1952 by *C-O-Two*,[94] which is now *Pevely*'s companion case.

Despite these express and implied criticisms of *Pevely* and its circumstantial evidence principle, even by the Eighth Circuit Court of Appeals which originally decided *Pevely*, the majority of cases have followed the erroneous economic theories and the concomitant principles established by *Pevely* as precedent.[95] *Pevely* needs to be reversed with regard to specific holdings.

V. CONCLUSION

While some courts have expressly and impliedly criticized *Pevely Dairy Co. v. United States*, the case continues to be cited as precedent. Specifically, *Pevely* set forth the principle that in the case of a standardized product, uniform pricing is a natural result of the competitive economic market and is not indicative of an antitrust violation. However, this holding was the result of erroneous expert testimony and misinterpretation and misapplication of economic theory. The economic theory adopted by the court in *Pevely* did not represent the predominate viewpoint of economists in 1949 and it does not represent the viewpoint today, particularly in light of several empirical studies of price behavior in a tight oligopoly or duopoly.

The Eighth Circuit Court of Appeals in *Pevely* did not consider the economic behavioral significance of a tight oligopoly or duopoly. In a tight oligopoly or duopoly, uniform pricing of a standardized product does not usually occur in the absence of an express or implied agreement between market participants to control prices. Therefore, uniform pricing in such a

---

89. 368 F.2d 679 (8th Cir. 1966).
90. *Id.* at 690.
91. *See supra* notes 23-35 and accompanying text.
92. 350 F.2d 321 (8th Cir. 1965).
93. *Id.* at 325.
94. We are not unmindful of the standard suggested in *Pevely* . . . . But that is not to say, as appellants would have us do, that such a rule must be separately applied to each link in the chain of circumstances and if one such unit does not fit the standard then the whole is likewise vulnerable.

197 F.2d at 494.

95. *See* Continental Baking Co. v. United States, 281 F.2d 137, 145 (6th Cir. 1960); United States v. Outer Harbor Dock & Wharf Co., 124 F. Supp. 337, 340 n.7 (S.D. Cal. 1954); Ronson Patents Corp. v. Sparklets Devices, 112 F. Supp. 676, 682 (E.D. Mo. 1953).

situation strongly suggests a conspiracy in violation of section 1 of the Sherman Antitrust Act. At the minimum, such a situation creates the presumption of a violation. This presumption should be applied in both criminal and civil cases.

Additionally, *Pevely* established a rigorous standard for the use of circumstantial evidence in antitrust cases. In light of the actual evidence offered in *Pevely*, however, that was characterized as circumstantial, this rigorous standard needs to be reexamined. Moreover, because the existence of a tight oligopoly or duopoly can be determined with numerical factual evidence, such evidence should more properly be recharacterized as direct evidence. Finally, we suggest that *Pevely*'s association with conscious parallelism be terminated or at least specifically qualified by the courts when the opportunity arises, in order to bring the judiciary's antitrust economic analysis more in line with current economic thought.