The Defense of Natural Monopoly in Sherman Act Monopolization Cases

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A natural monopoly exists in a market where the entire demand can be satisfied at lowest cost by one producer. Natural monopolies typically arise in the provision of services in small towns or in the distribution of utilities.

Cases which discuss the "natural monopoly" that a manufacturer has over his own products by virtue of trademark or patent, or simply because the product is unique, are not within the scope of this article. See, e.g., Parsons v. Ford Motor Co., 669 F.2d 308 (5th Cir. 1982); Spectrofuge Corp. v. Beckman Instruments, Inc., 575 F.2d 256 (5th Cir. 1978); Trixler Brokerage Co. v. Ralston Purina Co., 505 F.2d 1045 (9th Cir. 1974); Edward J. Sweeney & Sons, Inc. v. Texaco, Inc., 478 F. Supp. 243 (E.D. Penn. 1979).


See III P. AREEDA & D. TURNER, supra note 2, ¶ 621. For a discussion of the natural
Under natural monopoly conditions, competition cannot regulate the market because inevitably only one firm will survive, or if two firms survive, production will not be as efficient as possible.4

For the purposes of the antitrust law, the natural monopoly market poses special difficulties. Section two of the Sherman Act provides that:

Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony. . . .5

Since, by definition, a natural monopoly exists where economic factors dictate only one supplier for the market, a sole supplier should not face antitrust liability for achieving the position of a monopolist.6 Thus, an alleged monopolist may argue that a natural monopoly provides an absolute defense to a charge of monopolization under section two of the Sherman Act.7 This article will survey the case law in an effort to resolve the issue of whether natural monopoly conditions can or should provide an absolute defense for an alleged monopolist.

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4. See Posner, supra note 1, at 548. "If such a market contains more than one firm . . . production will continue to consume more resources than necessary." Id.; cf. 2 A. Kahn, The Economics of Regulation 318 (1971); R. Schmalensee, The Control of Natural Monopolies 4 (1979); Hamilton & Hamilton, Duopoly in the Distribution of Electricity: A Policy of Failure, 28 Antitrust Bull. 281, 284 (1983) (all three discussing large-scale duplication of electric distribution facilities as wasteful and inefficient).


6. See Lamb Enter., Inc. v. Toledo Blade Co., 461 F.2d 506 (6th Cir. 1972). As the Lamb court noted, "[i]f success in such a venture could become a per se violation of the anti-trust laws, the ultimate effect would be to stifle, rather than to encourage, competition and formation of new business enterprises." Id. at 514; see Greenville Publishing Co. v. Daily Reflector, Inc., 496 F.2d 391 (4th Cir. 1974). The Greenville court noted that "[t]he characteristics of a natural monopoly make it inappropriate to apply the usual rule that success in driving competitors from the market is evidence of illegal monopolization. . . . This variance allows businesses to compete fairly for a natural monopoly market, with assurance that the winner will not be penalized." Id. at 397 (citations omitted). Both the Lamb and Greenville decisions addressed the issue of monopolization of a natural monopoly market, which both courts agreed should not be a per se violation. Both courts indicated, however, that the methods used to achieve or maintain the position of monopolists could lead to an antitrust violation even in a natural market. Greenville, 496 F.2d at 397; Lamb, 461 F.2d at 519.

7. See City of Cleveland v. Cleveland Elec. Illuminating Co. (CEI), 538 F. Supp. 1306 (N.D. Ohio 1980). The City of Cleveland case is extensively reviewed in Austin, City of Cleveland Electric Illuminating Co.: Monopolization, Regulation and Natural Monopoly, 13 U. Tol. L. Rev. 609 (1982). The case involved a 60-year battle between a municipal power company and a privately held power company for control of the Cleveland service area. The defendant electric company invoked the defense of natural monopoly to justify the actions which it had taken to gain control of the market. Id. at 610. The defendant argued that "[t]he contestants [should be] free to fight it out, unencumbered by antitrust surveillance." Id. at 647. As Austin notes,
In this context, a second issue will be addressed. While only one supplier can exist in a natural monopoly market, the methods used to achieve the position of a monopolist may be subject to the antitrust laws. A competitor may engage in unfair and predatory behavior to drive out competition and then claim that it simply hastened the inevitable—one supplier for the market. Thus, whether the antitrust laws should be used to police behavior during an elimination bout in a natural monopoly market must also be considered.

While many antitrust cases have addressed the issue of natural monopolies, its treatment by the courts has been neither clear nor consis-
Nevertheless, some guidance is provided in case law, and therefore, an analysis of the relevant decisions follows. An analytical framework is provided to evaluate those contexts where the natural monopoly defense is an issue. Based upon this analysis, this article concludes that natural monopolists should not receive complete immunity from the provisions of section two. If a natural monopolist engages in seriously anticompetitive practices which contribute significantly to its monopoly position, that monopolist should be subject to liability under the Sherman Act.


Activities which are "predatory" or "anticompetitive" may cover a broad spectrum of behavior. As one authority notes, "predatory conduct, though seldom obvious and usually difficult to identify with certainty, does indeed occur." L. SULLIVAN, HANDBOOK OF THE LAW OF ANTITRUST 110 (1977). Still, predatory conduct bears certain distinguishing characteristics. First, to the educated observer the conduct will appear "abnormal" or at odds with normal business behavior. Id. at 111-12. In addition the behavior typically has a specific target, a specific competitor, or group of competitors. Id. at 112. Beyond these two features, anticompetitive conduct falls along a continuum, from obviously illegal acts involving physical threats or violence, to practices involving pricing or advertising of products where illegality becomes difficult to discern. Id. at 112-13.

In addition to "predatory practices" such as refusals to deal or tying arrangements, competitors may also engage in "dirty tricks," activities that may appear unethical but which are not enough to create a violation of the antitrust laws. For example, in Byars v. Bluff City News Co., 609 F.2d 843 (6th Cir. 1979), the defendant was accused of covering up the plaintiff's magazines with his own magazines on newsstands. In Knutson v. Daily Review, Inc., 548 F.2d 795 (9th Cir. 1976), the defendant "puffed" its circulation figures during audits to discourage rivals.

Although neither exhaustive nor complete, the following cases illustrate practices which the courts have found anticompetitive: Otter Tail Power Co. v. United States, 410 U.S. 366 (1973) (refusal to wheel electricity); Times-Picayune Publishing Co. v. United States, 345 U.S. 594 (1953) (tying agreements); Lorain Journal Co. v. United States, 342 U.S. 143 (1951) (refusal to deal); Affiliated Capital Corp. v. City of Houston, 700 F.2d 226 (5th Cir. 1983) (division of markets); Westborough Mall, Inc. v. City of Cape Girardeau, 693 F.2d 733 (8th Cir. 1982) (frivolous litigation); Spray-Rite Serv. Corp. v. Monsanto Co., 684 F.2d 1226 (7th Cir. 1982), aff'd, 104 S. Ct. 1464 (1984) (resale price maintenance); William Inglis & Sons Baking Co. v. ITT Continental Baking Co., 668 F.2d 1014 (9th Cir. 1981) (predatory pricing); City of Mishawaka v. American Elec. Power Co., 616 F.2d 976 (7th Cir. 1980) (price squeezing); Sargent-
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I. BACKGROUND

In United States v. Grinnell Corp., Justice Douglas stated that two elements were required for proof of a charge of unlawful monopolization under section two:

(1) the possession of monopoly power in the relevant market, and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of superior product, business acumen, or historical accident.

The first element, possession of monopoly power, consists of "the power to control prices or exclude competition." Under the second element, if the defendant takes actions which serve to maintain or expand monopoly power, these actions may violate the Sherman Act. Thus, a violation may occur even though the monopoly position was originally acquired in a lawful fashion.


13. Id. at 570-71. It should be noted that in the natural monopoly market, evidence of specific intent cannot be used to prove a violation of § 2. See Union Leader Corp. v. Newspapers of New England, Inc., 180 F. Supp. 125 (D. Mass. 1959), aff'd as modified, 284 F.2d 582 (1st Cir. 1960).


15. See United States v. United Shoe Machinery Corp., 110 F. Supp. 295 (D. Mass. 1953), aff'd per curiam, 347 U.S. 521 (1954). In United Shoe, the defendant was the largest supplier of shoe manufacturing equipment in the United States, supplying more than 75% of the demand for shoe machinery. 110 F. Supp. at 297. The court acknowledged that the monopoly had been lawfully acquired noting that, "[p]robably few monopolies could produce a record so free from any taint of . . . wrongdoing." Id. at 345. Still the court ordered the defendant to modify its leasing program and to make its machines available for sale to customers. Id. at 352-54. Even though control of the market was lawfully acquired, "United is denied the right to exercise effective control of the market by business policies that are not the inevitable consequences of its capacities or its natural advantages." Id. at 345.

Despite this admonition to monopolists by the court in United Shoe, the Court of Appeals for the Second Circuit acknowledged that lawful monopolists could engage in the same practices as other competitors. See Berkey Photo, Inc. v. Eastman Kodak Co., 603 F.2d 263 (2d Cir. 1979), cert. denied, 444 U.S. 1093 (1980). One of the primary issues in the Berkey case was Kodak's failure to predisclose the release of its 110 format cameras and films to its competitors. 603 F.2d at 279. At the trial the judge instructed the jury that if Kodak held a monopoly in cameras or film and failed to predisclose its new products, then Kodak's failure to predisclose its new products constituted exclusionary conduct. Id. at 281. The appellate court concluded that this instruction was erroneous, stating that:

[Withholding from others advance knowledge of one's new products, therefore,
Applying these two elements to a natural monopoly market poses several difficulties. The natural monopolist possesses monopoly power in the market and yet, by definition, the relevant market is capable of supporting only one supplier. Imposing liability upon a competitor who holds that power seems particularly unjust, because attaining that position could not be avoided due to the natural economic forces.

Under an extreme interpretation of Grinnell's second element of unlawful monopolization, mere possession of monopoly power may be considered a violation of the antitrust laws. For the natural monopolist, such a strict interpretation should not apply because the monopoly is the inevitable result ordinarily constitutes valid competitive conduct. Any success that [the monopolist] may achieve through "the process of invention and innovation" is clearly tolerated by the antitrust laws.

Id. at 281 (quoting United Shoe, 110 F. Supp. at 344). The court continued, noting that a firm, even a monopolistic firm, which designs a new camera, has the right to the "lead time that follows from its success." Id. at 283. Thus, the Berkey court indicated that even monopolists can engage in aggressive competition like any other competitor.

Other cases have noted, however, that a monopolist's practices will be scrutinized more strictly than those of an ordinary competitor. See, e.g., Peeters Co. v. Wendt, 260 F. Supp. 193 (W.D. Wash. 1966) (defendant exceeded rights of patent monopoly by unreasonably suppressing competition); Laithram Corp. v. King Crab, Inc., 244 F. Supp. 9, amended, 245 F. Supp. 1019 (D. Alaska 1965) (defendant abused patent monopoly and unjustifiably injured competition). But see LaSalle Street Press, Inc. v. McCormick & Henderson, 445 F.2d 84, 95 (7th Cir. 1971) (patentee can negotiate royalties with the leverage of his monopoly grant of a patent); Bela Seating Co. v. Poloron Prods., 438 F.2d 733, 738 (7th Cir.), cert. denied, 403 U.S. 922 (1971) (different royalties not unlawful if rational basis for difference exists).

16. See III P. AREEDA & D. TURNER, supra note 2, ¶ 621. The relevant market can be defined through reference to the geographic area served by the producer, the number of similar products in the market, and the ability of others to produce similar products. Id. ¶ 517; see 1982 Justice Dept. Merger Guidelines, reprinted in 2 Trade Reg. Rep. (CCH) ¶¶ 4502.10, 4502.30 (June 14, 1982). Defining a relevant product market can pose difficulties in that a determination of substitute products is necessary. See United States v. E.I. du Pont de Nemours & Co., 118 F. Supp. 41 (D. Del. 1953), aff'd, 351 U.S. 377 (1956).

Defining a geographic market is usually an easier process. Generally, one can look to whether a firm sells locally, regionally, nationally, or internationally and also to transportation costs for the product. See United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 357-62 (1963): II P. AREEDA & D. TURNER, ANTITRUST LAW ¶ 522 (1978).

In litigation arising under § 7 of the Clayton Act, 15 U.S.C. § 7 (1982), the Supreme Court provides a very non-analytical approach to the issue of market definition. The Clayton Act, in general, was intended to prevent economic concentration in the American economy by preserving a large number of small businesses. United States v. Von's Grocery Co., 384 U.S. 270, 275 (1966). In United States v. Pabst Brewing Co., 384 U.S. 546 (1966), Justice Black suggested that in a § 7 case, no meaningful geographic market need be established by the government. Id. at 549. The Justice Department in its 1982 Merger Guidelines attempted to correct this broadly sweeping definition. 1982 Merger Guidelines of Department of Justice, 2 Trade Reg. Rep. (CCH) ¶ 4502.30 (June 14, 1982).

Still, in § 2 cases the relevant geographic market would appear to involve the places where the allegedly monopolized trade occurs. § 2 Trade Reg. Rep. (CCH) ¶ 762 (Sept. 20, 1982).

17. This sentiment was stated by Justice Douglas in United States v. Griffith, 334 U.S. 100 (1948). In Griffith, Justice Douglas wrote: [M]onopoly power, whether lawfully or unlawfully acquired, may itself constitute
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of market forces. In the instance of natural monopoly, even clear indications of intent to monopolize are merely consistent with the decision to enter a natural monopoly market.

Monopolists in true natural monopoly markets, therefore, must obtain some relief from possible antitrust liability. Control of the natural monopoly market, however, must be distinguished from the methods used to obtain the natural monopoly. If the monopolist engages in egregious predatory conduct, liability should attach. A review of the case law follows and demonstrates that a competitor in a natural monopoly market may not use seriously anticompetitive means to achieve or maintain its natural monopoly status.

A. Non-Regulated Industries

An analysis of natural monopoly markets must begin with a review of the early case law considering this issue. Two cases, United States v. Aluminum Co. of America (Alcoa) and Union Leader Corp. v. Newspapers of New England, Inc., illustrate early judicial efforts to address the issue of natural monopoly.

In Alcoa, Justice Hand set forth his conclusions regarding situations where monopoly power should not result in violations of the antitrust laws. Justice Hand discussed the possibility of unavoidable monopolies, recognizing that an evil and stand condemned under § 2 even though it remains unexercised. For § 2 of the Act is aimed, inter alia, at the acquisition or retention of effective market control. . . . Hence the existence of power "to exclude competition when it is desired to do so" is itself a violation of § 2, provided it is coupled with the purpose or intent to exercise that power.

Id. at 107 (citations and footnote omitted). Justice Douglas's interpretation of unlawful monopolization appears to be one of the most extreme, condemning monopoly power in and of itself.

18. Defenses to charges of monopolization are limited primarily to the following situations: (1) where the defendant has shown that it does not have a monopoly in the relevant market, United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377 (1956); (2) where the defendant can demonstrate that it acquired the monopoly in a lawful fashion, United States v. Aluminum Co. of Am., 148 F.2d 416 (2d Cir. 1945) (dicta); (3) where the competitive benefits of the defendant's actions outweigh the anticompetitive effects, Broadcast Music v. Columbia Broadcasting Sys., 441 U.S. 1 (1979); or (4) where the monopolist has a legitimate business justification for extending its monopoly, Paschall v. Kansas City Star Co., 727 F.2d 692 (8th Cir. 1984).

19. See supra note 11.

20. 148 F.2d 416 (2d Cir. 1945).


22. See 148 F.2d at 429. Hand recognized a variety of situations where monopoly power could not be condemned per se. Specifically, Hand noted situations where a market could be so limited that only one supplier could produce and still meet the costs of production, where changes in tastes or costs could drive all but one producer out of the market, and where a competitor may be the only survivor in a market by virtue of his skill, foresight, and industry.

Id. at 430. Hand categorized all of these as monopolies which were "thrust upon" the competitor. Id. at 429.
a natural monopoly fell within this class. He wrote that "[a] market may ... be so limited that it is impossible to produce at all and meet the costs of production except by a plant large enough to supply the whole demand." Thus, Justice Hand established the principle that, in some instances, possession of a monopoly should not be considered a violation of the Sherman Act.

In Union Leader, the court faced the task of applying section two to a market which it believed to be a natural monopoly. The case involved a small Massachusetts town which had been served by a single newspaper for almost a century. When the printers of the the Haverhill Gazette newspaper went on strike, the Union Leader, a publisher from a nearby town, published a shoppers' guide for the town of Haverhill. Later the Union Leader began to publish and distribute its paper in Haverhill on a regular basis. Union Leader filed suit against the Gazette alleging that the defendant had engaged in a variety of unfair practices in seeking to maintain its monopoly power in Haverhill. The Gazette filed a counterclaim against Union Leader, alleging violations of sections one and two of the Sherman Act.

The district court noted that the town of Haverhill was a "one newspaper city," and that the market could not support two high quality daily newspapers. In analyzing the Gazette's section two claim against Union Leader, the court clearly recognized that the intent to capture the market through skill, foresight, and industry would not be a violation of section

Subsequent decisions appear to have added five more circumstances where a monopoly may be thrust upon a competitor: (1) new discovery; (2) original entry into a field; (3) accessibility to raw materials and skilled labor; (4) permanent, nondiscriminatory low profit margins; and (5) licenses conferred by and used within the law, for example, by patents and copyrights. See Strickland, The Thrust Upon Defense to Monopoly Prosecution in Alaska, 9 U.C.L.A. [UCLA]-ALASKA L. REV. 87, 88 (1979).

23. 148 F.2d at 430. Hand did not specifically refer to a natural monopoly although the concept is implicit in his opinion.

24. Id.


26. 180 F. Supp. at 129. See generally Comment, Local Monopoly in the Daily Newspaper Industry, 61 YALE L.J. 948 (1952) (The newspaper industry is one which, over the years, has tended toward monopoly conditions.).

27. 180 F. Supp. at 129.

28. Id. at 130.

29. Id.

30. Id. at 142-43. Specifically, Union Leader alleged that the Gazette gave secret discriminatory benefits to some advertisers and lowered their advertising rates in violation of the Sherman Act. Id.

31. Id. at 140-41. The Gazette challenged the use of the Gazette's striking printers to help deliver the Haverhill Journal, the Journal's requests to some merchants not to advertise in the Gazette, and the Journal's secret payments to merchants not to advertise in the Gazette. Id.

32. Id. at 129.

33. Id.
two. Exclusionary intent, however, could be proven through evidence of the use of unfair means to gain control in the natural monopoly market.

In the opinion of the court, the "unfair means" employed by Union Leader included secret payments to Haverhill businessmen and discriminatory advertising rates. The court found that these two acts were prima facie evidence of exclusionary intent, practices "not honestly industrial," and thus, constituted an attempt to monopolize.

The court applied the same test of unfair means to the behavior of the defendant Gazette. The Gazette secretly lowered its advertising rates in order to compete with Union Leader's rates. Although the defendant contended that this action was taken in self-defense, the court rejected this argument. According to the court, the Gazette's behavior also was "not honestly industrial," and thus constituted an attempt to monopolize the market in violation of section two.

On appeal, the Court of Appeals for the First Circuit acknowledged that the newspaper market in Haverhill could support only one publication. The court took a different approach, however, with respect to the charges of attempted monopolization. The court agreed that Union Leader's secret payments to Haverhill businessmen were conclusive evidence of an exclusionary intent and thus, a violation of section two. Based upon this conclusion, the court found it unnecessary to discuss or decide whether Union Leader's discriminatory advertising rates demonstrated an exclusionary intent.

The appellate court then reversed the district court's finding that the Gazette had also violated section two. Although the Gazette did engage in

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34. Id. at 140. Judge Wyzanski concluded that,
[a] person does not necessarily have an exclusionary intent merely because he foresees that a market is only large enough to permit one successful enterprise, and intends that his enterprise shall be that one and that all other enterprises shall fail. If the evidence shows that in laying his plans and executing them he contemplates and utilizes only superior skill, foresight, and industry, he has not an intent which is contrary to law.

Id. This finding is similar to Judge Hand's discussion of natural monopolies in Alcoa. See supra note 22.

35. 180 F. Supp. at 140.
36. Id. at 140-41.
37. Id. at 141.
38. Id.
39. Id. at 142.
40. Id. at 142-43.
41. Id. at 143.
42. Id.
43. 248 F.2d at 583-84.
44. Id. at 585.
45. Id. at 586.
46. Id. at 587.
discriminatory practices with regard to advertising rates, the court found that these actions were taken in self-defense. The court wrote that "[i]n the extent that a party has merely sought to offset the other's illegal acts it has not acted with a wrongful intention." The court noted that the existence of a natural monopoly market did not alter the Gazette's right to defend itself. Defensive actions, such as those taken by the Gazette, did not demonstrate the exclusionary intent necessary to prove a violation of section two.

Thus, in the appellate court's view, the only activity which clearly fell within the definition of "unfair means" was Union Leader's secret payments to local businessmen. Regarding Union Leader, the lower court found selective price reduction to be an unfair practice. The appellate court, however, never reached the issue. In the case of the Gazette, the court found that selective price reduction was not an unfair practice. Thus, the appellate court affirmed the district court's finding with respect to the Union Leader, but reversed the lower court's finding in regard to the Gazette.

Whether Union Leader's discriminatory advertising rates alone would have been an unfair practice remains unclear. The concern lies in the possibility that these low rates would constitute below cost or predatory pricing. Below cost pricing, however, could be justified as a promotional price, used to attract customers for a short period of time. Union Leader provides little guidance for the competitor attempting to determine what pricing activities will be permitted in an elimination bout in a natural monopoly market.

Both Alcoa and Union Leader provide examples of early judicial efforts to deal with natural monopolies in antitrust litigation. It would appear that judicial intuition is the primary analytical tool for evaluating natural monopolies in unregulated industries. Therefore, little guidance is provided for future cases involving natural monopolies because of the judiciary's failure to provide a consistent analytical framework to evaluate natural monopoly markets.

Natural monopolies arise in situations where a small town is capable of supporting only one enterprise of a particular type. Natural monopolies also exist in situations which involve the distribution of utility services, such as electricity or local telephone service. The classic governmental response to

47. Id.
48. Id. at 586-87.
49. Id. at 587.
50. Id.
51. Id. at 585.
53. Id. ¶ 214, at 200. If the promotional price results in increasing demand, thus calling forth increased production, the average cost will, by definition, fall in a natural monopoly industry. Thus a promotional price which may be below average cost at one point in time may be above average cost if production is increased.
54. Hamilton & Hamilton, supra note 4, at 284.
these natural monopolies has been to impose regulation to control the monopolist.\textsuperscript{15} A review of cases concerning regulated natural monopolies sheds further light on the courts' analysis of the natural monopoly defense.

**B. Regulated Industries**

For many years, monopolists subject to the regulatory controls of state or federal agencies assumed that they were exempt from the antitrust laws. In the 1973 case of *Otter Tail Power Co. v. United States*,\textsuperscript{56} the United States Supreme Court addressed this issue. The Court held that regulated industries were subject to possible liability under the Sherman Act.

In *Otter Tail*, the defendant utility company faced charges of violating section two for allegedly monopolizing the retail market for distribution of electrical power in the service area.\textsuperscript{57} At the district court level, the power company argued that it was exempt from antitrust liability since its acts were taken in self-defense.\textsuperscript{58} Nonetheless, the district court found Otter Tail guilty of violating the antitrust laws and enjoined future refusals to sell or wheel power\textsuperscript{59} in the service area.\textsuperscript{60}

On appeal to the United States Supreme Court, Otter Tail raised the defense that it was exempt from antitrust liability because it was regulated.\textsuperscript{61} The Supreme Court rejected this contention, noting the strong presumption against an exemption from the antitrust laws absent a "plain repugnancy" between the regulatory scheme and the antitrust laws.\textsuperscript{62} The majority affirmed the district court's ruling that Otter Tail's behavior constituted an attempt to monopolize.\textsuperscript{63} Thus, despite Otter Tail's assertions that it was not subject to antitrust scrutiny due to its regulation, the Supreme Court held that Otter Tail had violated section two of the Sherman Act.

\textsuperscript{55} See S. Breyer, Regulation and Its Reform 15 (1982).
\textsuperscript{57} *Otter Tail*, 331 F. Supp. at 56.
\textsuperscript{58} Id. at 58.
\textsuperscript{59} Wheeling power was defined by the court as "[transporting] power for another supplier."
\textsuperscript{60} Id. at 56 n.1.
\textsuperscript{61} Id. at 65.
\textsuperscript{62} 410 U.S. at 372. Otter Tail argued that because the Federal Power Commission had the authority to order involuntary interconnections pursuant to § 202(b) of the Federal Power Act, 16 U.S.C. § 824a(b) (1982), Otter Tail should be immune from antitrust prosecution. This argument was not addressed in the district court's written opinion.
\textsuperscript{63} 410 U.S. at 373-74. The Court noted that the legislative history of the Federal Power Act suggested a preference for voluntary interconnections and a policy which encouraged competition. Id.
Although the majority favored application of the antitrust laws, three Justices dissented.\(^4\) The natural monopoly characteristics of power distribution and the economies of scale possible from large scale power operations had originally created the need for the imposition of a federal regulatory scheme.\(^5\) Thus, the dissent argued that the federal regulatory scheme and the industry structure precluded the application of the antitrust laws to the defendant.\(^6\) Although the minority focused on the nature of the regulatory scheme, natural monopoly analysis and the implication that these monopolies should not be subject to traditional antitrust enforcement were implicit throughout the minority opinion.\(^7\)

Subsequent decisions have not disturbed the holding of \emph{Otter Tail}.\(^4\) Despite heavy regulatory controls and natural monopoly conditions in some industries, the Court appears dedicated to the position that competition must be encouraged in regulated markets, and that absent a clear exemption from the antitrust laws, practices which are plainly anticompetitive will not be tolerated regardless of industry structure.\(^9\) A review of current antitrust litigation appears to support this view, although the approaches followed by the courts do not follow a uniform path.

\(^{64}\) Chief Justice Burger and Justice Rehnquist joined in the partial dissent of Justice Stewart. \emph{Id.} at 382 (Stewart, J., dissenting). The dissent argued that the majority had "mechanically applied" the Sherman Act and in the process had misconstrued the legislative purpose of the Federal Power Act. \emph{Id.} at 383 (Stewart, J., dissenting). The dissent went so far as to state that the decree of the Court "starkly conflict[s] with the explicit statutory mandate of the Federal Power Commission." \emph{Id.} at 395 (Stewart, J., dissenting).

\(^{65}\) The dissent argued that the antitrust laws were simply inapplicable in this context, because "[a]ntitrust principles applicable to other industries cannot be blindly applied to a unilateral refusal to deal on the part of a power company, operating in a regime of rate regulation and licensed monopolies." \emph{Id.} at 389 (Stewart, J., dissenting).

\(^{66}\) \emph{Id.} at 383-84 (Stewart, J., dissenting).

\(^{67}\) \emph{Id.} at 382 (Stewart, J., dissenting). The dissent stated at the outset that \emph{Otter Tail} operated in a "natural-monopoly industry" and made explicit reference to this fact throughout the opinion.


\(^{69}\) 410 U.S. at 372. \emph{Otter Tail}'s actions to monopolize distribution in the service area were extensive and included the commencement of litigation in four of the towns in the service area, thus preventing the towns from issuing bonds to finance the municipal facilities.
II. CURRENT TRENDS AND CASES

In the recent "third wave" of antitrust litigation, more sophisticated economic tools are being used to evaluate the business practices of defendants charged with antitrust violations. Placing primary emphasis on the

70. See Flynn, Monopolization Under the Sherman Act: The Third Wave and Beyond, 26 ANTITRUST BULL. 1 (1981). The author characterizes antitrust litigation as falling into three categories or "waves" as follows: (1) beginning with Northern Securities Co. v. United States, 193 U.S. 197 (1904), and ending with United States v. United States Steel Corp., 251 U.S. 417 (1920); (2) beginning in the late thirties when Alcoa was filed and ending in the early fifties with United States v. United Shoe Machinery Corp., 110 F. Supp. 295 (D. Mass. 1953), aff'd per curiam, 347 U.S. 521 (1954); and (3) beginning in the late sixties with the filing of the IBM case, United States v. IBM Corp., 4 Trade Reg. Rep. (CCH) ¶ 45,070 (filed S.D.N.Y. 1969), and continuing to the present.

The "first wave" began 20 years after the enactment of the Sherman Act legislation, focusing on corporate giants in the railroad and oil industries. Flynn, supra, at 4. The "second wave" of litigation developed after the Great Depression when the country considered the possibility of cartelization to help the recovery of the economy. Id. at 9. "Wave three" involves the increased use of economics and an increasing number of private actions enforcing § 2. Id. at 22.

71. Economic analysis has had the greatest impact in the area of predatory pricing. In 1975, Professor Phillip Areeda and Donald Turner published an article setting forth a cost-based approach to analyzing pricing behavior. See Areeda & Turner, Predatory Pricing and Related Practices Under Section 2 of the Sherman Act, 88 HARV. L. REV. 697 (1975) [hereinafter cited as Predatory Pricing]. Under the Areeda and Turner model, any price below average variable cost (AVC) is presumed to be predatory. Id. at 732-33. Conversely, prices at or above average total cost (ATC) are presumptively nonpredatory. Id.


In addition, the article spurred a great deal of judicial interest. The AVC rule received early judicial recognition in the Fifth Circuit in the case of International Air Indus., Inc. v. American Excelsior Co., 517 F.2d 714 (5th Cir. 1975), cert. denied, 424 U.S. 943 (1976). Although the court did not directly apply the Areeda and Turner rule, economic analysis comprised a substantial portion of the court's analytical framework.

When the AVC rule first appeared, the Ninth Circuit readily applied it to antitrust cases involving predatory conduct. See, e.g., Janich Bros. v. American Distilling Co., 570 F.2d 848 (9th Cir. 1977), cert. denied, 439 U.S. 829 (1978); Hanson v. Shell Oil Co., 541 F.2d 1352 (9th Cir. 1976), cert. denied, 429 U.S. 1074 (1977). Later, as scholarly criticism began to emerge, the Ninth Circuit backed away from its original acceptance of the rule. This retraction was also due, in part, to California district court decisions which refused to follow the AVC rule. See, e.g., Ernest W. Hahn, Inc. v. Codding, 615 F.2d 830 (9th Cir. 1980); Transamerican Computer Co. v. International Business Machines Corp., 481 F. Supp. 965 (N.D. Cal. 1979).
goal of economic efficiency," the courts have turned to economic analysis for guidance in making their decisions in antitrust litigation. This new analytical approach, however, has not provided clear answers to the issues of how natural monopoly markets should be identified and what conduct will be tolerated in those markets.

The problem of market definition is evident in the 1983 case of Affiliated Capital Corp. v. City of Houston. Affiliated Capital involved the award of cable television franchises in the city of Houston, Texas. The city awarded franchises to four companies, who had previously agreed to a territorial division of service areas within the city. When the plaintiff submitted an application for a franchise, it was informed that it was too late, since the

The final blow to the AVC rule in the Ninth Circuit came in the case of William Inglis & Sons Baking Co. v. ITT Continental Baking Co., 668 F.2d 1014 (9th Cir. 1981) (amended order 1982). In Inglis, the plaintiffs had charged violations of § 2 of the Sherman Act and of the Robinson-Patman Act. The case involved competition in the wholesale bread market in northern California. The plaintiffs alleged that the defendant had engaged in predatory pricing behavior for over three years, which eventually forced the plaintiffs out of business. Although the Inglis court retained the Areeda and Turner below-AVC standard, the court expressly rejected any presumption that prices at or above AVC were merit-based. Id. at 1035-36.

The Second, Third, Seventh, Eighth, and Tenth Circuits have also considered the Areeda and Turner AVC rule. No clear pattern has emerged from these decisions. Some courts are willing to embrace a cost-based approach while others find it instructive but not determinative. Compare Superturf, Inc. v. Monsanto Co., 660 F.2d 1275 (8th Cir. 1981); Northeastern Tel. Co. v. American Tel. & Tel. Co., 651 F.2d 76 (2d Cir.), cert. denied, 102 S. Ct. 1438 (1981) (both cases adopting the AVC rule) with O. Hommel Co. v. Ferro Corp., 659 F.2d 340, 349-50 (3d Cir.), cert. denied, 102 S. Ct. 1771 (1981); Chillacothe Sand & Gravel Co. v. Martin Marietta Corp., 615 F.2d 427 (7th Cir. 1980); Pacific Eng. & Prod. Co. v. Kerr-McGee Corp., 551 F.2d 790 (10th Cir.), cert. denied, 434 U.S. 879 (1977); Telex Corp. v. International Business Machines Corp., 510 F.2d 894 (10th Cir.), cert. dismissed, 423 U.S. 802 (1975) (in all cases the AVC rule was instructive but not determinative). Clearly, as economic tools develop they will play an increasingly important role in antitrust analysis.

72. A continuing conflict exists regarding the legislative intent surrounding the Sherman Act. While the prevailing view is that Congress intended courts to consider non-economic factors, some scholars argue that economic concerns played a primary role in the enactment of the Sherman legislation. Compare H. Thorelli, The Federal Antitrust Policy (1955); Lande, Wealth Transfers as the Original & Primary Concern of Antitrust: The Efficiency Interpretation Challenged, 34 Hastings L.J. 65 (1982) (dominant views) with R. Bork, The Antitrust Paradox (1978); Bork, Legislative Intent and the Policy of the Sherman Act, 9 J. L. & Econ. 7 (1966) (legislative intent indicates courts should look only to consumer welfare and economic criteria). Within the dominant viewpoint, there are two noneconomic schools of thought, the societal and the structuralist. See Austin, The Emergence of Societal Antitrust, 47 N.Y.U. L. Rev. 903, 904-05 (1972) (societal view); Elzinga, The Goals of Antitrust: Other Than Competition and Efficiency, What Else Counts?, 125 U. Pa. L. Rev. 1191 (1977) (structuralist analysis). Although the societal school clearly occupies the more extreme position, both the societal and structuralist approaches stress the importance of noneconomic factors in antitrust analysis.


74. 700 F.2d 226 (5th Cir. 1983).
"pie had been cut.""

The plaintiff brought an antitrust action, alleging that the agreement to divide the city of Houston into exclusive service areas constituted a violation of section one of the Sherman Act. The defendant argued that the market for cable television in Houston constituted a natural monopoly. According to the defendant, the natural monopoly conditions precluded competition within the franchise areas, and thus, the agreement to divide the franchise areas caused no harm. Although the court rejected the validity of the agreement, it accepted without question the characterization of the market as a natural monopoly. The court simply stated: "We assume for purposes of this discussion that cable television is indeed a natural monopoly and proceed to discuss the pernicious affects [sic] of the conspiracy given this fact." Thus, the court did not analyze the cable market to determine if it was in fact a natural monopoly market. This failure to construct a clear market definition in markets that have been traditionally viewed as natural monopolies can lead to the mischaracterization of a market.11

75. Id. at 229. The cable controversy in Houston began in 1972 when the city first solicited applications for cable franchises. The public service and legal departments had recommended two applicants to the City Council, which in turn selected one of the applicants. Id. at 227. The unsuccessful applicant circulated a petition and obtained enough signatures to place the issue on a referendum ballot. Houston's voters defeated the award of a monopoly franchise. Id. at 227-28.

In 1978, the issue surfaced again. Rather than actively soliciting bids, however, the city passively accepted bids from interested cable companies. The final division of the cable market by four competitors culminated in this litigation. Id. at 228-29.

76. Id. at 230. Section one provides:

Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal. . . .


The plaintiff's complaint involved only violations of § 1 of the Sherman Act because the defendants agreed to divide the market in Houston. Nevertheless, one of the defendants asserted that because the market was a natural monopoly, the plaintiffs could not have suffered harm from the market allocations. 700 F.2d at 234. The district court granted the defendant a judgment notwithstanding the verdict, denying the plaintiff the jury's award of $2.1 million. The appellate court reversed, reinstating the jury's award. Id. at 227.

77. 700 F.2d at 234. The court noted that,

[defendant Gulf Coast asserts that cable television, like the electric utility, is generally considered a natural monopoly. According to the common wisdom, the extremely high fixed costs incurred in preparing a cable television company for operation prevent the survival of competition in the marketplace.

Id.

78. Id.

79. Id.

80. Id. The court noted that the fact of a natural monopoly market made the defendant's conduct all the more devastating. No competition could effectively take place once the franchise was awarded. Thus, the only competition possible occurred during the period before the franchise was granted. Id.

81. Cable television provides an excellent example of a market that has been mischaracterized as a natural monopoly. See Hamilton, Implications for Economic Regulation of Cable Television, 10 WM. MITCHELL L. REV. 433 (1984).
Further, the case law often fails to provide clear standards of behavior for firms in natural monopoly markets. Two recent newspaper cases demonstrate this omission in the antitrust case law. In Byars v. Bluff City News Co. and Paschall v. Kansas City Star Co., the courts considered cases where monopolists attempted to vertically integrate their production monopolies into the distribution level of the industry.

In Byars, the owner of the Bluff City News (News) decided that its existing newspaper distribution system was undesirable. The company decided to replace Byars, an independent carrier, with its own distribution agents. As a result of its decision, the News refused to continue dealing with Byars. Byars brought an action alleging that the News's refusal to deal with it constituted an illegal monopolization of the relevant market. The facts indicated that the monopoly had been "thrust upon" the News by national distributors and that the industry possessed some features of a natural monopoly.

In addition to refusing to deal with Byars, the News allegedly engaged in a variety of other acts after Byars secured other smaller accounts which the appellate court termed "dirty tricks." These alleged acts ranged from removing the plaintiffs' magazine racks to threats of reprisal against individuals who could have helped the plaintiff obtain alternative sources of periodicals.

82. 609 F.2d 843 (6th Cir. 1979), aff'd after remand, 683 F.2d 981 (6th Cir. 1982).
83. 441 F. Supp. 349 (W.D. Mo. 1977), vacated and remanded, 605 F.2d 403 (8th Cir. 1979), aff'd on rehearing, 695 F.2d 322 (8th Cir. 1982) (panel opinion), rev'd, 727 F.2d 692 (8th Cir. 1984) (en banc).
84. Vertical integration occurs when a single firm is involved in two or more stages of the production and distribution of a single end product. III AREEDA & D. TURNER, supra notes 2, ¶ 723. This is to be compared to horizontal integration. Horizontal integration occurs when a producer attempts to acquire a competitor in order to create a monopoly. Id.
85. 609 F.2d at 848.
86. Id. at 847-48. Andrew Byars had worked as a distributor of Bluff City News since 1957. In 1970, the new owners of the company were unhappy with the arrangement with Byars and terminated it. Id.
87. Id. at 846.
88. Id. at 853. The record indicated that the national periodical distributors, for valid business reasons, chose to deal only with Bluff City. Thus, Bluff City had obtained a monopoly. As Hand established in Alcoa, mere possession of monopoly power is not contrary to the Sherman Act. Monopoly power which is obtained because of a superior product, acute business sense, or circumstance should not be faulted. See supra note 22 and accompanying text.
89. 609 F.2d at 851-52. As the court pointed out, periodicals are highly perishable. Regional distributors are unwilling to bear the risk of purchasing large quantities of magazines that can become outdated quickly. Thus, unsold periodicals can be returned to national distributors by regional distributors. Generally, to avoid confusion and minimize problems, national dealers have made the decision not to have more than one regional distributor in any given area. Id. at 852.
90. Id. at 853-54.
91. Id. at 854 n.30.
The appellate court found that on the basis of the evidence, the trial court had failed to determine whether the News held a monopoly. If additional fact finding resulted in a finding that the News held a monopoly, the "predatory conduct on Bluff City's part would go a long way toward establishing a [section two] violation." In referring to the predatory conduct, the court specifically mentioned the defendant's alleged misconduct. The case was thus remanded to the trial court for additional fact finding.

The case returned to the appellate court three years later. The appellate court noted that the trial court did not hold an evidentiary hearing but simply allowed the parties to supplement the record. Further, the trial court held that although the News did have monopoly power, no abuse of that power occurred. The Sixth Circuit affirmed this holding with reluctance, stating that "[t]here is little doubt that this Court may well have come to a different conclusion had we viewed de novo the evidence on the present record." Thus, whether all of the News's alleged "dirty tricks" were actually tolerable practices remains unclear.

Following the final decision in Byars, the Eighth Circuit Court of Appeals faced a situation similar to Byars. In Paschall v. Kansas City Star Co., the defendant (Star) held a monopoly of its wholesale newspaper market in Kansas City, Missouri. The Star used independent carriers to deliver its newspapers, although the Star retained the right to distribute the papers itself. When the Star proposed a discontinuation of its independent delivery system, the plaintiff and 250 other independent newspaper carriers filed an antitrust action alleging violations of section two of the Sherman Act for refusal to deal and attempted monopolization of the carrier market. The district court granted an injunction preventing the termination of the

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92. Id. at 852-53. The appellate court ordered fresh fact-finding on the issue of whether the News possessed the power to control prices or exclude competition. Id.
93. Id. at 863 (citing Otter Tail Power Co. v. United States, 410 U.S. 366, 381-82 (1973)).
94. Id. at 863.
95. 683 F.2d 981 (6th Cir. 1982).
96. Id. at 982.
97. Id.
98. Id. at 983. The trial court heard conflicting evidence from News's employees regarding the alleged "dirty tricks." The content of this testimony is not included in the appellate court decision. The appellate court stated only that "[t]he Court concluded that Bluff City's conduct was fair competition." Id.
99. Id.
100. 441 F. Supp. 349 (W.D. Mo. 1977), vacated and remanded, 605 F.2d 403 (8th Cir. 1979), aff'd on rehearing, 695 F.2d 322 (8th Cir. 1982) (panel opinion), rev'd, 727 F.2d 692 (8th Cir. 1984) (en banc).
101. 695 F.2d at 326-27.
102. Id. at 325.
103. Id.
independent carrier contracts\textsuperscript{104} and awarded the plaintiffs' attorney fees.\textsuperscript{105} On appeal, the Eighth Circuit affirmed the district court.\textsuperscript{106}

Upon the newspaper's petition, the Eighth Circuit agreed to reconsider the case en banc.\textsuperscript{107} The court, in a 6-3 decision, reversed the holding of the panel decision.\textsuperscript{108} In an opinion that placed great emphasis on economic theory and analysis,\textsuperscript{109} the majority found that the Star's decision to vertically integrate did not violate section two of the Sherman Act.\textsuperscript{110}

Using the optimum monopoly price theory of the Chicago School of Economics,\textsuperscript{111} the court concluded that the Star's decision to vertically integrate would not have unreasonable anticompetitive effects and, in fact, would result in lower prices and better service for some customers.\textsuperscript{112} The dissent, however, took a dim view of this interpretation of the evidence, stating that they preferred to rely on facts rather than theory.\textsuperscript{113} Further, the dissent pointed out that the Star had originally obtained its monopoly status in an illegal fashion,\textsuperscript{114} that many more customers would see price increases rather than decreases,\textsuperscript{115} and that many customers would suffer
reduced services. Finally, taking a populist approach to antitrust analysis, the dissent noted the desirability of preserving 250 independent businesses. 

Paschall indicates that courts may look to economic theory to predict whether conduct may have unreasonable anticompetitive effects, such as higher prices or reduced services, in determining whether a section two violation has occurred. Looking to predictable effects rather than the means used to achieve those effects may be particularly useful in the natural monopoly setting, where the nature of the market itself makes evidence of "specific intent" such as statements of intent to monopolize or below-cost pricing, inconclusive. Focusing only on effects, however, provides little guidance for the competitor attempting to discern what actions will not violate the Sherman Act.

Affiliated Capital, Byars, and Paschall all demonstrate the difficulties faced in analyzing a natural monopoly market and defense. Courts have not yet clearly addressed how to determine whether a market is indeed a natural monopoly market or what particular activities violate the antitrust laws in such a market. These cases, however, provide a springboard for a more principled approach to natural monopoly analysis by exemplifying the problems inherent in natural monopoly situations.

III. PROBLEMS SURROUNDING NATURAL MONOPOLY MARKETS

As Affiliated Capital, Byars, and Paschall demonstrate, the courts have not clearly analyzed the market definition of a natural monopoly. Further, upon finding that a market is a natural monopoly, the courts have not applied an analysis of intent and conduct in a consistent manner. It is clear that the economic factors at work in a natural monopoly market dictate that some accommodation be made to preclude strict enforcement of section two. A principled analysis of these issues must take into account several problems inherent in the natural monopoly defense.

A. Definition of a Natural Monopoly Market

One of the most difficult issues simply involves identifying those markets which are, in fact, natural monopolies. The courts have had difficulty

116. Id. (Heaney, J., dissenting).
117. Id. at 706 (Heaney, J., dissenting).
118. See, e.g., P. JOSKOW & R. SCHMALENSEE, MARKETS FOR POWER: AN ANALYSIS OF ELECTRICAL UTILITY DEREGULATION 29-34 (1983). The authors note the extensive scholarly debate concerning whether vertically integrated electric companies are natural monopolies, or whether generation and transmission might be competitively priced, leaving electric distribution as the only true monopoly. Id.; see also R. SCHMALENSEE, supra note 1; Demesetz, Why Regulated Utilities?, 11 J. L. & ECON. 55 (1968); Goldberg, Deregulation and Administered Contracts, 7 Bell J. Econ. 426 (1976); Williamson, Franchise Bidding for Natural Monopolies — In General and with Respect to CATV, 7 Bell J. Econ. 73 (1976) (all discussing alternative methods of introducing competition into perceived natural monopoly markets).
defining these markets and commentators have provided lengthy lists of "identifying characteristics" of natural monopoly markets which serve to complicate, rather than clarify, the analysis. The soundest approach to the market definition issue is to start with the goal of current antitrust analysis: to provide the most efficient use of resources at the lowest cost.

119. See Primeaux, Some Problems With Natural Monopoly, 24 Antitrust Bull. 63 (1979). Primeaux lists 11 elements which sometimes characterize natural monopoly:

1. Attributes of natural monopoly dependent on economies of scale for their existence or implementation.
   a. Economies of scale in production characterize a natural monopoly. The economies result in persistently decreasing long-run average total costs which means that a firm's costs continue to fall as output is increased.
   b. Firms in a natural monopoly are characterized by relatively high fixed costs.
   c. A single producer in an industry characterized as a natural monopoly operates at lower cost than if two or more firms served the market.
   d. The nature of the business in a natural monopoly is such that a large number of competing plants is impossible.
   e. Higher customer prices will result if more than one firm serves a market in an industry characterized as a natural monopoly.
   f. Price differences are a customer attraction in a natural monopoly. Small price differences by one firm cause customers to switch to that firm.

2. Attributes of natural monopoly not dependent on economies of scale for their existence or implementation.
   a. The item supplied by a natural monopoly is a necessity.
   b. Duplication of facilities in a natural monopoly causes inconvenience to customers.
   c. Natural monopolies supply articles or conveniences which are used at the place where produced and in connection with the plant or machinery supplying the output.
   d. Natural monopolies may result from a special limitation of raw materials.
   e. Natural monopolies may arise from secrecy.

Id. at 64-65.

Ultimately, Primeaux concludes that none of the attributes usually applied to characterize natural monopolies is applicable in the electric industry. Thus, he states that any continued grants of monopoly to electric utilities must rest on something other than a natural monopoly justification. Id. at 84-85.

See also Austin, supra note 7, at 646. Austin notes that Professor John O'Donnell lists six characteristics of natural monopoly:

1) high proportion of fixed to variable costs;
2) a product that has to be supplied on demand;
3) an "umbilical" cord to consumers or a permanent connection that can only be switched at considerable expense;
4) fluctuating demand;
5) use of eminent domain or similar techniques; and
6) necessity of the product.

Id. As stated in the text, these definitions complicate rather than clarify natural monopoly analysis. Further, reliance on such characteristic lists can result in a mischaracterization of a market as a natural monopoly. See supra note 81.

120. The evolutionary change in the most recent Supreme Court opinions toward accepting the notion that economic efficiency is the principal, if not the sole, goal of antitrust enforcement is documented in Sims, 'Monsanto,' 'Hyde' Rulings Put Baxter Slightly Ahead, Legal
This points toward a simple and workable definition of a natural monopoly. In economic terms, a monopoly is natural only when one producer provides the lowest cost method of supply in the long run.\(^{121}\)

Despite the apparent simplicity of this definition, in reality its application to a given market may be difficult. Changing technology may prevent an accurate characterization of a market as a natural monopoly. Cable television systems provide an excellent example of situations where technological developments have made its characterization as a natural monopoly obsolete.\(^{122}\) Competing technologies with similar services and prices provide a competitive check on cable systems and prevent them from exercising apparent monopoly control.\(^{123}\)

While the physical attributes of a cable system may constitute a natural monopoly in the sense that the duplication of the cable distribution system would be wasteful, the cable firm may lack market power. Technological innovations have created a variety of alternatives which provide ample competition for the services provided by a cable system.\(^{124}\) Many alternatives to the services provided by cable systems currently exist\(^ {125}\) and other alternatives will be developed which will provide more competition for cable in the future.\(^{126}\)

Thus, in industries where technology is rapidly developing, the definition of a natural monopoly is particularly problematic. Competitive substitutes may be quickly developed to eliminate market power. Antitrust policy must protect these sources of innovation from anticompetitive practices. Consequently, the foreseeability of innovation affecting a given market must be analyzed by the courts.

Similarly, where a monopolist is regulated, the application of the simple definition of natural monopoly in the context of a monopolization charge may be difficult. In particular, the application of traditional market share analysis to demonstrate monopoly power may lead to incorrect conclusions. *MCI Communication Corp. v. American Telephone and Telegraph Co.*,\(^ {127}\)

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\(^{121}\) R. Schmalensee, *supra* note 1, at 3; Hamilton & Hamilton, *supra* note 4, at 284 n.10.

A more technical definition of a natural monopoly can be arrived at through the introduction of the concept of "subadditivity." See Cirace, *supra* note 1, at 492. The concept of "subadditivity," however, is essentially a reformulation of the definition that a monopoly is natural only when one producer is the lowest cost method of supply in the long run. *Id.*

\(^{122}\) See Hamilton, *supra* note 81, at 456.

\(^{123}\) See id.

\(^{124}\) See id.

\(^{125}\) See id. at 438-39. These include conventional television, subscription television, multi-point distribution service, and satellite master antenna television.

\(^{126}\) See id. at 439. In the near future, direct broadcast satellites and low power television stations may be available.

\(^{127}\) 708 F.2d 1081 (7th Cir.), *cert. denied*, 104 S. Ct. 234 (1983).
a recent case involving a regulated utility company possessing natural monopoly characteristics, points to the need for careful economic analysis of whether a regulatory scheme may prevent a company from controlling prices or excluding competitors from the market. If so, the regulated company would lack the necessary monopoly power for a finding of monopolization under the Sherman Act. In MCI, the Court of Appeals for the Seventh Circuit noted that heavy reliance on market share data is likely to be a misleading indicator of "monopoly power" in a regulated setting.\textsuperscript{28} Statistical dominance may be the result of regulation imposing an obligation to serve the public. In lieu of traditional market share analysis, the appellate court held that "the analysis [of whether AT&T possesses market power] must focus directly on the ability of the regulated company to control prices or exclude competition."\textsuperscript{29} Thus, in a case involving a refusal to deal by a utility having natural monopoly characteristics, the court required direct evidence of the power to control prices or exclude competitors before it would find that the requisite monopoly power existed.\textsuperscript{30}

\textbf{B. Leveraging}

The second problem created by natural monopoly markets involves the use of the monopoly power in the natural monopoly market to gain control of another market which is not a natural monopoly.\textsuperscript{31} The problem is of particular concern when the natural monopoly market is regulated. Antitrust actions have challenged this practice of leveraging in the past.\textsuperscript{32}

\begin{itemize}
\item \textsuperscript{128} 708 F.2d at 1107.
\item \textsuperscript{129} Id.; see also Almeda Mall v. Houston Lighting & Power Co., 615 F.2d 343, 354 (5th Cir.) (in natural monopoly setting, controlling relevant market share cannot lead to the inference of traditional monopoly power), cert. denied, 449 U.S. 870 (1980).
\item \textsuperscript{130} For criticism of the appellate court's reasoning with respect to whether AT&T had the ability to control prices or exclude competitors, see Norton & Early, Limitations On the Obligation to Provide Access to Electric Transmission and Distribution Lines, 5 Energy L.J. 47, 61-64 (1984).
\item \textsuperscript{131} The concept of leveraging is evident in the 1948 case of United States v. Griffith, 334 U.S. 100 (1948). In Griffith, the defendant owned movie theaters throughout Oklahoma, Texas, and New Mexico. Id. at 101-02. Many of the theaters operated in "closed towns," that is, towns capable of supporting only one theater. Id. The defendant attempted to combine the purchasing power it possessed in the closed towns to obtain exclusive run and first run movies for its theaters in competitive towns. Despite the fact that the defendant's competitive practices were generally found to be lawful, the court enjoined future "package negotiations," noting that any attempts to acquire, retain, or expand monopoly power could be found to violate § 2. Id. at 108-09.
\item \textsuperscript{132} See, e.g., Cantor v. Detroit Edison Co., 428 U.S. 579 (1976) (Court did not exempt a private utility company from liability under the Sherman Act for using its monopoly power in distribution of electricity to restrain competition in the sale of light bulbs); Times-Picayune Pub. Co. v. United States, 345 U.S. 594 (1953) ("tying" agreements in which a seller exploits his dominant position in one market to expand into another are violative of the Sherman Act); United States v. Griffith, 334 U.S. 100 (1948) (operator of a circuit of motion picture theatres cannot use his monopoly power in towns where he has no competitors to obtain exclusive rights to films in those towns where he has competitors).
\end{itemize}
The 1976 case of Cantor v. Detroit Edison Co.\textsuperscript{133} provides an example of this leveraging technique. The defendant, Detroit Edison, supplied electricity to about five million customers in southeastern Michigan.\textsuperscript{134} In addition, Detroit Edison supplied customers with nearly fifty percent of the most frequently used standard size light bulbs.\textsuperscript{135} Customers paid for their use of electricity, but paid no additional charge for the light bulbs.\textsuperscript{136}

The plaintiff, owner of a retail drugstore, challenged the light bulb program as restraining competition in violation of the Sherman Act.\textsuperscript{137} The defendant argued that since the state regulatory commission required the light bulb program to continue, it could not be liable for antitrust violations.\textsuperscript{138} The Supreme Court rejected this argument, finding that:

\begin{quote}
\textbf{[P]}ublic utility regulation typically assumes that the private firm is a natural monopoly and that public controls are necessary to protect the consumer from exploitation. There is no logical inconsistency between requiring such a firm to meet regulatory criteria insofar as it is exercising its natural monopoly powers and also to comply with antitrust standards to the extent that it engages in business activity in competitive areas of the economy.\textsuperscript{139}
\end{quote}

Thus, the Court indicated that natural monopolists, even those subject to regulatory controls, must be policed for possible antitrust violations when entering a competitive market.\textsuperscript{140}

The district court in United States v. American Telephone & Telegraph Co.\textsuperscript{141} addressed a similar leveraging issue when it reviewed the litigants' proposed consent decree. The case involved the government's contention that AT&T engaged in anticompetitive practices in its intercity telephone market.\textsuperscript{142} The court noted that the government's accusations of antitrust practices were possibly due to AT&T's control over local exchange facilities.\textsuperscript{143} The court

\footnotesize{\textsuperscript{133} 428 U.S. 579 (1976).}  
\textsuperscript{134} \textit{Id.} at 582.  
\textsuperscript{135} \textit{Id.}  
\textsuperscript{136} \textit{Id.}  
\textsuperscript{137} \textit{Id.} at 581.  
\textsuperscript{138} \textit{Id.} at 594. The defendant based its argument on the fact that the light bulb distribution program could not be discontinued without the approval of the Michigan Public Service Commission. \textit{Id.} Thus, the defendant argued that under Parker v. Brown, 317 U.S. 341 (1942), its actions were exempt from antitrust liability. In \textit{Parker}, the court held that action which would result in a private person violating the antitrust laws would not violate the Sherman Act if taken by a state official pursuant to express legislative command. \textit{Id.} at 350-51. The \textit{Cantor} court held that the \textit{Parker} exemption did not apply to private utilities. 428 U.S. at 391-92.  
\textsuperscript{139} 428 U.S. at 595-96.  
\textsuperscript{140} \textit{Id.} at 597 n.35. The Court stated that there was no doubt that the federal antitrust laws apply to electric utilities. The Court held that neither state approval of a program nor the need to apply to the state to abstain from the program exempted an electric utility from the antitrust laws. \textit{Id.} at 598.  
\textsuperscript{142} 552 F. Supp. at 161.  
\textsuperscript{143} \textit{Id.} at 162.
ultimately approved the decree which divested AT&T of the Bell Operating Companies.  

The ease with which a natural monopolist can extend its power into other areas is amply demonstrated in the Detroit Edison and AT&T cases. The potential abuses surrounding the exercise of a firm's natural monopoly power suggests that courts must carefully scrutinize a natural monopolist's efforts to compete in other markets.

C. Natural Monopoly as a Defense to Antitrust Violations

A defendant may assert the defense of natural monopoly to justify a variety of anticompetitive practices. The defense has considerable appeal to a jury, since the defendant would argue that economic forces inevitably would result in the defendant becoming the sole supplier for the given market. The defense also can maintain that duplicated efforts and other inefficiencies of production would result during the elimination bout.

An analysis of the case law and other issues raised above, however, indicates that considerable danger to consumer welfare lurks in the natural monopoly defense. An extremely liberal interpretation of the defense may reach too far in permitting anticompetitive activity. On the other hand, consumer welfare will suffer from an overly restrictive interpretation of the defense. Consumer losses will flow principally from delay in realizing lowest cost productions, because natural economic forces, absent government intervention or collusion among competitors, will ultimately produce the desired result of one producer. The cost of an overly broad defense that may permit anticompetitive activity must be balanced against the costs of an overly restrictive defense, which may result in an unnecessarily long elimination bout between competitors in a natural monopoly market.

One principal danger of an extremely liberal interpretation of the defense lies in the fact that the perceived natural monopoly market may be defined at one point in time but invention and innovation may alter the market. If new technologies are developed that could provide alternative products or services, the perceived natural monopolist may be able to preserve its position through anticompetitive practices simply because it gained a monopoly at a time when no alternative was available.

For example, generation of electricity is traditionally viewed as a natural monopoly. New alternative energy sources may, however, be able to pro-

145. See Austin, supra note 7, at 624-27, 644-45.
146. Hamilton & Hamilton, supra note 4, at 305.
147. See supra text accompanying notes 122-26.
vide a similar product. The new competitor may be unable to survive a competitive battle with a natural monopolist who utilizes anticompetitive practices, and innovative technology may be lost. A natural monopoly should not be a defense in these cases.

The second principal danger of a liberal interpretation of the natural monopoly defense is the possibility that the natural monopolist may use its monopoly power in the natural monopoly market to gain control of a market which is not a natural monopoly. Both the Detroit Edison and AT&T decisions bear witness to the reality of the danger of leveraging, especially in regulated industries. Thus, the defense of natural monopoly does not, and should not, apply in such cases.

A third danger to consumer welfare from an overly broad defense is the potential harm caused when a less efficient, higher cost competitor achieves the position of monopoly power through anticompetitive practices. A brief example bears this out. Assume that two firms, A and B, are competing in a natural monopoly market. Firm A is the more efficient producer, and at any given quantity of output, A has lower cost production than B. Firm B, however, has substantial financial resources, while the resources of firm A are fairly limited.

If firm B is allowed to use anticompetitive practices without restriction, it may choose, for example, to price below average variable cost and thereby gain market share. As it gains market share in a decreasing cost industry, its costs will fall and it will be able to drive out the more efficient competitor. Thus, firm B, although the less efficient, higher cost competitor at any given quantity of output, may gain the natural monopoly simply because firm A lacked the financial resources to survive an unfair elimination bout. Consumers would be better off if the more efficient firm A were to be the surviving monopolist. For consumers, the fact that firm B prevails is undesirable, and yet, may occur if the competitive battle is not monitored.

Balanced against these fears is the reality that a natural market itself creates conditions which make specific intent to gain monopoly power, its possession, and its exercise inevitable. Subjecting defendants to section two liability in the natural monopoly setting without taking this reality into account would be unfair to the competitors in such a market. In some cases, it may also result in diminished consumer welfare because of the prolongation of the elimination bout. To determine whether the prolongation of the elimination bout will lead to net social losses, two consideration must be balanced.

During the elimination bout, the competitors are sharing the market and neither is realizing the lowest cost production attainable by one firm producing for the entire market. Thus the prolongation of the elimination bout delays the realization of the lowest cost production and consumer welfare is diminished. On the other hand, during the elimination bout, the competitors may compete with one another on price, driving it downward. Once

148. See supra text accompanying notes 131-44.
the monopoly is achieved, the monopolist will set a monopoly price, perhaps constrained by a calculation of a limit price which will deter any potential entrant. The monopoly price charged by a single low cost firm may be higher than the price resulting from competition among high cost firms.

The specific market itself will dictate the decision in a particular case. In a natural monopoly market, where natural forces, absent collusion or government intervention, will inevitably lead to a monopoly, the prolongation of the elimination bout may not necessarily lead to net social losses. The welfare losses of the monopoly price must be compared to the welfare gains from the realization of lowest cost production.

One commentator points out that the probabilities are that the monopoly price charged by the low-cost firm will be lower than the price resulting from competition among high-cost firms. The fact that the social benefit of the natural monopolist’s resource savings is unambiguous should also weigh heavily in any balance with uncertain price effects. Finally, the antitrust laws generally seek to promote price cutting in concentrated markets, not hinder it, and any effort to protect higher-cost competing firms from lower-cost producers could chill price cutting generally.

The overall goal must be to strike a balance in assessing the application of the natural monopoly defense. Courts must address the fears concerning the natural monopoly defense, yet permit it in the appropriate circumstance. A principled approach must focus on market definition as well as the acts which will subject a natural monopolist to section two liability. Consideration of the acts which should trigger a monopolization charge for a natural monopolist will help guide consideration of the issue of market definition.

The evaluation of the acts which may trigger a monopolization charge in this type of market also must take into account that there are other methods of policing elimination bouts, without calling into play the antitrust laws and the concomitant threat of treble damages. Laws regulating unfair trade practices such as section five of the Federal Trade Commission Act, unfair and deceptive trade practices laws, as well as section one of the Sherman Act, all provide potential weapons to police unfair competition in the natural monopoly market.

149. Williamson, Economies as an Antitrust Defense: The Welfare Tradeoffs, 58 AM. ECON. REV. 18, 21-23 (1968). A small reduction in the monopolist’s cost relative to that of high-cost competitive firms would mean a monopoly price that is lower than the competitive price. Id.


Every contract, combination . . . or conspiracy in restraint of trade or commerce among the several states . . . is hereby declared to be illegal. . . .

Id.
The difficulty lies in drawing the line between those acts which will subject the natural monopolist to section two liability and those acts which will be left to other less onerous forms of legal sanction. The three classifications below attempt to characterize different types of anticompetitive behavior and the consequences that should result.

In the clearest case of a natural monopoly, only the most egregious anticompetitive conduct, such as section one violations, like vertical or horizontal price fixing or classic boycotts, should be serious enough to be deemed a violation of section two. Despite the inevitable result of one supplier in the natural monopoly market, a competitor could not provide legitimate business justifications for this type of conduct and the application of section two is clearly in order.

Less flagrant, but still very clear anticompetitive practices may also trigger section two liability if it can be shown that this conduct significantly contributed to the monopoly position and the competitor cannot provide legitimate business justifications for his acts. For example, exclusive dealing

154. Price fixing is a per se violation of the Sherman Act and includes any "combination formed for the purpose and with the effect of raising, depressing, fixing, pegging, or stabilizing the price of a commodity in interstate or foreign commerce." United States v. Socony-Vacuum Oil Co., 310 U.S. 150, 223 (1940); see also, Arizona v. Maricopa County Medical Soc'y, 457 U.S. 332, 342 (1982) (price fixing is a per se violation of the Sherman Act); Catalano, Inc. v. Target Sales, Inc., 446 U.S. 643, 650 (1980) (holding that an agreement among wholesalers to refuse to sell unless retailer made payment in cash was anticompetitive, a per se violation of the Sherman Act); Borden, Inc. v. FTC, 674 F.2d 498, 515-16 (6th Cir. 1982) (Sherman Act was violated when a monopolist manipulated prices in order to exclude competitors by requiring them to sell below their average variable cost).

155. A boycott is an agreement among competitors to refuse to deal. Such an agreement is illegal per se if it is a concerted attempt to reduce or exclude competition. See, e.g., Klor's Inc. v. Bradway-Hale Stores, Inc., 359 U.S. 207 (1959) (group boycotts are forbidden by the antitrust laws); Spray-Rite Serv. Corp. v. Monsanto Co., 684 F.2d 1226, 1236 (7th Cir. 1982) (illegal boycotts occur where some of the boycotters are competitors of the boycotted party and the boycott is designed to protect boycotters from competing with the boycotted party), aff'd, 104 S. Ct. 1464 (1984). But cf. United States Trotting Ass'n v. Chicago Downs Ass'n, Inc., 665 F.2d 781, 788-89 (7th Cir. 1981) (trotting association's prohibition against its members racing at non-member tracks was not a per se violation of the Sherman Act because there was no showing of a purpose to exclude competitors).

156. Watson and Brunner conclude that "exclusionary conduct" which may trigger a finding of willful monopolization under § 2 in other industries may not be sufficient in a regulated public utility operating as a natural monopoly. They suggest three guidelines for consideration: (1) conduct enforcing a clearly articulated public policy against competition should not be considered exclusionary conduct; (2) action or inaction required because of the regulated firm's status as a public utility or common carrier should not be considered exclusionary; and (3) reasonable actions taken by a regulated public utility to protect its ability to provide reliable, efficient service to customers should not be considered exclusionary. Watson & Brunner, Monopolization by Regulated "Monopolies": The Search for Substantive Standards, 22 ANTITRUST BULL. 559, 576-79 (1977), cited in MCI Communications v. American Tel. & Tel. Co., 708 F.2d 1081, 1106, 1108 (7th Cir.), cert. denied, 104 S. Ct. 234 (1983) and Almeda Mall, Inc. v. Houston Lighting & Power Co., 615 F.2d 343, 354 n.21 (5th Cir.), cert. denied, 449 U.S. 870 (1980).
contracts, tying arrangements, or patent violations might fall within this category. Pricing below average variable cost presents a more difficult question in a natural monopoly market. If the price results in increasing demand, and thus increasing production, average variable costs, by definition, will fall in a natural monopoly market. A price which may be below average variable cost at one point in time may be above average cost a short period later as production is increased.

Finally, conduct which falls into a grey area, that which is not clearly anticompetitive and does not significantly contribute to monopoly power, should not subject the defendant to section two liability. Behavior such as pricing between average variable cost and average total cost should not constitute a violation of section two. Other conduct that may be expected in an effort to capture a market, such as inflated claims of success, disparagement of a competitor's product, or hiring away high quality personnel should be permitted in an elimination bout for a natural monopoly market.

157. An exclusive dealing contract exists when one firm agrees to buy only from another, most commonly when a dealer agrees to handle only the goods of a particular manufacturer. Exclusive dealing contracts are a form of vertical integration and as such, competition may be injured through foreclosure of competitors. Thus, these types of arrangements may be violative of the Sherman Act although they are not illegal per se. See, e.g., Lupia v. Stella D'Oro Biscuit Co., 586 F.2d 1163, 1173 (7th Cir. 1978), cert. denied, 440 U.S. 982 (1979) (plaintiff must allege facts demonstrating that defendant-manufacturer's exclusive dealing arrangement foreclosed competitors of defendant from a substantial market); Brown v. Hanson Publications, Inc., 556 F.2d 969, 970-71 (9th Cir. 1977) (exclusive dealing contracts are not illegal per se and preemptive purpose in such arrangements is not necessarily equivalent to specific intent to exclude competition).

158. A tying arrangement is an agreement by a party to sell one product, but only on the condition that the buyer also purchase a different (or tied) product or at least agree that he will not purchase that product from another supplier. Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 104 S. Ct. 1551, 1558 (1984) (tying arrangements are invalid where seller exploits his power to force a buyer to buy a tied product the buyer does not want or might have purchased elsewhere); United States Steel Corp. v. Forter Enter., 429 U.S. 610, 620 (1977) (tying arrangements are condemned where seller uses market power to force purchaser to do something he would not do in a competitive market).


161. See III P. AREEDA & D. TURNER, supra note 2, ¶ 728a (misrepresentation should be presumed of little relevance for § 2 purposes).

162. Id. ¶ 738c (effects of disparagement upon a rival are speculative and should be ignored for § 2 purposes); cf. Van Dyk Research Corp. v. Xerox Corp., 478 F. Supp. 1268, 1326 (D.N.J. 1979) (court found isolated instances of disparagement, but damages were not shown), aff'd on other grounds, 631 F.2d 251 (3d Cir. 1980).

163. See III P. AREEDA & D. TURNER, supra note 2, ¶ 738d (compromising of rival's employees should not be grounds for § 2 liability absent a continued pattern of similar behavior).
Given the potential strength of the natural monopoly defense, which would define more liberally the acts which a monopolist may undertake without triggering a monopolization charge, the use of the defense should be carefully limited to markets which are truly natural monopolies. A natural monopoly should not be a defense to a section two charge without clear and convincing evidence of the natural monopoly market. Clearly, with any of the three types of activity discussed above, if the defendant failed to prove the existence of the natural monopoly market, it could face potential section two liability.

IV. Conclusion

Where consumers are best served by the survival of the single most efficient firm, merit-based competition should produce the desired result. Given the uncertainties surrounding the identification of natural monopoly markets, and the underlying purpose of the antitrust laws, if any error is to occur, it should fall on the side of encouraging a fair elimination bout, rather than an unfair competitive battle which may not ensure the desired result. A natural monopolist must compete fairly for the market which it desires to control. Prohibiting egregious anticompetitive acts will permit vigorous competition on the merits in a natural monopoly market.

Although the concept of natural monopoly is widely-recognized in antitrust litigation, its definition and application in judicial decisions has varied considerably with little guidance in providing an analytical framework for future decisions. Given the potential strength of such a defense, its use should be limited to situations where there is clear and convincing evidence of the natural monopoly market. Certain markets are natural monopolies, and where they exist liability for less serious anticompetitive practice can be imposed through state and federal laws designed to prevent unfair trade and business practices. In such cases, the uncertain standards of liability and the severe remedies of section two are appropriate.