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AN ECONOMIC ANALYSIS OF ANTITRUST LAW'S NATURAL MONOPOLY CASES

JOHN CIRACE*

I. INTRODUCTION

A. Statement of the Problems

In its recent decision in Aspen Skiing Co. v. Aspen Highlands Skiing Corp., the Supreme Court affirmed a jury verdict that the defendants attempted to monopolize or monopolized downhilling ski facilities at Aspen, Colorado in violation of section 2 of the Sherman Act, but declined to rule on the lower court's holding that a multi-day, multi-area ski ticket could be characterized as an "essential facility." The Court also declined to specify the circumstances under which a firm with monopoly power has a duty to engage in a joint marketing program with a competitor, by declining to specify the circumstances under which horizontal competitors may or must engage in price fixing. In this article, I will attempt to provide answers to the issues that the Court chose to avoid. Further, this article will show that the essential facility cases and cases addressing when horizontal competitors may engage in price fixing are best analyzed in the context of the economic theory of natural monopoly.

B. Approach to the Problems

In brief, the essential facility (or bottleneck) doctrine requires that "where facilities cannot practically be duplicated by would-be competitors, those in possession of them must allow them to be shared on fair terms." Because courts and

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2 Section 2 of the Sherman Act states in pertinent part: "Every person who shall monopolize, or attempt to monopolize...any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony..." 15 U.S.C. § 2 (1982).


1 Aspen Skiing Co., 105 S. Ct. at 2862 n.44.

4 In this Court, Ski Co. contends that even a firm with monopoly power has no duty to engage in joint marketing with a competitor. The absence of an unqualified duty to cooperate does not mean that every time a firm declines to participate in a particular cooperative venture, that decision may not have evidentiary significance, or that it may not give rise to liability in certain circumstances.

Id. at 2856.

1 A. NEALE & D. GOYDER, THE ANTITRUST LAWS OF THE UNITED STATES OF AMERICA 62 (3d ed. 1980). Several other statements of the essential facilities doctrine are as follows: "[A] business or group of businesses which controls a scarce facility has an obligation to give competitors reasonable access to it." Byars v. Bluff City News Co., 609 F.2d 843, 856 (6th Cir. 1979).
commentators have neither defined nor limited the fact patterns to which the essential facility doctrine applies, the "doctrine is neither invoked nor applied with principled consistency. . ." It will be shown that the cases applying the essential facility doctrine are included within the group of cases defined and limited by two classes of natural monopoly; i.e., essential facility cases are a poorly defined subset of all natural monopoly cases. Aspen Skiing is representative of the first type of natural monopoly, which is local natural monopoly. Associated Press v. United States is an example of the second type of natural monopoly, which is public good-natural monopoly. There is controversy as to whether Associated Press should be characterized as an essential facility case. Those who argue that it is not an essential facility case contend that, since Associated Press has competitors, it is therefore not essential. However, recent advances in economic theory allow this vacuous doctrinal distinction to be avoided; it will be shown that Associated Press is a natural monopoly case even though it has competitors. Moreover, Associated Press is not an aberration, but is representative of a class of natural monopoly cases concerned with

[I]f a group of competitors, acting in concert, operate a common facility and if due to natural advantage, custom, or restrictions of scale, it is not feasible for excluded competitors to duplicate the facility, the competitors who operate the facility must give access to the excluded competitors on reasonable, non-discriminatory terms.

L. SULLIVAN, HANDBOOK OF THE LAW OF ANTITRUST, § 48 at 131 (1977);

The case law sets forth four elements necessary to establish liability under the essential facilities doctrine: (1) control of the essential facility by a monopolist; (2) a competitor's inability practically or reasonably to duplicate the essential facility; (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility.


Local natural monopoly is defined in Section II A. The local natural monopoly cases are discussed in Section IV.


Commentators who discuss Associated Press along with United States v. Terminal R.R. Ass'n, 224 U.S. 383 (1912), implicitly classify Associated Press as an essential facility case. 3 P. AREEDA & D. TURNER, ANTITRUST LAW § 729g (1978);

In the Terminal case, for example, the terminal company was owned by railroads which used its services; these competed with other railroads to whom terminal services were denied. The owners of the monopoly at the terminal level could be seen as using their power at that distribution level to extend their domination and control at another level where they do encounter competition—in the provision of railroad services. In Otter Tail, Gancon, and Associated Press, similar factors were involved.

SULLIVAN, supra note 5, at 130-31 (1977) (Professor Sullivan appears to be ambivalent. See infra note 10 for his qualification).

Note, supra note 5, at 451 n.65. The essential facility doctrine "also explains cases like Associated Press, though it is not entirely clear in that case that a competing organization could not have been put together by non-members." L. SULLIVAN, supra note 5, at 131-32 (1977).

The recent advances in the economic theory of natural monopoly are discussed in Section II.
the marketing of information\textsuperscript{12} or the setting of standards.\textsuperscript{13} The new theory of natural monopoly, which also clarifies the conceptual overlap between natural monopoly and public goods (a public good is one that, once produced, can be consumed by an unlimited number of people without additional cost),\textsuperscript{14} justifies calling this second type of natural monopoly, public good-natural monopoly.\textsuperscript{15} In this context, Broadcast Music, Inc. \textit{v.} Columbia Broadcasting System,\textsuperscript{16} which is thought to be \textit{sui generis},\textsuperscript{17} will be shown to be a public good-natural monopoly case. In short, once it is clear that \textit{Aspen Skiing} and \textit{Associated Press} are representative of the two major subclasses of natural monopoly cases, much of the confusion is cleared up.

In addition to an inadequate theoretical understanding of the concept of natural monopoly, a second source of confusion stems from the commentary concerning a monopolist’s right to refuse to deal.\textsuperscript{18} There is a conflict between those who emphasize a natural monopolist’s obligation to give competitors reasonable access\textsuperscript{19} and those who emphasize that business decisions are most efficiently made by businesses and not courts. The latter commentators maintain that courts are not

\textsuperscript{12} United States \textit{v.} Realty Multi-List, Inc., 629 F.2d 1351 (5th Cir. 1980); Silver \textit{v.} New York Stock Exch., 373 U.S. 341 (1963); United States \textit{v.} American Soc’y of Composers, Authors & Publishers; (CCH) 1940-43 Trade Cas. (CCH) ¶ 56, 104 (S.D.N.Y. 1941), 1950 Trade Cas (CCH) ¶62, 595 (S.D.N.Y. 1950).


\textsuperscript{15} Public good-natural monopolies are defined and discussed in Section II C.

\textsuperscript{16} \textit{Broadcast Music, Inc.}, 441 U.S. at 1.

\textsuperscript{17} H. Hovenkamp, \textit{supra} note 13, § 4.3 at 123.


\textsuperscript{19} A. Neale & D. Goyder, \textit{supra} note 5, at 61-65, 128-34; L. Sullivan, \textit{supra} note 6, § 48 at 131; Note, \textit{supra} note 6, at 459; Barber, \textit{supra} note 18, at 9.
well suited to the continuous supervision of business, *i.e.*, courts should refrain from *judicial utility regulation.* In order to distinguish those natural monopoly cases in which reasonable access is paramount from those in which complex efficiency considerations and judicial utility regulation are more likely to be involved, the natural monopoly cases are classified into three groups: a) simple access or unintegrated cases in which efficiency analyses are not difficult and judicial regulation is rarely implicated, as distinguished from b) vertically integrated cases and c) horizontally integrated cases where horizontal price fixing is integral to the efficient exploitation of a natural monopoly. The cases in the latter two groups involve complex efficiency analyses and judicial utility regulation is often implicated.

The explicit definitions of vertical and horizontal integration used in this article are different than those implicitly used by other commentators and lead to different characterizations of the cases as well as different analyses and conclusions.

This article will introduce a new economic theory of natural monopoly and illustrate its use in analyzing antitrust cases. More specifically, the article will show how the new theory of natural monopoly is superior to the essential facility doctrine which remains too ambiguous to provide a helpful framework. The old theory

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21 "The word 'integration' means only that administrative direction rather than a market transaction organizes the cooperation of two or more persons engaged in a productive or distributive activity." R. Bork, *supra* note 2, at 227.

22 In general, the various doctrinal classifications of essential facilities, intent to monopolize, individual and concerted refusal to deal, and per se violations that are employed by other commentators are avoided. See L. Sullivan, *supra* note 5, §§ 48-52, 63-67, 83-92; H. Hovenkamp, *supra* note 13, § 4.4, at 124-134 and ch. 10 at 273-91; A. Neale & D. Goyder, *supra* note 5, Part I, chs. 1 and 2.

23 Natural monopoly cases are classified as *vertically integrated* if courts must decide whether a natural monopolist should be allowed to take over a vertically related function currently performed by others or whether it should be divested of an activity that is vertically related to, but separable from, its monopoly.

24 Natural monopoly cases are classified as *horizontally integrated* when courts must decide whether horizontal price fixing is integral to the efficient exploitation of a natural monopoly, and even if so, whether the natural monopoly should nevertheless be dissolved into more than one competing entity to reduce its market power despite the loss of efficiency.

25 See e.g., 3 P. Areeda & D. Turner, *supra* note 9, ¶729g (both Terminal Railroad and Associated Press are characterized as vertical integration cases). Professor Sullivan implies that there are common vertical effects on competition in many of the cases: "In the Terminal case, for example, the terminal company was owned by railroads which used its services; these competed with other railroads to whom terminal services were denied. The owners of the monopoly at the terminal level could be seen as using their power at that distribution level to extend their domination and control at another level where they do encounter competition—in the provision of railroad services. In *Otter Tail*, *Ganco*, and *Associated Press*, similar factors were involved." L. Sullivan, *supra* note 6, at 130-31. However, in terms of the analysis of this article, *Terminal Railroad* is a horizontally integrated case, *Otter Tail* is a vertically integrated case, and *Ganco* and *Associated Press* are unintegrated.
of natural monopoly recognized only local natural monopolies under the essential facility doctrine, but the new theory identifies a second class of natural monopoly—the public good-natural monopoly. The new theory of natural monopoly allows for a more coherent analysis of past and future antitrust cases.

The import of the case law concerning an unintegrated natural monopoly (whether local or public good type) is that the monopolist has an obligation to give competitors\(^\text{26}\) (or even buyers of the monopoly, assuming it is for sale\(^\text{27}\)) reasonable access up to the limits of its capacity.\(^\text{28}\) Judicial utility regulation is rarely implicated in these cases. With respect to customers of an unintegrated natural monopoly, the monopolist has the burden of proving an efficiency justification for its economically motivated\(^\text{29}\) refusal to deal.\(^\text{30}\) As shown below, in unintegrated cases, the courts have been able to perform the necessary efficiency analysis without difficulty.\(^\text{31}\)

A second group of cases concerns vertically integrated natural monopolies. In these cases, the issue of access by competitors necessarily involves judicial consideration of the scope and activities that a local natural monopolist should be allowed to perform. Notwithstanding the broad holding in one case,\(^\text{32}\) dicta in other

\(^{26}\) Gamco, Inc. v. Providence Fruit & Produce Bldg., Inc., 194 F.2d 484 (1st Cir.), cert. denied, 344 U.S. 817 (1952); Hecht v. Pro-Football, Inc., 570 F.2d 982 (D.C. Cir. 1977), cert. denied, 436 U.S. 956 (1978); American Fed'n of Tobacco Growers v. Neal, 183 F.2d 869 (4th Cir. 1950); Associated Press, 326 U.S. at 1; Realty Multi-List, Inc., 629 F.2d 1351; Silver, 373 U.S. 341; Majorie Webster Junior College, 432 F.2d 650.


\(^{28}\) Gamco, Inc., 194 F.2d 484; Dessen v. Professional Golfers' Ass'n of Am., 358 F.2d 165 (9th Cir. 1966). In effect, this rule is a variant of the so-called bottleneck or essential facility doctrine; however, the differences are that under the essential facility doctrine the fact patterns that qualify as essential facilities were never defined; here the rule is limited to natural monopolies that are unintegrated according to the definition of integration contained in Section II D. A second difference is that the rule is not limited to competitors and buyers of a natural monopoly if it is for sale, but also applies to customers.

\(^{29}\) 3 P. Areeda & D. Turner, supra note 9 ¶ 738 at 270-71, 1982 Supp., ¶ 736 at 229-31. See America's Best Cinema Corp. v. Fort Wayne Newspapers, Inc., 347 F. Supp. 328 (N.D. Ind. 1972) (in which a monopoly newspaper publisher refused to accept advertising for X-rated films. Such refusal is not economically motivated). See the discussion in Section IV B.


\(^{31}\) For example, Official Airline Guides, 630 F.2d 920 (the Second Circuit refused to allow the FTC to substitute its own business judgment for that of a monopolist).

cases,\textsuperscript{33} and commentary,\textsuperscript{34} the case law taken as a whole does not support a general duty of reasonable access in vertically integrated natural monopoly cases.\textsuperscript{35} A full rule of reason analysis is usually required in these cases; the courts must balance the potential efficiencies of integration against potential inefficiencies. If the natural monopolist is allowed to vertically integrate a stage that is potentially competitive, such integration may result in substantial adverse efficiency effects on costs and progressiveness;\textsuperscript{36} may lead to a rise in price to consumers as a result of forward integration by a monopolist;\textsuperscript{37} or may allow a firm to evade regulation of the monopolized stage.\textsuperscript{38} The fear that courts may become involved in judicial utility regulation is often justified in these cases.

\textsuperscript{33} Hecht, 570 F.2d at 992; Byars, 609 F.2d 843 at 857; MCI Communications Corp., 708 F.2d at 1133.

\textsuperscript{34} L. Sullivan, supra note 6, at 131.

\textsuperscript{35} Otter Tail, 410 U.S. at 366; MCI Communications Corp., 708 F.2d at 1081; Mid-Texas Communications v. American Tel. & Tel. Co., 615 F.2d 1372 (5th Cir. 1980); Byars, 609 F.2d 843; Paschall v. Kansas City Star Co., 695 F.2d 322 (8th Cir. 1982), rev'd en banc, 727 F.2d 692 (8th Cir. 1984). These cases are discussed in Section V A. The Sixth and Tenth Circuit Court of Appeals have explicitly rejected suggestions that a general duty of reasonable access be limited to vertically related anticompetitive effects, Byars, 609 F.2d at 856 n.33. Aspen Highlands Skiing Co. v. Aspen Skiing Co., 738 F.2d 1509, 1518 n.11 (10th Cir. 1984). These suggestions to the courts were probably due to commentary that implicitly uses a much broader definition of vertical integration than the explicit definition used in this article and therefore tends to force many of the leading natural monopoly cases into the vertically integrated category. "Both [Terminal Railroad and Associated Press] are vertical integration cases: defendants possessed a vertically related facility that their competitors lacked and could not otherwise obtain." 3 P. Areeda & D. Turner, supra note 9, ¶ 729g at 243. "In the Terminal case...[t]he owners of the monopoly at the terminal level could be seen as using their power at that distribution level to extend their domination and control at another level where they do encounter competition—in the provision of railroad services. In Otter Tail, Gamco and Associated Press, similar factors were involved." L. Sullivan, supra note 6, at 130-31. See the discussion on characterization of natural monopoly cases as unintegrated, vertically and horizontally integrated in Section II D.

\textsuperscript{36} ‘[V]ertical integration into a natural monopoly may well block entry into the “non-natural” monopoly stage, with losses in efficiency and progressiveness that could ultimately exceed the price-output benefits of integration. In this respect, integration involving a natural monopoly is worse than integration that does not.’ 3 P. Areeda & D. Turner, supra note 9, at ¶ 726d5.

\textsuperscript{37} There are at least two reasons why forward integration by a monopolist may raise prices to consumers: First, “the monopoly producer's acquisition of the existing distribution outlets could delay new entry into production, and the delay would tend to increase the optimum monopoly price.” R. Posner, supra note 20, at 198. Second, when a monopolist integrates forward into a stage at which competitive firms formerly were able to substitute competitive inputs for the monopolized input (i.e., a stage with variable input proportions), price may rise; however, the welfare effects are ambiguous because the reductions of consumer surplus consequent on the higher price must be evaluated against the increase in productive efficiency consequent on the optimum use of inputs by the monopolist. McGee & Bassett, Vertical Integration Revisited, 19 J. LAW & ECON. 17, 27 n.28 (1976); Schmalensee, A Note on the Theory of Vertical Integration, 81 J. Pol. Econ. 442 (1973); Hay, An Economic Analysis of Vertical Integration, 1 INDUST. ORG. REV. 188 (1973); Warren-Boulton, Vertical Control with Variable Proportions, 82 J. Pol. Econ. 783 (1974). But see, W. Bowman, Jr., PATENT AND ANTITRUST LAW: A Comprehensive Analysis of the Antitrust Laws in the Context of Patent Law (1979).
A third group of natural monopoly cases concerns the question of whether horizontal price fixing is integral to the efficient exploitation of the natural monopoly (whether local or public good type).\textsuperscript{39} Although there is a general obligation of reasonable access to both competitors and customers in these cases, the difficult question is whether horizontal price fixing should be allowed (and if so, on what terms) or whether the natural monopoly should be dissolved into more than one competing entity to reduce its market power despite the loss of efficiency. This group of cases, in which the courts use the rule of reason to balance the anticompetitive effect of horizontal price fixing against the efficiency aspects of coordinated action through a natural monopoly, is the only major exception to the rule that horizontal price fixing is per se illegal.\textsuperscript{40}

II. THE THEORY OF NATURAL MONOPOLY AND ITS RELATIONSHIP TO ANTITRUST CASE LAW

The old theory of natural monopoly\textsuperscript{41} gives an adequate explanation of local natural monopoly cases such as \textit{Gamco, Inc. v. Providence Fruit and Produce Building, Inc.}\textsuperscript{42} and \textit{Hecht v. Pro-Football, Inc.},\textsuperscript{43} but is not adequate to explain public good-natural monopolies like that in \textit{Associated Press v. United States}\textsuperscript{44} and \textit{Broadcast Music, Inc. v. Columbia Broadcasting System}.\textsuperscript{45} The new theory of natural monopoly\textsuperscript{46} provides a much more adequate tool to analyze the latter cases. On the other hand, in the economics literature the new theory is stated in forbidding mathematics and is difficult to apply because of its more abstract and highly generalized nature.\textsuperscript{47} Since the old theory of natural monopoly is a special case

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\textsuperscript{39} AREEDA & TURNER, supra note 9, at \textsuperscript{\$} 726e.
\textsuperscript{39} Terminal R.R. Ass'n, 224 U.S. at 383; Aspen Skiing Co., 105 S. Ct. at 2847; Broadcast Music, Inc., 441 U.S. at 1; National Collegiate Athletic Ass'n, 104 S. Ct. 2948 (1948). These cases are discussed in Section VI.
\textsuperscript{42} Gamco, Inc., 194 F.2d at 484.
\textsuperscript{43} Hecht, 570 F.2d at 982.
\textsuperscript{44} Associated Press, 326 U.S. at 1.
\textsuperscript{45} Broadcast Music, Inc., 441 U.S. at 1.
}
of the new theory and is easier to apply to many fact patterns, both theories will be used where appropriate. I begin by showing the limited usefulness of the old theory of natural monopoly and then show how the new theory expands the number of antitrust cases that are encompassed by the natural monopoly concept. Finally, the concepts of public good-natural monopoly, vertically integrated, and horizontal price fixing natural monopolies are defined and their relevance explained.

A. The Economies of Scale or Old Theory of Natural Monopoly

The older literature on the theory of natural monopoly defined the concept in terms of single-product firms which incur decreasing unit costs as output increases. In this literature the sine qua non of the natural monopoly is economies of scale: the larger the firm, the cheaper the cost per unit. Given this technological definition, the logic of the theory dictates that if economies of scale exist throughout the relevant market, competition must inevitably result in a monopolistic market structure because the first firm that becomes large enough to supply the entire market would have the lowest costs and would therefore be able to underprice all its competitors, driving them from the market. Since economies of scale are difficult to measure in the real world, an observable market is said to be a natural monopoly

48 W. Sharkey, supra note 47, at 56; W. Baumol, J. Panzar & R. Willig, supra note 47, at 18 Proposition 2A.

49 Even though the reformulated definition of a natural monopoly is difficult to use in practice because (a) it is not as easily related to the more familiar properties of cost functions as is the old formulation, which is defined by declining average costs, and (b) it is difficult to verify that subadditivity exists because this requires comparison of a single firm's costs with all possible alternatives. W. Sharkey, supra note 47, at 85; W. Baumol, J. Panzar & R. Willig, supra note 47, at 170, 174. It more than makes up for these deficiencies due to its superior analytic and descriptive power.

50 Several different meanings may be attached to the term "decreasing unit costs": 1) short-run decreasing costs - i.e., when a firm has a given capacity already in being, total unit costs of production decline as output increases up to, or almost up to, the physical limits of capacity operation; 2) long-run decreasing costs - i.e., the larger the plant constructed or the larger the unit of additional capacity put into operation, the lower will be its unit cost if operated to the capacity for which it was designed; 3) decreasing costs due to economies of scale external to the firm - i.e., as an entire industry grows it may acquire some of its input at decreasing average costs because its growth enables the suppliers of its input to take advantage of potential economies of scale internal to their industries; 4) decreasing costs over time as a result of technological progress. The phenomenon of long-run decreasing costs due to economies of scale internal to the firm is the definition to which the concept of natural monopoly is related. 1 A. Kahn, supra note 41, at 124-30. C. Phillips, supra note 41, at 21-23; H. Petersen, supra note 41, at 189-95.

51 "A market may, for example, be so limited that it is impossible to produce at all and meet the cost of production except by a plant large enough to supply the whole demand." United States v. Aluminum Co. of America, 148 F.2d 416, 430 (2d Cir. 1945). For conditions necessary for a single firm to prevent entry into a market in which there are decreasing unit costs, see D. Dewey, supra note 14, at 114-19; W. Vickery, Microeconomics 249-59 (1964).

52 "There are cases of natural monopoly that would seem at first blush not explicable in terms of long-run decreasing costs. . . . [f]or example,. . . as the number of telephone subscribers goes up, the number of possible connections among them grows more rapidly; local exchange service is therefore
if it is thought to be capable of sustaining only one firm. The retailing of groceries is a simple example. In a very small town, the sole grocery store is surely a natural monopoly in the sense that only one store can survive in the market, whereas in large cities, where there are many grocery stores, the industry is clearly not a natural monopoly. Thus, whether particular firms should be classified as natural monopolies was said to depend on the extent of the market.

The older theory's qualified definition of natural monopoly, single-product firms that incur declining unit costs over the extent of the relevant market, gives a useful analysis and description of many local natural monopoly cases. As examples of local natural monopolies consider cable television systems, local newspapers and professional football teams (each with its own stadium). A cable television system is probably a natural monopoly in sparsely settled areas. In large metropolitan areas, more than one cable television system can often survive profitably in different sub-markets; thus, it is possible to argue that cable television is not a natural monopoly. However, if the extent of the market is redefined and the metropolitan market is subdivided, each of several submarkets may be a natural monopoly in terms of the old theory's qualified definition of declining unit costs over the extent of the appropriately defined market.

generally believed to be subject to increasing, not decreasing unit costs, when the unit of output is the number of subscribers. . . .

In fact, however, this example is not necessarily an exception to the general principle that long-run decreasing costs are an indispensable condition for natural monopoly. The rise in the exchange cost per subscriber as their number increases is the counterpart of an improvement in the quality of service rendered: each telephone is thereby enabled to reach more and more customers. The fact that the dollar cost of a unit of service rises as its quality improves is not a proof of decreasing returns. Increasing or decreasing returns can be measured only by the behavior of costs when there is an increased quantity of service of an unchanging quality. By that test local exchange service, too, is subject to increasing returns: the same subscriber plant (the phone instrument and the drop-line into the house) can handle additional calls at zero additional costs. . . . 2 A. Kahn, supra note 41, at 123-24.

R. Schmalensee, supra note 37, at 5. From these observations, the conclusion, that unit costs in grocery firms stop declining and must be constant or rising after a relatively modest level of output has been attained, is usually inferred.

See Helix Milling Co. v. Terminal Flour Mills Co., 523 F.2d 1317 (9th Cir. 1975), cert. denied, 423 U.S. 1053 (1976) plaintiff operated a flour and millfeed mill in Oregon which was destroyed by fire. Plaintiff alleged that the only feasible way to continue its milling and sales business was to acquire the assets of an existing mill because the construction cost of a new mill was too great with respect to its limited profitability. Defendant chose to sell its mill to an existing competitor rather than plaintiff. Despite the allegation by plaintiff that "[i]n a closed market, where the acquisition of existing production facilities is the only economically feasible method of entry, an agreement to acquire the only available facilities necessarily excludes a potential entrant", the market was not a natural monopoly. The Ninth Circuit Court of Appeals held that a jury issue was presented as to whether the agreement between defendant and plaintiff's competitor was a restraint of trade or was merely joint activity to accomplish a legitimate business objective which had an incidental and indirect effect upon competitors. However, in dicta, the court used broader language: citing Associated Press, it said that "The Sherman Act prohibits competitors from selecting who or what their competition will be . . . ."

On the other hand, in a recent Ninth Circuit Court of Appeal decision, the court declined to resolve the issue of whether regulation of cable TV is justified because it is a natural monopoly
With respect to local newspapers and professional football teams, the old theory of natural monopoly gives a reasonably adequate description of why competition is usually not feasible; even one firm may have difficulty surviving in small towns, and only very large cities can support more than one. However, even the qualified definition of natural monopoly does not resolve ambiguities with respect to whether related products are substitutes that should be included in the relevant market. Moreover, even in analyzing these relatively easy cases, the old theory encounters difficulty when the possibility is considered that a city may be able to support two newspapers or two professional football teams if they share a common production facility, such as a stadium or a printing plant. The difficulty arises because the old theory, unlike the new theory, does not adequately analyze multiproduct firms.

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on a motion for failure to state a claim because the plaintiff alleged that no natural monopoly exists and because there is space available on telephone poles and physical conduits to accommodate more than one system. Preferred Communications, Inc. v. City of Los Angeles, 745 F.2d 1396, 1404 (9th Cir. 1985).

66 See Lorain Journal Co. v. United States, 342 U.S. 143 (1951); Paschall, 695 F.2d 322.

67 See Hecht, 570 F.2d at 982; Deesen, 358 F.2d 165 (time and space limitations at the facilities at which tournament sports are played are such that these facilities are usually natural monopolies).


69 Times-Picayune Pub. Co. v. United States, 105 F. Supp. 670 (E.D. La. 1952), rev’d, 345 U.S. 594 (1953). One morning newspaper and two evening newspapers were published daily in New Orleans. The morning paper and one of the evening papers were owned by the defendant who required certain advertisers to buy space in both papers at a combination rate. The Government contended that defendant’s tying arrangement allowed the defendant to use its monopoly of the morning newspaper to strengthen its afternoon paper at the expense of its rival. The Government lost the case in a five to four decision in the Supreme Court. The four dissenting justices agreed with the government. The five justices in the majority defined the market as all the advertising line-age that appeared in all three New Orleans daily newspapers. In effect the majority thought that readers of evening newspapers were in the same market as readers of morning newspapers. See D. Dewey, supra note 2, at 205 (suggesting several plausible motives for tying in Times-Picayune, some of which are legal, some illegal). The rival afternoon newspaper subsequently went out of business by selling to the defendant. A. Neale & D. Goyder, supra note 5, at 131 (3d ed. 1980).

60 Hecht, 580 F.2d 1243 (5th Cir. 1978), cert. denied, 440 U.S. 981 (1979), plaintiff, a breeder and racer of greyhounds was denied access to a South Florida track at which he had raced for fifteen years. Although there were three dog tracks in the relevant county, one of which was defendant’s, only one was operating at any given time, making each track’s market power greater than its share of the county market. However, there was a fourth dog track in another county which was a direct competitor of the defendant’s track; the three tracks in the county plus the fourth track had an agreement concerning the joint use of kennels. There is also a fifth track 200 miles away which could be considered a relevant competitor. Only if one defined the market as narrow as possible, excluding nearby dog tracks, could one argue that it was a natural monopoly. The Fifth Circuit considered but said it need not decide the issue of market power in the relevant market because it held that a single firm monopolist, citing United States v. Colgate & Co., 250 U.S. 300 (1919), as distinguished from combinations, citing Terminal R.R. Ass’n, 224 U.S. 383, was free, under § 2 to discriminate arbitrarily among those in an adjacent market. Fulton, 580 F.2d at 1248 n.2.

B. The New or Subadditivity Theory of Natural Monopoly and Sustainability

Associated Press v. United States\textsuperscript{62} involved a cooperative newsgathering service consisting of independent member-newspapers. Since Associated Press had several major competitors,\textsuperscript{63} it is arguably not a natural monopoly under the old theory. However, the new theory demonstrates that Associated Press and related antitrust cases dealing with markets for information and standard setting organizations can be natural monopoly cases even though more than one firm may exist in the relevant market.\textsuperscript{64}

The new theory is defined by the concept of "subadditivity." With given technology, if one firm can produce a given output at less cost than two or more firms, costs of that output are said to be subadditive; that is, production costs of one firm are \textit{sub} (less) than if one \textit{adds} the costs of two or more firms that divide the output.\textsuperscript{65} When one firm can produce all levels of output at less cost than two or more firms, costs are said to be "globally subadditive."\textsuperscript{66} However, the existence of a natural monopoly in the least cost or subadditivity sense does not guarantee that it can necessarily prevent entry by competitors in submarkets. This means that the natural monopoly may not be "sustainable" because more than one competitor can survive.\textsuperscript{67} The basic ideas are most easily understood in the form of an example.\textsuperscript{68}

A municipal bus system that runs both day and night is a natural monopoly in the context of the subadditivity definition. One bus system is the least costly way of providing public transportation both day and night because \textit{common overhead cost} does not have to be duplicated.\textsuperscript{69} However, a competitor may be able to enter the most profitable submarkets, the high density corridors transporting commuters during the day hours. If such competitive entry is possible and is not prohibited

\textsuperscript{62} Associated Press, 326 U.S. at 1.
\textsuperscript{63} Both United Press International and Reuters were in existence at the time of the case; they offered similar services and were therefore an alternative to membership in Associated Press. Note, supra note 6, at 451 n.65.
\textsuperscript{65} "[S]ubadditivity means that it is always cheaper to have a single firm produce whatever combination of outputs is supplied to the market and conversely." Baumol, \textit{supra} note 46, at 810. To state the concept mathematically, assume that the prices of inputs and technology are fixed, that the cost of producing a specified output of each of \( n \) products within a single firm is given by the function \( C(y^1 + y^2 + \ldots + y^n) \), and that the cost of producing these same outputs by two or more firms is \( C(y^1) + C(y^2) + \ldots + C(y^n) \). If the former is less than the latter, costs are subadditive because division of total output among two or more firms using the same technology must raise costs. \textit{Id.}; 2 A. Kahn, \textit{supra} note 41, at 123.
\textsuperscript{66} Baumol, \textit{supra} note 46, at 810.
\textsuperscript{67} Panzar & Willig, \textit{supra} note 46, at 1 (1977); W. Sharkey, \textit{supra} note 47, at 84-110.
\textsuperscript{68} See E. Zajac, \textit{supra} note 46, at 75-78.
\textsuperscript{69} \textit{Id.} at 76.
by legislative fiat, the competitor would be "cream skimming"70 and a natural monopoly bus system would not be sustainable.

If the sine qua non of the old theory was economies of scale, the sine qua non of the new theory is the spreading of joint production or common overhead costs, i.e., cost complementarity.71 In the context of the new theory of natural monopoly, a cooperative newsgathering service like Associated Press is a natural monopoly in the least cost sense even though more than one firm exists in the industry. The reasoning is as follows: at the time of the trial, Associated Press was a joint venture of over 1200 member newspapers. It compiled and disseminated news gathered by its own employees and by reporters from member newspapers. Without the cooperative, each newspaper would have to maintain reporters in many cities. Instead, the member newspapers in different cities agreed that each would distribute news gathered by its reporters to newspapers in other cities.72 A news gathering cooperative is a natural monopoly in the least cost or subadditivity sense because it eliminates a great deal of duplicative overhead costs; one cooperative can produce the news at less cost than two or more newspapers each of which has reporters in every city. The larger the number of newspapers from different

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70 Id. at 74; 1 A. KAHN, supra note 41, at 7-10, 221-46.
71 W. Sharkey, supra note 47, at 66-70. This notion, that multiproduct natural monopoly inheres in the ability to spread joint or common costs, provides the link between the old and the new theory of natural monopoly and shows that the old is a special case of the new. In the context of a single-product firm, the old theory's definition of natural monopoly, declining average unit cost over the extent of the relevant market, is roughly translatable into the new theory's definition. Under the old theory, average unit costs decline because fixed cost, which is another name for common or joint cost, is spread over more output as output expands. The single-product natural monopoly is a special case of the multiproduct natural monopoly because in the single-product case, common or joint costs are merely spread over the output of a single product, whereas in the multiproduct case, common or joint costs are spread both over output of each product and across products that share the same common or joint costs. However, in the general or multiproduct case, declining average unit cost for each product taken individually is not sufficient for subadditivity; there must be spreading of common or joint cost across products for a natural monopoly to exist, otherwise each single product firm would be as efficient as a multiproduct firm. However, as indicated above, one of the major conclusions of the new theory is that even though a multiproduct firm may be a natural monopoly in the sense that it is the least costly way of fulfilling demand for all of an industry's related products, i.e., costs may be subadditive, there may exist one or more submarkets in which competitive entry is possible by a firm producing less than all products. Thus, a multiproduct natural monopoly need not be "sustainable." W. BAUMOL, J. PANZAR & R. WILLIG, supra note 47, at 173.
72 "But what will happen if a second newspaper in city #1 wants to join? The members are already being provided with news from city #1, through its first member newspaper. As a result, entry by the second newspaper in city #1 will not lower the costs of the incumbent newspapers—it will not add anything to the efficiency of the organization, assuming that news stories are fungible and that the incumbent newspaper in city #1 is doing its job well. However, entry by the second newspaper in city #1 may injure the first newspaper in city #1 substantially. Before entry, the first newspaper in city #1 had a...cost advantage over the second newspaper in city #1. After the second newspaper's entry the first newspaper will face much stiffer competition. The cost savings produced by membership in the joint venture will accrue not to the member newspaper, but to the newspaper's subscribers or adver-
cities that are in the cooperative, the lower will be the average unit cost of gathering news from these cities. However, since Associated Press has competitors who sell different "versions" of the news, plus competitors in specialized submarkets such as financial or sports reporting, a cooperative news gathering service is a natural monopoly that is not sustainable. A second reason why the cost of gathering news can be sharply reduced by a cooperative is that transmission of news among the members is nearly costless due to the public good nature of information.

C. Public Good-Natural Monopolies

A private good is one that if consumed by A cannot be consumed by B, C, or D. An apple is an example. On the other hand, a public good is one that, once produced, can be consumed by an unlimited number of people without additional cost. National defense, television broadcasts, and fireworks displays, are examples. In many cases, excluding those who are unwilling to pay a positive price for public goods is difficult or impossible. This is the "free rider" problem. For example, excluding those who do not pay for national defense is usually not practical. The free rider problem may prevent private producers from receiving adequate compensation for their efforts, so that markets tend to produce less than the socially optimal amount of public goods and services. If private producers are to have a financial incentive to produce public goods, monopoly grants in the form of patents, copyrights, or other property rights are thought by many to be necessary to solve the free rider problem. In International News Service v.

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71 For a discussion of the aspects of the distinction between private and public goods, see W. Nicholson, supra note 14, at 708-09; D. Dewey, supra note 14, at 242; E. Mansfield, supra note 14, at 471; Borcherding, supra note 14, at 111; Coase, supra note 14, at 357; Samuelson, supra note 14, at 387.

72 This means that the marginal cost of additional consumption is zero. For example, the marginal cost of providing national defense to an additional person is zero. W. Nicholson, supra note 14, at 707-08; W. Baumol & A. Blinder, Economics 541 (2d ed. 1982).

73 W. Baumol & A. Blinder, supra note 74, at 540. Other examples are spraying swamps to kill disease-bearing mosquitoes and removing snow to improve driving conditions for all automobiles using the cleaned street. Id. W. Nicholson, supra note 14, at 707; W. Baumol & A. Blinder, supra note 74, at 540; R. Heilbroner & L. Thurow, The Economic Problem 228 (5th ed. 1978); E. Mansfield, supra note 14, at 473.

74 W. Nicholson, supra note 14, at 715-16; W. Baumol & A. Blinder, supra note 74, at 540; R. Heilbroner & L. Thurow, supra note 75, at 228; E. Mansfield, supra note 14, at 473.

75 W. Nicholson, supra note 14, at 709-10; C. Ferguson & S. Maurice, Economic Analysis 494-95 (3d ed. 1978); R. Heilbroner & L. Thurow, supra note 75, at 472-73. Some public goods, such as national defense, are oversupplied while other public goods, such as prison reform, are undersupplied.

Associated Press (INS), INS made a practice of obtaining news through early publications and bulletins from Associated Press and selling such news to its own customers as taken or in rewritten form. The Supreme Court held that INS was guilty of unfair competition and could be enjoined from misappropriating the news items during the period the information had commercial value. The INS case demonstrates that the news gathered by Associated Press is a public good; the Court prohibited INS from getting a free ride.

Both natural monopoly and public good concepts concern goods and services that are dominated by common costs, the difference being that in natural monopoly, the spreading of common production cost (e.g., fixed cost) allows a firm to produce output at less cost than two or more firms (e.g., an electric utility), whereas with a public good, common consumption cost allows an unlimited number of people to consume the same good (e.g., national defense). However, some goods and services, (e.g., those which are primarily information), are both natural monopolies and public goods because both production and consumption costs are common. It has been shown that Associated Press is a natural monopoly and that news is a public good. Other examples of public good-natural monopolies concern musical performance rights, product standards, and college athletic standards.  


80 To the extent that INS rewrote the news it would not have violated copyright laws. For example, § 102(b) of the current copyright law states: "In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work." 17 U.S.C. § 102(b) (1976). In order to prevent INS from getting a free ride on Associated Press's news, the Supreme Court said that news was quasi property and that INS was guilty of unfair competition and misappropriation. Id. at 242.

81 Stripped of all disguises, the process amounts to an unauthorized interference with the normal operation of complainant's legitimate business precisely at the point where the profit is to be reaped, in order to divert a material portion of the profit from those who have earned it to those who have not; with special advantage to defendant in the competition because of the fact that it is not burdened with any part of the expense of gathering the news. . . . [A] competitor . . . cannot be heard to say that . . . [news] is too fugitive or evanescent to be regarded as property. It has all the attributes of property necessary for determining that a misappropriation of it by a competitor is unfair competition. Id. at 240.

82 The injunction "only postpones participation by complainant's competitor in the process of distribution and reproduction of news that it has not gathered, and only to the extent necessary to prevent that competitor from reaping the fruits of complainant's efforts and expenditure, to the partial exclusion of complainant, and in violation of the principle that underlies the maxim sic utere tuo, et." Id. at 241.

83 W. Sharkey, supra note 47, at 47; W. Baumol, J. Panzar & R. Willig, supra note 47, at 301-02.

84 Associated Press, 326 U.S. at 1.


87 Radiant Burners, Inc., 364 U.S. at 656.

88 W. Sharkey, supra note 47, at 47; W. Baumol, J. Panzar & R. Willig, supra note 47, at 301-02.
The local natural monopoly situations discussed first, such as stadiums, newspapers, and cable TV, differ in at least three respects from the public good-natural monopoly cases, which involve such things as news, stock exchanges,\textsuperscript{90} realty boards,\textsuperscript{90} and musical performance rights.\textsuperscript{91} The former natural monopolies involve markets (a) for private goods that tend to be (b) geographically local, and have (c) monopolistic market structures.\textsuperscript{92} Natural monopolies like Associated Press involve markets (a) for public goods that tend to be (b) regional, national, or international, and often have (c) a competitive market structure.\textsuperscript{93} Some of the public good-natural monopoly cases are simple access or unintegrated cases,\textsuperscript{94} while others involve horizontal price coordination.\textsuperscript{95}

D. Vertically and Horizontally Integrated Natural Monopolies

In the antitrust literature, the natural monopoly cases that involve vertical integration\textsuperscript{96} or horizontal price fixing are usually lumped together with the simple access or unintegrated natural monopoly cases involving stadiums, newspapers, cable TV, cooperative news gathering, etc.\textsuperscript{97} The vertically and horizontally integrated cases are given separate classifications here because, in addition to simple access issues, these cases require a complex rule of reason analysis, and judicial utility regulation is often implicated.\textsuperscript{98}

Vertical integration is easier to define theoretically than operationally. The standard definition of vertical integration is deceptively simple: a firm is vertically in-

\textsuperscript{89} Silver, 373 U. S. at 341.
\textsuperscript{90} Realty Multi-List, Inc., 629 F. 2d 1351.
\textsuperscript{91} Broadcast Music, Inc., 441 U. S. at 1.
\textsuperscript{92} Gamco, Inc., 194 F. 2d at 484; American Fed'n of Tobacco Growers, 183 F. 2d at 872; Lorain Journal Co., 342 U. S. at 143; Paschall, 727 F. 2d at 692.
\textsuperscript{93} Associated Press, 326 U. S. at 1 (1945) (United Press International and Reuters were competitors of Associated Press at the time of the suit. See Note, supra note 6, at 451 n. 65); Broadcast Music, Inc., 441 U. S. at 1 (American Society of Composers, Authors & Publishers and Society of European Songwriters, Authors and Composers are competitors of BMI); Silver, 373 U. S. at 341 (international stock exchanges, the American Stock Exchange, and regional exchanges are competitors of the New York Stock Exchange).
\textsuperscript{95} National Collegiate Athletic Ass'n, 104 S. Ct. 2948; Broadcast Music, Inc., 441 U. S. 1 (1979).
\textsuperscript{96} "The word 'integration' means only that administrative direction rather than a market transaction organizes the cooperation of two or more persons engaged in a productive or distributive activity." R. Bork, supra note 2, at 227. See Coase, The Nature of the Firm, 4 Economica (n.s.) 386 (1937); O. Williamson, Markets and Hierarchies: Analysis and Antitrust Implications 109, 117 (1975).
\textsuperscript{98} The vertically and horizontally integrated natural monopoly cases are discussed in Section V.
tegrated when "two or more separable stages of production are combined under common ownership."99 The problem is to define a "stage of production." "Within every establishment, the same productive functions may be conceived as a continuous process or, alternatively, subdivided into a vast number of separate operations, each of which may be identified as a separate stage of production."100 Since defining vertical integration in terms of technology is highly arbitrary, vertical integration is often defined operationally in terms of economics.101 It has been defined as the "[transmission] from one of [a firm's] departments to another [of] a good or service which could, without major adaptation, be sold in the market."102 In practice, we do not know if stages are economically separable unless we actually observe successful separate production by at least some firms.103 A similar operational approach will be employed in this article. Cases will be classified as vertically integrated if courts consider (1) whether a natural monopolist should be allowed to take over a vertically related function currently performed by others104 or (2) whether it should be divested of an activity that is vertically related to but separable from its monopoly.105

101 One approach to this problem is simply to use the Census Department's Standard Industry Classifications (SIC) and to define economically separable stages as successive 4-digit SIC industries. M. Gort, supra note 100. The SIC system classifies industries into 2-digit, Major Groups (e.g., 37—Transportation Equipment), 3-digit, Groups (e.g., 371—Motor Vehicles and Motor Vehicle Equipment), 4-digit, Industries (e.g., 3711—Motor Vehicles and Passenger Car Bodies), etc. Standard Industry Classification Manual (Washington, D.C. Government Printing Office, 1972). See H. Peterson, supra note 41, at 42-44. Alternatively, production can be divided into intuitively reasonable stages—for example, extraction, refining, semifinished manufacturing, finished manufacturing, transportation, wholesale distribution, and retail distribution, Livesay and Porter, Vertical Integration in American Manufacturing, 1899-1948, 29 J. Econ. Hist. 494, or as the difference between normal sales and hierarchical relations. O. Williamson, supra note 96, at 109, 117. Even if there is no clear absolute definition of vertical integration, the degree of vertical integration can be compared between firms or over time using such measures as the ratio of value-added to sales, or the ratio of employment in all "auxiliary" activities to aggregate employment. M. Gort, supra note 100 (inversely) the ratio of corporate sales to gross corporate product; Laffer, Vertical Integration by Corporations 1929-1965, 51 Rev. of Econ. & Stat. 91 (1969); the number of "stages" (Livesay and Porter, 1969); or the ratio of value-added by the firm to the "final product value" of the firm's output (the value of all final products incorporating any of the firm's output), M. Rusin & J. Atwood, Quantitative Definition and Measurement of Vertical Integration, Research Study No. 112, American Petroleum Institute, 1976.
102 Adelman, Integration and Antitrust Policy, 63 Harv. L. Rev. 27 (1949).
103 Gamco, Inc., 194 F.2d 484, which involved the question of whether the owner of a local natural monopoly could deny access to a competitor who was vertically or horizontally integrated has been classified as an unintegrated natural monopoly case.
104 Paschall, 695 F.2d 322; Byars, 609 F.2d 843.
The vertically integrated cases are concerned with questions such as whether a natural monopoly should be allowed to vertically integrate activities not arguably within its boundaries due to efficiencies of integration or whether such integration should be prohibited due to potential adverse effects on costs and efficiency. An example might be whether a newspaper, which is a local natural monopoly, should be prohibited from vertically integrating the distribution stage as in *Paschall v. Kansas City Star.*\textsuperscript{106} *Otter Tail Power Co. v. United States*\textsuperscript{107} posed the question of whether a vertically integrated power company, which produced, transmitted, and distributed power and had a natural monopoly of the transmission stage, should be required to transmit power to municipalities that had refused to renew the power company's retail distribution franchises, i.e., whether vertical integration of power transmission and distribution involves a gain or loss of efficiency. Other examples are whether a local telephone monopoly should be required to interconnect with competitors of their long distance service as posed in *MCI Communications v. American Telephone & Telegraph*\textsuperscript{108} or whether local telephone monopolies should be allowed to engage in long distance service at all, *United States v. Western Electric Co.*\textsuperscript{109}

Cases will be classified as horizontally integrated when courts must decide 1) whether horizontal price fixing is integral to the efficient exploitation of a natural monopoly or (2) whether the natural monopoly should be dissolved into more than one competing entity to reduce its market power despite the loss of efficiency.\textsuperscript{110} An alternative remedy to be considered is judicial regulation of its conduct.\textsuperscript{111} The horizontal coordination cases concern questions such as whether all railroads that use a terminal system should be allowed to fix prices collectively as a natural monopoly due to the resulting efficiency gains or whether the anticompetitive threat

\textsuperscript{106} *Paschall*, 695 F.2d 322.

\textsuperscript{107} *Otter Tail*, 410 U.S. 366.

\textsuperscript{108} *MCI Communications Corp.*, 708 F.2d 1081.

\textsuperscript{109} *Western Elec. Co.*, 552 F. Supp. 131 (D. D.C. 1982), aff'd sub nom., *Maryland v. United States*, 103 S. Ct. 1240 (1983). The full details of compliance with the Modified Final Judgment were approved on August 5, 1983 (memorandum and order). The term “Modified Final Judgment” reflects the relationship between this consent decree and the original consent decree that resolved the 1949 antitrust suit brought by the United States to break up AT&T. See *Western Elec. Co.*, 1956 Trade Cas. (CCH) ¶ 68,246 (original consent decree).


\textsuperscript{111} *Terminal R.R. Ass’n*, 224 U.S. 383, 412-13 (1912). See R. POSNER, supra note 20, at 211.

\textsuperscript{denied}, 449 U.S. 1096 (1981); Town of Massena v. Niagara Mohawk Power Corp., 1980-2 Trade Cas. (CCH) ¶ 63,526 (N.D. N.Y. 1980). The vertically integrated natural monopoly cases are discussed in Section V.
such an integrated system poses to shippers requires that it be dissolved into three competing systems (United States v. Terminal Railroad Association\textsuperscript{112}). Aspen Skiing Co. v. Aspen Highlands Skiing presented the issue of whether four mountain facilities for downhill skiing should participate in a joint ski ticket arrangement for the convenience of skiers or whether such a joint arrangement would provide owners of competing ski facilities with a forum for illegal price fixing.\textsuperscript{113} Whether efficiency considerations inherent in natural monopoly justified collective selling of musical performance rights or whether the market power inherent in collective selling requires individual dealing between copyright owners and television producers was the question in Broadcast Music, Inc. v. Columbia Broadcasting System.\textsuperscript{114}

III. AMBIGUITIES IN THE REFUSAL TO DEAL CASE LAW

A. General Case Law on Monopoly

The Supreme Court defined monopoly power as "the power to control prices or exclude competition" in United States v. Grinnell.\textsuperscript{115} However, mere possession of monopoly power is not illegal. In addition to possession of monopoly power in the relevant market,\textsuperscript{116} there must also be "willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of superior product, business acumen, or historic accident."\textsuperscript{117} The rule proceeds from the premise that monopolists are "tolerated but not cherished" because of "considerations of fairness and the need to preserve proper economic incentives."\textsuperscript{118} Natural monopoly is a classic case of legal monopoly.\textsuperscript{119} Other examples of lawful monopolies are those based on innovation or patents.\textsuperscript{120} Generally, liability for unlawful monopolization has required proof of either specific intent to monopolize\textsuperscript{121}

\begin{thebibliography}{99}
\bibitem{112} {Terminal R.R. Ass'n,} 224 U.S. 383.
\bibitem{113} {Aspen Skiing Co.,} 105 U.S. 2847.
\bibitem{114} {Broadcast Music Inc.,} 441 U.S. 1.
\bibitem{117} Grinnell, 384 U.S. at 570-71.
\bibitem{118} Berkey Photo, Inc. v. Eastman Kodak Co., 603 F.2d 263, 274 (2d Cir. 1979), cert. denied, 444 U.S. 1093 (1980).
\bibitem{121} "It is . . . not always necessary to find a specific intent to restrain trade or to build a monopoly in order to find that the antitrust laws have been violated. It is sufficient that a restraint of trade . . ."
\end{thebibliography}
or anticompetitive effects that result from a monopolist's actions.\textsuperscript{122}

\section*{B. The Ambiguities in the Refusal to Deal Case Law}

Whether or not a firm is a monopolist, the general rule is that it has no duty to deal so long as it makes the determination unilaterally as the Supreme Court held in \textit{United States v. Colgate & Co.}\textsuperscript{123} As exceptions to the general rule, there are three overlapping and ambiguous antitrust doctrines that impose a duty to deal upon a monopolist. The first exception is a straightforward "intent" test that originated from dicta in \textit{Colgate}, in which the Supreme Court stated that a business is free to deal with whomever it pleases so long as it has no "purpose to create or maintain a monopoly."\textsuperscript{124} But, since intent must be inferred from conduct,\textsuperscript{125} and since a great deal of conduct is included in a vast middle range that is neither clearly exclusionary nor clearly competitive (and may be characterized as either), the intent test is ambiguous at best.\textsuperscript{126}

The second exception is the bottleneck or essential facilities doctrine\textsuperscript{127} which provides that a business or group of businesses that control a scarce facility has an obligation to give competitors reasonable access to it.\textsuperscript{128} But, as discussed in the introduction, there is a great deal of confusion as to cases and fact patterns to which the essential facilities doctrine applies.\textsuperscript{129} Moreover, the intent test and the essential facilities doctrine overlap.\textsuperscript{130}


\textsuperscript{122} United States v. Columbia Steel Co., 334 U.S. 495, 531-32 (1948).


\textsuperscript{125} Some courts have given weight to the defendant's subjective state of mind. \textit{See, e.g.}, Southern Blowpipe & Roofing Co. v. Chattanooga Gas Co., 360 F.2d 79 (6th Cir. 1966), cert. denied, 393 U.S. 844 (1968). Other courts have adopted a "fairness" approach to evaluate the monopolist's conduct, measured by industry practice, with allowance made for otherwise improper defensive tactics. See Union Leader Corp. v. Newspapers of New England, 180 F. Supp. 125 (D. Mass. 1959), \textit{modified}, 284 F.2d 582 (1st Cir. 1960), cert. denied, 365 U.S. 833 (1961). Most courts, however, have been content to adopt standardless language such as "bold, relentless and predatory," \textit{Lorain Journal Co.}, 342 U.S. at 149, while others have examined legitimate business purpose. \textit{See Times-Picayune Publ. Co.}, 345 U.S. 594.

\textsuperscript{126} Hawk, \textit{Attempts to Monopolize—Specific Intent as Antitrust's Ghost in the Machine}, 58 C\textit{ornell L. Rev.} 1121 (1973). L. \textit{Sullivan}, \textsuperscript{ supra} note 5, at 135-36 (1977). 3 P. \textit{Areeda} & D. \textit{Turner}, \textsuperscript{ supra} note 9, at \textsuperscript{\textsection} 603 (1978), \textsuperscript{\textsection} 729.5d (1982 supp.).

\textsuperscript{127} \textit{Terminal R.R. Ass'n}, 224 U.S. 383.

\textsuperscript{128} \textit{Gamco}, Inc., 194 F.2d 484.

\textsuperscript{129} \textit{See supra} notes 4-6 and accompanying text.

\textsuperscript{130} "In theory, the distinction between the 'intent' theory and the 'bottleneck' [or essential facility] theory is that the former focuses on the monopolist's state of mind while the latter examines the detrimental effect on competitors. In practice, however, there exist many overlapping considerations."}
The third exception concerns concerted refusals to deal which in many situations are per se violations of the Sherman Act. This exception is illustrated in Klor’s Inc. v. Broadway-Hale Stores131 and Radiant Burners, Inc. v. Peoples Gas Light & Coke Co.132 However, “there is more confusion about the scope of the per se rule against group boycotts than in reference to any other aspect of the per se doctrine.”133 Moreover, many franchisees and distributors have discovered to their chagrin that the law ordinarily offers them no remedy against unilateral termination absent proof that a conspiracy took place.134

The next Section’s conclusion is that in simple access or unintegrated natural monopoly cases, a monopolist has an obligation to give competitors reasonable access up to the limits of its capacity. However, with respect to customers the monopolist has the burden of proving an efficiency justification for its economically motivated refusal to deal. In Section V and VI, in which the more complex vertically integrated and collective price fixing natural monopoly cases are discussed, it is concluded that the rule of reason must be used.

IV. THE SIMPLE ACCESS OR UNINTEGRATED NATURAL MONOPOLY CASES

The cases involving access by competitors to a natural monopoly are discussed separately from those involving economically motivated refusals to deal with customers of the natural monopoly. The unintegrated cases are relatively easy cases because it is usually apparent whether there are efficiency justifications for refusal to grant access or economically motivated discriminatory dealing.

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133 L. Sullivan, supra note 5, at 229-30. Realty Multi-List, Inc., 629 F.2d at 1366; R. Bork, supra note 2, at 330.

According to conventional wisdom, boycotts (or agreements among competitors to refuse to deal) are illegal per se. But that proposition is easily shown to be false. Many agreements not to deal with others are perfectly lawful, and will certainly remain so, because they are indispensable to the conduct of the business involved. The categories of lawful and unlawful boycotts have never been defined, however, so that the law makes many mistakes and does much harm.

E.A. McQuade Tours, Inc. v. Consolidated Air Tour Manual Comm., 467 F.2d 178 (5th Cir. 1972), cert. denied, 409 U.S. 1109 (1973) (summarizing the major cases dealing with the problem).

134 See, e.g., Daniels v. All Steel Equip., Inc., 590 F.2d 111 (5th Cir. 1979); Pray Chevrolet Sales v. General Motors Corp., 536 F.2d 683, 686 (6th Cir. 1976); Burdett Sound, Inc. v. Altec Corp., 515 F.2d 1245 (5th Cir. 1975); Elder-Beeman Stores Corp. v. Federated Dep’t Stores, 459 F.2d 138 (6th Cir. 1972). See Realty Multi-List, 629 F.2d at 1362, in which the Fifth Circuit stated that there is confusion about the scope of the per se rule in group boycotts.
A. Access by Competitors to a Natural Monopoly

The access to natural monopoly cases discussed in detail below are ordered in terms of whether the natural monopoly can support an additional competitor. In the first case, which involved the sale of a local natural monopoly, there was no question of access by an additional competitor; the court held that the antitrust laws required that the victor for a natural monopoly market prevailed by valid competitive conduct. The second case involved a lessee whose access to a natural monopoly was terminated for anticompetitive reasons and who had been replaced with an innocent incumbent. Since the market could not support an additional competitor, the equitable remedy the court adopted was to require the monopolist to allow the plaintiff to have the next available opening whenever it should occur. In the third case, in which it is not clear whether the market will support two competitors, the court placed the burden of proving that the market could not support the two firms on the defendant. In the next three cases, which involved natural monopolies that could support additional competitors, the courts merely enjoined the monopolists from denying access. The final group of cases involve public good-natural monopolies for information and standard setting organizations. Because there are no significant limits on the number of competitors that can be supported by these monopolies, there are few efficiency justifications for limiting membership; therefore, courts scrutinize membership requirements for evidence of attempts to convert these organizations into cartels.

1. Access by Competitors to Local Natural Monopoly

In Fishman v. Wirtz, two groups of buyers were attempting to buy a professional basketball franchise located in Chicago. The seller chose the plaintiffs' group over the defendants' group. However, the defendants' group included the owner of the stadium in which the team played. The stadium owner not only refused to lease the stadium to plaintiffs' group, he engaged in a conspiracy with certain league members to deny transfer of the franchise to the plaintiffs. The district court held that Chicago was a natural monopoly market with regard to professional basketball, that the stadium in which the team played was an essential facility, and

136 Gamo, Inc., 194 F.2d 484.
137 Hecht, 570 F.2d 982.
139 Associated Press, 326 U.S. 1 (1945); Realty Multi-List, 629 F.2d 1351; Silver, 373 U.S. 341; American Soc'y of Composers, Authors & Publishers, 1940-43 Trade Cas. ¶ 56,104 at 403, 405, 1950-51 Trade Cas. ¶ 62,595 at 63,753, 63,756; Radiant Burners, Inc., 364 U.S. 656; Eliason Corp. v. National Sanitation Found., 614 F.2d 126 (6th Cir. 1980), cert. denied, 449 U.S. 826 (1980); Marjorie Webster Junior College, 432 F.2d 650.
140 Fishman, 1981-82 Trade Cas. (CCH) ¶ 64,378 (N.D. Ill. 1981).
141 Id. at 74,755-56.
that the antitrust laws required that the victor for a natural monopoly market prevailed by valid competitive conduct. As Judge Posner has said: "[w]here resources are shifted pursuant to a voluntary transaction, we can be reasonably confident that the shift involves a net increase in efficiency." The plaintiffs were eventually awarded damages totaling $13.3 million; however, the franchise was not restored to the plaintiffs as a remedy.

In *Gamco, Inc. v. Providence Fruit & Produce Building, Inc.*, the entire local wholesale produce trade was centered in one building. A tenant, whose lease renewal was refused, filed an antitrust suit. The lessor defended on two grounds: first, that its discriminatory lease policy could never amount to monopoly because alternative selling sites could be constructed. The First Circuit held that the produce building was a monopoly.

The short answer to this is that a monopolized resource seldom lacks substitutes; alternatives will not excuse monopolization. . . .[i]t is only at the Building itself that the purchasers to whom a competing wholesaler must sell and the rail facilities which constitute the most economical method of bulk transport are brought together. To impose upon plaintiff the additional expenses of developing another site, attracting buyers, and transshipping its fruit and produce by truck is clearly to extract a monopolist's advantage.

The lessor also contended that its refusal to renew was justified because the tenant had violated a covenant not to transfer any interest in the lease to anyone not a bona fide resident of the state without the lessor's permission. The court found sufficient evidence that the lessor's policy of refusing access to tenants with out-of-state affiliations was an effort to insulate local dealers from firms with buyers or affiliates in other cities, which translates into an attempt to insulate local dealers

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142 *Id.* at 74,756. Washington Professional Basketball Corp. v. National Basketball Ass'n, 1956 Trade Cas. (CCH) ¶ 68,560, 174 F. Supp. 154 (S.D. N.Y. 1956), a district court held that plaintiff's allegations that it did everything required to acquire the remnants of a defunct professional basketball team but was prevented from completing the acquisition solely by the defendants' alleged illegal conspiracy stated a claim upon which relief could be granted. In *Petro v. Madison Square Garden Corp.*, 1958 Trade Cas. (CCH) ¶ 69,106 (S.D. N.Y. 1958), a district court held that a complaint charging that a corporation and certain executive officers combined to restrain trade and to establish a monopoly in major league professional hockey teams stated a claim upon which relief could be granted.


144 48 Antitrust & Trade Reg. Rep. 500-02 (March 21, 1985).

145 *Gamco, Inc.*, 194 F.2d 484.

146 The building was constructed by a subsidiary company of the New Haven Railroad and was subsequently leased to Providence Fruit and Product Building Incorporated, a company in which the stock was mostly held by local wholesalers. *Id.* at 486.

147 *Id.* at 487.

148 *Id.* at 488 n.4. See *United States v. Standard Oil of Calif.*, 362 F. Supp. 1331, 1341 (N.D. Cal. 1972), *aff'd*, 412 U.S. 924 (1973), in which the U.S. Government alleged a conspiracy between defendant and officials of the Government of American Samoa (GAS) to grant defendant oil company an exclusive long-term lease to storage facilities in an oil tank farm owned by GAS and a conspiracy to thwart attempts of others to build competing storage facilities. The district court held that the defendant...
from vertically and horizontally integrated competitors. The First Circuit held that "it is incumbent on one with the monopolist's power to deny a substantial economic advantage such as this to a competitor to come forward with some business justification."\(^{149}\) The remedy imposed by the First Circuit took into account the limits of the natural monopoly in question;\(^{150}\) it held that the lessor must restore the lessee immediately or as soon as space became available.

In *Hecht v. Pro-Football, Inc.*,\(^ {151}\) the first issue was whether the lease of a public stadium in Washington, D.C. to a professional football team with a restrictive covenant that excluded other professional football teams from the stadium violated the antitrust laws.\(^ {152}\) There was evidence that the stadium could clearly accommodate two football teams because locker facilities, practice sessions, and choice of playing dates made sharing the stadium practical and convenient.\(^ {153}\) Moreover, the stadium was a natural monopoly in terms of the market structure definition. The District of Columbia Circuit held that, when a restrictive covenant covers a natural monopoly, the restraint is unreasonable per se, provided the facility can be shared practically. It also held that the trial court erred in failing to give the requested essential facility instruction.\(^ {154}\) However, these holdings were not dispositive of the case.

\(^{149}\) *Gamco, Inc.*, 194 F.2d at 489.

\(^{150}\) *Deesen*, 358 F.2d 165. In *Deesen*, a professional golfer was denied membership in the Professional Golfers' Ass'n (PGA). Membership is necessary to compete in substantially all professional golf tournaments in the United States. The Ninth Circuit held that because "the limitations of time and space make it impossible to play a full tournament with a field of more than 150 or 160 golfers, some means had to be found to limit the number of golfers who could enter these tournaments. PGA rules limiting entry to PGA members, approved tournament players and a few others, and defining the qualifications necessary for non-member entrants, were intended to accomplish this purpose." *Id.* at 167.


\(^{152}\) The lease was authorized by a federal statute, so no question of the "state action" exemption to the federal antitrust laws arose. *Hecht*, 444 F.2d at 932-33. *See* the discussion of the "state action" doctrine infra note 175.

\(^{153}\) *Hecht*, 570 F.2d at 993. In a recent Ninth Circuit decision, *Preferred Communications*, 754 F.2d 1396 (9th Cir. 1985), the court held that even though the state action doctrine prevented an antitrust attack on a city's decision to allow only one cable TV company in each designated region of the city, it may be challenged under the First Amendment. With respect to the city's claim that regulation is justified because cable TV is a natural monopoly, the court declined to resolve the issue on a motion for failure to state a claim because the plaintiff alleged that no natural monopoly exists and because there is space available on telephone poles and physical conduits to accommodate more than one system.

\(^{154}\) *Hecht*, 570 F.2d at 993.
The ultimate issue in the case was whether the Washington, D.C. market for professional football could sustain two firms. Given the difficulty of producing creditable evidence before a second team has attempted to compete, a determination of which party had the burden of proof was of great importance. The District of Columbia Circuit said: "we hold merely that when, as here, a defendant seeks to avoid a charge of monopolization by asserting that it has a natural monopoly owing to the market's inability to support two competitors the defendant, and not the plaintiff, bears the burden of proof on that score." The court based its holding in part on United States v. Aluminum Co. of America, in which Judge Learned Hand said in dicta that a firm could defend against a charge of monopolization by showing that the monopoly was "thrust upon it." 

In American Federation of Tobacco Growers v. Neal (AFT), a local tobacco association, which allotted the time of major tobacco buyers to its member warehouse owners, refused to admit to membership and to allot time to a cooperative warehouse even though the major buyers could schedule the cooperative without depriving other warehouses of time. The cooperative tried to function alone but was unable to do so because the major buyers were unwilling to make special ar-
Arrangements with the cooperative, and farmer customers were unwilling to sell at an auction at which major buyers were not represented. The Fourth Circuit held that admission to membership in the association and allotment of selling time was a prerequisite to doing business in the market. The association defended its refusal to admit the cooperative and allot it buying time on the grounds that the cooperative was located outside the city limits with resulting advantages of lower taxes, real estate values, and building costs. The court held that the act incorporating the trade association referred to the tobacco market not municipal limits and that an attempt to eliminate a lower cost competitor was an unreasonable restraint of trade. In the AFT case, the natural monopoly could clearly support another competitor and there was no reasonable efficiency justification for excluding such competitor.

In United States v. Southwestern Greyhound Lines, Inc., several bus lines that jointly operated a bus terminal evicted another bus line from the terminal because it refused to cease competing with the terminal operators for certain routes. A district court held that an antitrust violation was established even though the evicted bus line continued operation at a nearby, but distinctly inferior, site. In United States v. New England Fish Exchange, a district court held that, in lieu of dissolution, an organization that provided a place where fishermen and dealers could transact business must reform its rules so as to permit all applicants to become members under reasonable regulations.

2. Access by Competitors to Public Good-Natural Monopoly

Associated Press v. United States (discussed earlier as an illustration of a natural monopoly—that is not sustainable) involved a nonprofit cooperative of 1200 newspapers that gathered and distributed news and included ninety-six percent of

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159 Id. at 872.
160 See Rogers v. Douglas Tobacco Bd. of Trade, 266 F.2d 636 (5th Cir. 1957), cert. denied, 361 U.S. 833 (1959) (local tobacco association imposed restrictions on daily selling time of warehouses in the area; it would be lawful for the association to arrange selling times for local warehouses in order to allow potential buyers the widest possible range of choice, but it would be unlawful use of its power to restrict competition by artificial restrictions on the selling time available to warehouses entering the tobacco market for the first time or to warehouses that wanted to expand their existing capacity). Asheville Tobacco Bd. of Trade, Inc. v. FTC, 263 F.2d 502 (4th Cir. 1959)(facts similar to Rogers).
162 New England Fish Exch., 258 F. 732.
163 The court also held that several of the Fish Exchange's rules were unreasonable restraints of trade: a rule assessing dealers a certain amount on all fish purchased, but which is not reasonably related to the exchange's expenses, tends to increase fish prices; a rule which precluded commission men, who have privileges on the exchange, from selling fish to retailers unreasonably restrained trade; and a rule requiring fishermen to pay a certain percentage on the highest bid made for their fish, although the bid was not accepted, tends to compel a sale whether fishermen were satisfied with the bid. Id. at 748-50.
164 Associated Press, 326 U.S. 1.
morning newspapers in the United States among its membership. The government brought a Sherman Act suit challenging Associated Press's restrictive bylaws that prohibited its members from selling news to nonmembers and granted members power to block local competitors from membership.\(^\text{165}\) The Supreme Court held that a newspaper without access to Associated Press was at a competitive disadvantage and that an agreement to restrain competition is not saved from Sherman Act condemnation just because it does not inhibit competition in all aspects. With respect to the argument that Associated Press's exclusionary bylaws could not violate the Sherman Act because it had competitors and therefore was not a monopoly, the Supreme Court rejected the "indispensability test."\(^\text{166}\) In doing so, it implicitly rejected the market structure theory of natural monopoly that implies a market cannot be a natural monopoly unless only one firm is sustainable. As shown above, Associated Press is a public good-natural monopoly.\(^\text{167}\)

In other cases concerning public good-natural monopolies, those involving markets for information in which there are virtually no technical limits on the number of firms that can be granted access, courts have held that membership criteria must be related to reasonable goals,\(^\text{168}\) members may not be expelled without due process,\(^\text{169}\) and there can be no unreasonable discrimination among members

\(^{165}\) The Fifth Circuit has said that Associated Press is more accurately characterized as horizontal territorial division rather than as a group boycott. Realty Multi-List, 629 F.2d at 1367 n.30.

\(^{166}\) Associated Press, 326 U.S. at 18. Although it is possible to function independently, exclusion of a competitor from a natural monopoly is actionable when the competitor is greatly handicapped. American Fed'n of Tobacco Growers, 183 F.2d 869, 872; Gamco, Inc., 194 F.2d 484.

\(^{167}\) Moreover, a dissenting opinion by Justice Roberts speculated that a decree invalidating Associated Press's By-Laws and requiring access may make single firm dominance more likely. Associated Press, 326 U.S. at 48.

\(^{168}\) Realty Multi-List, 629 F.2d at 1351. Realty Multi-List, Inc. (RML) is a real estate service in which member brokers pool their listing. The service increases market information and therefore increases market efficiency. The vast majority of brokers in the relevant county were members. Although the defendant had competitors at one time, the slow process of absorption had resulted in its being the sole listing service by the time of the trial. "In essence, a multiple listing service like RML functions as a trade exchange for the purchase and sale of real estate, an analogy that has not gone unnoticed in the cases and literature dealing with these institutions." Id. at 1356. See, e.g., Grillo v. Board of Realtors, 92 N. J. Super. 202, 219 A.2d 635 (Ch. Div. 1966); Austin, Real Estate Boards and Multiple Listing Systems as Restraints of Trade, 70 COLUM. L. REV. 1325, 1353-62 (1970). The Fifth Circuit said that the defendants required that members: a) have a favorable credit rating and business reputation was subjective; b) maintain an active real estate office open during customary business hours was not related to a reasonable goal; and c) pay a $1000 membership fee that was not related to start-up costs and pro rata contribution to maintenance (initially the membership fee was $100 but had been as high as $3000). It held that membership requirements were not per se unreasonable, but that existing restrictions were facially unreasonable. Reasonable ancillary restraints are allowed, but the rationale for exclusion from a multiple listing service must be closely scrutinized in terms of operational needs of the service.

\(^{169}\) Silver v. New York Stock Exch., 373 U.S. 341 (1963). New York Stock Exchange (NYSE) discontinued direct-wire telephone connections between a nonmember broker and its members. Private telephone connections are necessary to execute and monitor stock transactions. Without such access a stockbroker is generally unable to carry on his business. The broker was not given notice, an opportunity to be heard, an explanation of the NYSE's action. The Supreme Court held that the termination
or unreasonable limitations placed on members freedom of contract.170

Standard setting organizations are also public good-natural monopolies.171 They are generally in the best interests of consumers because they substantially reduce information costs and therefore consumer research costs. However, standard setting may lead to price fixing in concentrated industries whose products do not change rapidly over time because it is easier to agree on a price of a standardized product.172 Moreover, innovation may be retarded because standards are outdated or

tion was not exempt from antitrust scrutiny. "[E]xchange self regulation is to be regarded as justified in response to antitrust charges only to the extent necessary to protect the achievement of the aims of the Securities Act." Id. at 361-62. As observed in Gordon v. New York Stock Exch., 422 U.S. 659 (1975): "The mere existence of the Commission's reserve power of oversight with respect to rules initially adopted by the exchanges...does not necessarily immunize those rules from antitrust attack... The question...is whether exchange rules...are 'necessary to make the Securities Exchange Act work.'" Id. at 692-93 (Stewart, J., concurring)(quoting Silver, 373 U.S. at 357). In United States v. National Ass'n of Sec. Dealers, 422 U.S. 694 (1975), the Court noted that "[i]mplied antitrust immunity is not favored, and can be justified only by a convincing showing of clear repugnancy between the antitrust laws and the regulatory system." Id. at 719. See also Cantor v. Detroit Edison Co., 428 U.S. 579, 597 (1976)("The Court has consistently refused to find that regulation gave rise to an implied exemption without first determining that exemption was necessary in order to make the regulatory Act work, 'and even then only to the minimum extent necessary' "); United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 348 (1963); United States v. Borden Co., 308 U.S. 188, 197-206 (1939).

At the time Silver was decided brokerage commissions on the NYSE were fixed. The purpose of fixed commissions was arguably to force brokers to provide the optimal number of customer services. However, the members may have reached an "understanding" about the number of services they would give. A disruptive broker who provided more services could do substantial damage to such a service cartel. The defense asserted in Silver would effectively have given NYSE members the power to cartelize all aspects of the stock brokerage Market.

H. Hovenkamp, supra note 13, at 288-89. See Zuckerman v. Yount, 362 F. Supp. 858 (N.D. Ill. 1973), holding that due process requires that the hearing record must contain a reasonable justification for the disciplinary action taken; but see, Crimmins v. American Stock Exch., 346 F. Supp. 1256 (S.D.N.Y. 1972), holding that there is no right to counsel in such disciplinary hearings.

170 American Soc'y of Composers, Authors & Publishers, 1940-43 Trade Cas. (CCH) ¶ 56,104 at 403, 405; 1950-1951 Trade Cas. ¶ 62,595 at 63,753, 63,756 (ASCAP consented to admit to membership any composer or author of a copyrighted musical composition who shall have had at least one work of his composition or writing regularly published; it also consented not to acquire or assert exclusive performing rights from the copyright owners.


172 National Macaroni Mfg. Ass'n v. FTC, 345 F.2d 421 (7th Cir. 1965)(a disastrous growing season drove up the price of durum wheat and manufacturers of macaroni agreed to a standardized reduction of about fifty percent in the use of this flour which would be replaced by less expensive wheat. The Seventh Circuit held that this concerted activity tended to depress the market for durum wheat and was tantamount to price fixing); Milk & Ice Cream Can Inst. v. FTC, 152 F.2d 478 (7th Cir. 1946)(the defendant issued a freight book, engaged in price reporting, discouraged the sale of "seconds" and pressed for standardization. The court inferred that the standardization program, which facilitated price uniformity was injurious to competition); Bond Crown & Cork Co. v. FTC, 176 F.2d 974 (4th Cir. 1949)(a standardization program is not innocent when it is part of a program to standardize trade discounts and differentials and to publicize prices). Paramount Famous Lasky Corp. v. United States,
too restrictive.\textsuperscript{173}

In some cases, public agencies evaluate and approve products and set standards.\textsuperscript{174} In other cases, typically involving professional licensing, a mixture of public and private involvement, or state action is implicated in standard setting.\textsuperscript{175} In still

282 U.S. 30 (1930) and United States v. First Nat'l Pictures, Inc., 282 U.S. 44 (1930)(the Supreme Court held unlawful agreements by movie producers fixing nonprice terms on which they would deal with exhibitors). Jewel Tea Co. v. Associated Food Retailers, 331 F.2d 547 (7th Cir. 1964), rev'd on other grounds sub nom., Meat Cutters Local 189 v. Jewel Tea Co., 381 U.S. 676 (1965)(horizontal agreement among competitors as to hours of trade was unlawful); United States v. Southern Pine Ass'n, 1940-43 Trade Cas. (CCH) ¶ 56,007 (E.D. La. 1940), United States v. Western Pine Ass'n, 1940-43 Trade Cas. (CCH) ¶ 56,107 (S.D. Cal. 1941), United States v. West Coast Lumbermen's Ass'n, 1940-43 Trade Cas. (CCH) ¶ 56,122 (S.D. Cal. 1941)(standardization of lumber in terms of grades, sizes and the use of a mark assuring consumers that standards were met; the government charged that non-members could not obtain the mark except at heavy cost and that the association induced many federal and local authorities to specify grade marked lumber so that non-members were excluded. The associations signed consent decrees prohibiting such practices). See Fort Howard Paper Co. v. FTC, 156 F.2d 899 (7th Cir.), cert. denied, 329 U.S. 795 (1946); C-O-Two Fire Equip. Co. v. United States, 197 F.2d 489 (9th Cir.), cert. denied, 344 U.S. 892 (1952); See also, R. Posner & F. Estrebrock, ANTITRUST: CASES, ECONOMIC NOTES AND OTHER MATERIALS 337 (2d ed. 1981).


175 Standard setting activity by state agencies or municipalities that has anticompetitive consequences is exempt from federal antitrust laws under the state action doctrine if it is pursuant to a "clearly articulated and affirmatively expressed," City of Lafayette v. Louisiana Power & Light Co., 435 U.S. 389, 410 (1978), and "actively supervised," California Retail Liquor Dealers Ass'n v. Mideal Aluminum, Inc., 445 U.S. 97, 105 (1980) state policy. The state action antitrust exemption dates from the 1943 Supreme Court case of Parker v. Brown, 317 U.S. 341 (1943), which held that the Sherman Act was not intended by Congress to prohibit states from acting in their sovereign capacities to regulate commerce, even when such regulation has anticompetitive effects. The Parker principle was virtually ignored for the first twenty years of its existence, but it became one of the critical issues in antitrust law during its third decade. Beginning in 1975, the Supreme Court decided a series of cases in which it appeared to be narrowing the exemption, Goldfarb v. Virginia State Bar, 421 U.S. 773 (1975)(prohibition by federal antitrust laws of minimum fee schedules for legal services despite the Virginia Supreme Court's role in indirectly enforcing the local bar association's price floor); Cantor, 428 U.S. 579 (Michigan Public Service Commission's approval of electric companies' tariffs not exempting Detroit Edison's distribution of free electric light bulbs to its electricity customers from Sherman and Clayton Act attack); Bates v. State Bar of Ariz., 433 U.S. 350 (1977)(Arizona Supreme Court's restrictions on advertising by attorneys upheld under the Sherman Act because Arizona was acting in its sovereign capacity in issuing such restrictions; however, advertising restrictions struck down on first amendment grounds); City of Lafayette, 435 U.S. 389 (municipalities subject to the Sherman Act; state action doctrine only exempting acts by a state acting in its sovereign capacity or its subdivisions acting pursuant to state policy to displace competition with regulation); California Retail Liquor Dealers Ass'n, 445 U.S. 97 (California's wine-pricing system an illegal resale price maintenance plan; California's involvement, which did not include active supervision of pricing policies, insufficient to provide antitrust immunity). But see, New Motor Vehicle Board v. Fox Co., 439 U.S. 96 (1978) (a state statute requiring all new automobile franchises to be approved by a state board was exempt under the state action doctrine).
other cases, evaluation is performed by private laboratories which are often operated by associations composed of sellers and related firms, many of which are affiliated with the American National Standards Institute.\textsuperscript{176} \textit{Radiant Burners, Inc. v. People's Gas Light & Coke Co.}\textsuperscript{177} involved a private standard setting association consisting of gas heater manufacturers, gas pipeline companies, and gas utilities that

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\textsuperscript{176} The American National Standards Institute (ANSI) is composed of firms, trade associations, technological societies, consumer organizations, and government agencies.

ANSI recognizes three possible ways to develop consensus for a standard: the canvass method, the accredited organizations method, and the standards committee method. Under the canvass method, the sponsoring organization takes a canvass or mail poll of all organizations known to have concern or competence in the subject. The responses to the poll are transmitted to ANSI for final approval. The canvass method is used only when an organization already has a set of standards that it wants considered as an American national standard. Some organizations, presumably, do not bother to seek national status for their standards.

When standards do not already exist, ANSI must use either the standards committee method or the accredited organization method. ANSI uses the standards committee method when more than one accredited organization is developing standards for a specific area or when a request for standards is made to ANSI and no accredited organization is working on it. ANSI establishes standards committees, many of which become permanent committees with responsibility for all standards in a certain technical area.

The accredited-organization method begins by an organization applying to ANSI for accreditation. Approval depends on the organization's having acceptable methods for developing a consensus on a set of standards. The method of developing a consensus is usually similar to that of the standards-committee method.

Standard setting is a complicated procedure. An area is proposed for standardization. The matter is referred to the appropriate standards committee. The standards committee refers the matter to various technical committees, and perhaps to planning committees, for comment. The standards committee then decides whether to authorize the project. If the committee decides to go ahead, the matter is again referred to a technical committee, which begins collecting information from international standards organizations and/or other organizations on proposed standards. Successive drafts are drawn up and circulated to interested groups for comment. Any testing that is done is by private parties at their own expense. Eventually the technical committee submits a draft to the standards committee. Public review is held. Technical committees respond to critical comments and submit a new draft for public review and comments. The review process can be repeated any number of times. The standards committee eventually votes on the proposal. If at least two-thirds of the members vote for it, then it is submitted to ANSI, via the secretariat. If approved by ANSI, the standards are printed in the Federal Register and promulgated by the participating organizations through trade journals, university libraries, or labeling procedures." Carlton & Klamer, supra note 173, at 448-49.
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evaluated gas burning products; and placed a seal of approval on products judged to be safe. If a product was judged unsafe the association not only refused its seal of approval, but the utility companies in the association refused to provide gas to a user of the disapproved product. The plaintiff manufacturer claimed that the standards used to disapprove its radiant burner were formulated by its competitors and were arbitrary and capricious. In a per curiam opinion the Supreme Court held that the allegations, if true, constituted a per se violation of the Sherman Act.\textsuperscript{178} On the other hand, in Eliason Corp. v. National Sanitation Foundation,\textsuperscript{179} the Sixth Circuit approved the standards of an organization set up to evaluate commercial refrigerators, even though the organization refused to certify the plaintiff, because there was no evidence of discrimination or that the testing laboratory was "controlled" by competing manufacturers.\textsuperscript{180} In Marjorie Webster Jr. Co. v. Middle States Association,\textsuperscript{181} a nonprofit restriction on membership was held reasonable for an educational standard setting organization.\textsuperscript{182}

\textsuperscript{178} Id. at 659-60. In Blalock v. Ladies Professional Golf Ass'n, 359 F. Supp. 1260 (N.D. Ga. 1973), a district court held that a rule suspending the plaintiff for alleged cheating was per se unlawful. The makers and enforcers of the rule were the plaintiff's competitors, and the rule gave them "unfettered, subjective discretion." See Weistart, Player Discipline in Professional Sports: the Antitrust Issues, 18 WM. & MARY L. REV. 703 (1977). American Medical Ass'n v. United States, 317 U.S. 519 (1943) (an accreditation or standard-setting association may not dismiss or discipline a member because she is a price cutter).


\textsuperscript{180} In Molinas v. National Basketball Ass'n, 190 F. Supp. 241 (S.D.N.Y. 1961), a district court upheld a rule formulated by agreement among professional basketball teams requiring the suspension of a player who placed bets on his own team. The teams in the case were not competitors of the individual player.

\textsuperscript{181} Middle States Ass'n, 432 F.2d 650.

\textsuperscript{182} Although individual professional sports teams, Hecht, 570 F.2d 982, or tournament sports, Deesen, 358 F.2d 165, may be local natural monopolies and some athletic organizations that set standards may be public good-natural monopolies, National Collegiate Athletic Ass'n, 104 S. Ct. 2948, team athletic leagues are probably not natural monopolies and should be classified as joint ventures. See Brodly, Joint Ventures and Antitrust Policy, 95 HARV. L. REV. 1521 (1982). Although there is technically no limit to the number of teams a league can sustain, if each new team is required to play all existing teams, adding new teams must eventually increase average unit costs due to an increase in distance and travel time as more teams are added. See the discussion in Section II.A concerning the old theory of natural monopoly which is defined by declining average unit costs. See supra note 52 discussing the difficulty of proving that a local telephone network is a natural monopoly because the number of possible connections rises faster than the number of subscribers. (The new or subadditivity theory of natural monopoly is not relevant because it compares the cost of producing a given output by one firm with the cost of producing the same output by two or more firms; for example, an 8-team league in which each team plays each other is not comparable to two 4-team leagues in which each team plays each other team but in which there is no interleague play.)

Establishing divisional play with playoffs is similar to the divisional structure of modern corporations and may allow an athletic league to experience constant costs as it expands. O. Williamson, supra note 96, at 132-54; A. Chandler, STRATEGY & STRUCTURE 42-51 (1962). For an argument that under a laissez-faire regime with freedom of contract, i.e., no antitrust policy, a multi-plant monopoly would naturally dominate even those industries in which competition is technologically feasible, see D. Dewey, THE TRENCHES OF THE CLASSICAL POLITICAL ECONOMY 187-94 (1974). As evidenced by RECONSTRUCTION chs. 3-4 (1969).
B. A Natural Monopolist's Economically Motivated Refusal to Deal

If there is no efficiency justification for an economically motivated refusal to deal with customers of a natural monopoly, courts need not engage in continuous supervision of business, but need merely require that the proprietor of the natural monopoly charge nondiscriminatory prices to all similarly situated customers.

In Lorain Journal Co. v. United States, a newspaper, which was a local natural monopoly, refused to sell advertising to customers who also purchased advertising on a nearby radio station. Although the Supreme Court characterized this as an attempt to monopolize, the newspaper had to be a monopolist to begin with or else anyone who wanted to buy both radio and newspaper advertising would have bought the newspaper advertising from a competitor. In reality, the newspaper was trying to force the radio station out of business in order to protect its local

that courts implicitly do not consider that athletic leagues are natural monopolies, consider that although they have required those in control of natural monopolies to grant access to competitors of those using the monopoly, they have not required athletic leagues to grant access to competitors. Mid-South Grizzlies v. National Football League, 720 F.2d 722 (3d Cir. 1983) (a federal statute, which insulated the merger of two competing professional football leagues from antitrust liability, was not directed at preserving competition in the market for professional football and did not oblige the existing league to permit entry by a particular applicant. The plaintiff also failed to show any actual or potential injury to competition. The court said the essential facility doctrine assumes that admission of an excluded applicant results in added competition in economic not athletic terms.) Id. at 787. See American Football League v. National Football League, 323 F.2d 124 (4th Cir. 1963)(substantial evidence to support findings that the older league did not have power to monopolize the relevant market and had not attempted any conspiracy to monopolize). See the discussion of required access to natural monopoly by competitors in Section IV A.

3 P. Areeda & D. Turner, supra note 9, at ¶ 736a, 270. See America's Best Cinema Corp. v. Fort Wayne Newspapers, Inc., 347 F. Supp. 328 (N.D. Ind. 1972), in which a newspaper adopted a policy of restricting advertising from movie houses that habitually show only unrated or X-rated adult films to their signatures and phone numbers only. Id. at 331. The court said that this was analogous to a refusal to deal. However, the advertising policy did not constitute an unreasonable restraint of trade because it was adopted out of a concern that the newspapers would lose their "family image" and did not have an anticompetitive purpose. Id. at 333.

"Consider these few examples of 'arbitrary' refusals to deal:

a monopoly theatre might refuse to admit male patrons with long hair, or those unshod or unwashed. Or a monopoly newspaper might refuse advertising from one of two department stores, from all or some political groups, or from cigarette manufacturers. In all such situations, the excluded person will feel oppressed because he lacks the alternative sources that competition would provide if it existed.

Id. at 332. 3 P. Areeda & D. Turner, supra note 9, at ¶ 736a at 270-71.

Lorain Journal Co., 342 U.S. 143.

It is clear that the city of Lorain, Ohio could not support a rival newspaper. The Lorain Journal had a circulation of only about 20,000 copies, but even so was thought to reach 99% of all families in the city. A. Neale & D. Goyder, supra note 5, at 129.

Times-Picayune Publishing Co., 105 F. Supp. 670 (requiring advertisers to buy space in both morning and afternoon newspapers at a combination rate was not unlawful because the newspaper did not have a monopoly. J. Dirlam & A. Kahn, Fair Competition: The Law and Economics of Antitrust Policy 105-08 (1954) (an analysis criticizing the Supreme Court's conclusion that there was

advertising monopoly from erosion. Clearly, there was no efficiency justification for the economically motivated refusal to deal with customers who also advertised on the radio station.

On the other hand, Official Airline Guides, Inc. v. FTC (OAG) involved a monopolist publisher of a consolidated listing of airline flights between cities which discriminated against commuter air carriers. Although OAG listed the direct flights of both regular and commuter airlines, only connections between regular air carriers were listed. The Federal Trade Commission (FTC) found that OAG's refusal to publish the connecting flights of commuter airlines was arbitrary, that it had not offered a reasonable justification for such refusal, and that such refusal significantly impaired competition between the regular and commuter carriers. The FTC held that OAG was required to publish the connecting flights. The Second Circuit accepted the FTC's findings as to arbitrariness and lack of justification (the $6,000 expense for publishing the connecting flights did not seem substantial to the court), but reversed because "enforcement of the FTC's order here would give the FTC too much power to substitute its own business judgment for that of the monopolist in any decision that arguably affects competition in another industry."  

The dividing line between an efficiency justification and anticompetitive conduct in dealing with customers is well illustrated by comparing Six-Twenty-Nine Productions v. Rollins Telecasting, Inc. with Packaged Programs, Inc. v. Westinghouse Broadcasting Co. In both cases, circuit courts reversed dismissals of Sherman Act suits involving the question of whether a refusal to deal with customers by television stations that had lawful monopolies conferred on them by the Federal Communications Commission (these are not natural monopoly cases) violated the antitrust laws. The Fifth Circuit in Six-Twenty-Nine thought these cases were "closely analogous." However, they are clearly distinguishable on efficiency grounds. In Six-Twenty-Nine, it was alleged that the monopolist refused to accept filmed commercials submitted by the plaintiff advertising agency in furtherance of a conspiracy with another advertising agency to eliminate the plaintiff as a competitor. The monopolist had no efficiency justification for discriminating among advertising agency suppliers. The Fifth Circuit held that, if the station set up unreasonable standards for the purpose of refusing advertising from the plaintiff

189 Official Airline Guides, 630 F.2d at 927. The court said: "if the only supermarket in town decides to stock Birdseye vegetables but not Green Giant vegetables, the FTC would be able to require it to stock Green Giant vegetables if it were to find Green Giant competitively disadvantaged." Id.; See P. Areeda & D. Turner, Antitrust Law ¶ 736 at 229-31 (Supp. 1982).
or adopted an arbitrary course of action to destroy the plaintiff and thereby extend its monopoly, the Sherman Act was violated. On the other hand, in Packaged Programs, the refusal to deal involved a refusal by defendant to schedule filmed programs produced by the plaintiff on the defendant's television station. Packaged Programs involved managerial decisions concerning program scope and content which are decisions most efficiently determined by each television station. In short, Six-Twenty-Nine and Packaged Programs are distinguishable on efficiency grounds, and the latter was incorrectly decided.

V. VERTICALLY INTEGRATED NATURAL MONOPOLY CASES

Efficiency considerations in vertically integrated natural monopoly cases are much much complex and difficult to evaluate than in unintegrated natural monopoly cases involving simple access issues. The vertically integrated natural monopoly cases discussed below do not support any generalization: in two cases vertical divestiture was supported by the courts; in three others it was not; and, in one case, it is too early to tell whether a natural monopoly is involved or whether the eventual outcome will require divestiture.

At first approximation, since there is only one profit-maximizing monopoly price at which a product can be sold to the consumer no matter how many vertical stages exist in any industry according to the optimum monopoly price theory, there should not be a difference in retail price to consumers whether one or more stages are monopolies. For example, in a two stage industry, rational monopolists dealing with each other in a vertical relationship would set the price at this optimum level and then allocate the monopoly profit between themselves. But, if agreement on the division of monopoly profits between them, which is arbitrary, proves

193 In Venture Technology v. National Fuel Gas Co., 1980-81 Trade Cas. (CCH) ¶ 63,780 (W.D. N.Y. 1981), rev'd, 685 F.2d 41 (2d Cir.)(1982), cert. denied, 103 S. Ct. 362 (1982), defendant, a public utility, bought gas from independent production companies. One of plaintiff's competitors, some of whose wells were not hooked up to defendant's pipelines due to bottlenecks, complained to defendant that plaintiff's wells were located too close. Id. at 44 n.4. Defendant adopted a well spacing policy similar to that of the New York Department of Environmental Conservation, but applied it retroactively to plaintiff's wells to protect the financial expectations of drillers and refused to take plaintiff's gas. A district judge gave an instruction on the essential facility doctrine; there was a finding of per se liability; the Second Circuit reversed, because of insufficient evidence to establish a contract, combination, or conspiracy. Id. at 45-58.

194 Otter Tail, 410 U.S. 366; MCI Communications Corp., 708 F.2d 1081.

195 Mid-Texas Communications Systems, Inc., 615 F.2d 1372; Byars, 683 F.2d 981; Paschall, 727 F.2d 692.

196 United Airlines v. Civil Aeronautics Bd., 766 F.2d 1107 (7th Cir. 1985).

197 3 P. AREEDA & D. TURNER, supra note 9, at ¶ 725; R. BORK, supra note 2, at 225-31; R. POSNER, supra note 20, at 196-200; Paschall, 695 F.2d 322; Byars, 609 F.2d at 861.

198 The sharing of monopoly profit between the stages is indeterminate. Each stage can set bounds on the range of outcomes that may result, but the actual outcome will depend on the bargaining skills of the parties. W. NICHOLSON, supra note 14, at 522-23; D. DEWEY, supra note 14, at 110-13.
impossible because of misperception or opportunistic behavior,199 the result will be a price to the consumer higher than the optimal monopoly price, with correspondingly lower output. The first stage monopoly will charge the second stage monopolist a price calculated to maximize its monopoly profit without regard to the second stage; faced with this higher than competitive cost, the second stage monopolist will set its monopoly price to the consumer at a correspondingly high level—higher than the optimal monopoly price that the two monopolists would have set had they been able to agree. Thus in many cases, a refusal to deal by a monopolist designed to accomplish vertical integration may increase efficiency and, without more, should not be a basis for imposing liability.200

However, there are situations in which a refusal to deal by a natural monopolist as part of a vertical integration scheme is objectionable. First, if integrating the second stage increases first stage entry barriers so that potential competitors are stymied, the optimum price may rise.201 Second, if a monopolist integrates forward into a stage with variable proportions, price may rise and output may decline.202 Third, if vertical integration facilitates price discrimination, the effect on consumer welfare may be negative.203 Fourth, integration may facilitate evasion of regulation


200 See 3 P. Areeda & D. Turner, supra note 9, at ¶ 725c, 726; L. Sullivan, supra note 5, at 129-30; F. Scherer, supra note 99, at 300-02. See also Sargent-Welch Scientific Co. v. Ventron Corp., 567 F.2d 701, 712 (7th Cir. 1977), cert. denied, 439 U.S. 822 (1978) (monopolist can terminate a dealer on efficiency grounds); Byars, 609 F.2d at 861. In contrast, a single vertically-integrated monopolist has no such problems—it will merely set the price to the consumer at the optimum monopoly level. And to the extent that economies of scale result from the vertical integration, then the consumer will benefit. The monopolist will reap more profit, but the optimal monopoly price to the consumer will be lower. 3 P. Areeda & D. Turner, supra note 9, at ¶ 725c at 200.

201 "[T]he monopoly producer's acquisition of the existing distribution outlets could delay new entry into production, and the delay would tend to increase the optimum monopoly price." R. Posner, supra note 20, at 198. 3 P. Areeda & D. Turner, supra note 9, at ¶ 725h1 at 206.

202 Economists, who have evaluated forward integration by a monopolist, have often assumed that the monopolized input is used in variable proportions at the second stage and have estimated the traditional welfare tradeoffs between favorable increase in productive efficiency (the integrated monopolist will employ efficient factor proportions, whereas an unintegrated second stage firm will substitute away from the monopolized input if possible) and possible reduction in consumer surplus because of a possible increase in final price (by using less of the monopolized input, the unintegrated second stage firm may be able to charge a lower price). The overall welfare tradeoff is indeterminate. Vernon & Graham, Profitability of Monopolization by Vertical Integration, 79 J. Pol. Econ. 924-25 (1971); Schmalensee, supra note 37, at 442; F. Warren-Boulton, supra note 37, at 783; 3 P. Areeda & D. Turner, supra note 9, at ¶ 725f, 202-04; Byars, 609 F.2d at 861.

203 On the one hand, although a positive effect on output from price discrimination is likely, 3 P. Areeda & D. Turner, supra note 9, at ¶ 725e, 201-02; D. Dewey, supra note 14, at 55-56, 106-08; P. Samuelson, Foundations of Economic Analysis 42-45 (1947); J. Robinson, Economics of Imperfect Competition 201-02 (1933); however, output may decline depending on the difficulty of separating the several markets. O. Williamson, supra note 96, at 120. On the other hand, price discrimination is objectionable on equity or income distribution grounds because it allows the monopolist seller to capture consumer surplus from buyers, D. Dewey, supra note 14, at 218, and may result in higher social costs than single-price monopoly due to the transaction costs of separating customers. R. Posner, supra note 20, at 1-4.
of monopoly profits. The problem is distinguishing efficiency enhancing vertical integration from the objectionable type.

A final major factor is the feasibility of forming a final decree. Because courts do not want to continually supervise and set prices charged by one vertical stage to another, they are usually reluctant to interfere with decisions by managers of natural monopolies concerning vertical integration unless the industry in question is regulated by an administrative agency that is empowered to set such prices or unless there is a history of previous dealing on the basis of a fixed percentage of a market determined price.

In Otter Tail Power Co. v. United States, the defendant was a vertically integrated company which generated, transmitted, and sold electric power to nearly 500 communities in Minnesota, North Dakota, and South Dakota. As a producer of power and the only firm with transmission lines in its market area, it had a natural monopoly. Within each municipality, Otter Tail operated at the retail level pursuant to ten to twenty year franchises. The retail electric power business, which entailed ownership of the local distribution lines, was also a natural monopoly. Localities that wanted to establish independent systems at the retail level either had to obtain wholesale power directly from Otter Tail itself or had to purchase it elsewhere and have Otter Tail "wheel" the power over its transmission lines. When these independent systems asked Otter Tail to provide power to them, it refused.

sumer would be willing and able to pay for a product and the "market price"; W. Nicholson, supra note 14, at 426-28; C. Ferguson & S. Maurice, supra note 77, at 352-55.

104 I. A. Kahn, supra note 41, at 28.

105 The Sixth Circuit said, "[i]n injunction ordering a monopolist to deal might enmesh a court in difficult problems of price regulation." Byars, 609 F.2d at 863. However, the court also said: Fear of judicial "utility regulation" permeates Areeda & Turner's analysis of monopolists' refusals to deal. [3 P. Areeda & D. Turner, Antitrust Law ¶ 736 (1978)] We agree that federal judges do not make good regulators of business conduct. However, courts must be careful not to abdicate their responsibilities under the Antitrust laws in the name of expedience. When the adverse effect of allowing a monopolist to maintain certain practices is clear, a court should stay its hand rarely, if ever.

Ids at 864 n.57.

106 "In the ordinary case, however, the difficulty of setting a price at which the monopolist must deal might well justify withholding relief altogether. In this case, we have a history of previous dealing between the parties where they set a price—10 1/2% below wholesale. As in Poster Exchange, Inc., 431 F.2d 334 (5th Cir. 1970) this greatly facilitates the structuring of a decree." Byars, 609 F.2d at 864 (these cases are discussed infra).

107 Otter Tail, 410 U.S. 366.

108 In City of Mishawaka, Ind. v. American Elec. Power Co., 465 F. Supp. 1320 (N.D. Ind. 1979), aff'd in part, rev'd in part, 616 F.2d 976 (7th Cir. 1980), cert. denied, 449 U.S. 1096 (1981), a district court held that the evidence showed that the defendant electric power company had monopoly power and that by requiring municipalities to pay a wholesale price for electricity substantially higher than the retail price charged to the company's own industrial customers, it had the requisite intent to impair the plaintiffs' competitive position in order to preserve and expand its monopoly in retail sales of electric power. The court also endorsed the essential facility doctrine. Id. at 1336-37.

109 In four communities, the citizens voted to establish independently owned systems at the expira-
Despite an amicus brief by the Federal Power Commission supporting Otter Tail, the poor performance of a municipality that had also replaced Otter Tail at the retail level, and an "erosion study" by Otter Tail purporting to show the inefficiencies of vertical divestiture, the Supreme Court held that Otter Tail could not lawfully refuse to wholesale or wheel power. On the other hand, several arguments can be used to support the Court's decision. First, if the Federal Power Commission regulated Otter Tail's wholesale price and wheeling charges more effectively than the states regulated the retail rates (permitting a monopoly retail price), then vertical integration may allow the defendant to evade regulation. Second, the Otter Tail decision, by giving municipalities a choice between remaining part of Otter Tail's system and independence, may be thought of as one in which the Court decided to allow the market to determine whether the efficiencies of vertical integration outweigh the reduced incentives for invention and cost reduction as a result of monopoly at the retail level. Third, the Court did not have to continuously supervise the industry because the Federal Power Commission had the power to control the wheeling charges.

In sum, given the regulatory context and the complex issues involved in Otter Tail, the case hardly supports the rule some have attributed to it to the effect that a natural monopoly, which is vertically integrated, has a general obligation to provide access to one of its potentially competitive stages.

...
Mid-Texas Communications Systems, Inc. v. American Telephone & Telegraph\textsuperscript{214} involved the question of whether a vertically integrated telephone company misused its monopoly power by refusing to interconnect with an independent telephone company.\textsuperscript{215} The district court, which relied on the broad language in Otter Tail,\textsuperscript{216} held that AT&T was not entitled to antitrust immunity because its initial decision whether to interconnect was a matter of "business judgment" and was not the product of "regulatory supervision."\textsuperscript{217} The Fifth Circuit reversed by distinguishing Otter Tail and held that in the telephone industry the regulatory procedure was directly relevant to the defendant's power to exclude competition.\textsuperscript{218}

\textit{MCI Communications v. American Telephone & Telegraph} (\textit{MCI v. AT&T})\textsuperscript{219} involved AT&T when it was a vertically integrated telephone company. It controlled most local telephone facilities which are generally regarded as natural monopolies and are regulated as such.\textsuperscript{220} It also had a monopoly of most long distance lines which, because of technological change, had ceased to be a natural monopoly by the late 1960s. At that time, the Federal Communications Commission (FCC), which regulated the long distance telephone market, certified that MCI could compete with AT&T. AT&T refused to interconnect with MCI and the latter brought an antitrust suit. The Seventh Circuit held that local telephone exchanges are "essential facilities" and that AT&T's refusal to interconnect constituted an act of monopolization.\textsuperscript{221} The complexity of the issues in the case, which involved the

\textsuperscript{214} Mid-Texas Communications, 615 F.2d at 1389.
\textsuperscript{215} The independent telephone company was formed for the purpose of providing telephone service within a new residential development. \textit{Id.} at 1375.
\textsuperscript{216} The Supreme Court said that Congress rejected a pervasive regulatory scheme in the electric industry "in favor of voluntary commercial relationships. When these relationships are governed in the first instance by business judgment and not regulatory coercion, courts must be hesitant to conclude that Congress intended to override the fundamental national policies embodied in the antitrust laws." \textit{Otter Tail}, 410 U.S. at 374.
\textsuperscript{217} Mid-Texas Communications, 615 F.2d at 1380.
\textsuperscript{218} \textit{Id.} at 1387, 1389.
\textsuperscript{219} MCI Communications, 708 F.2d 1081.
\textsuperscript{220} See \textit{supra} note 52 (indicating the difficulty of employing the economies of scale theory of natural monopoly to prove that local telephone service is one).
\textsuperscript{221} "The case law sets forth four elements necessary to establish liability under the essential facilities doctrine: (1) control of the essential facility by a monopolist; (2) a competitor's inability practically or reasonably to duplicate the essential facility; (3) the denial of the use of the facility to a competitor; (4) the feasibility of providing the facility... AT&T had complete control over the local distribution facilities that MCI required. The interconnections were essential for MCI to offer FX [foreign exchange lines] and CCSA [common control switching arrangement] service. The facility in question met the criteria of "essential facilities" in that MCI could not duplicate Bell's local facilities. Given present technology, local telephone service is generally regarded as a natural monopoly and is regulated as such. It would not be economically feasible for MCI to duplicate Bell's local distribution facilities (involving millions of miles of cable and lines to individual homes and businesses), and regulatory authorization could not be obtained for such an uneconomical duplication. Finally, the evidence supports the jury's determination that AT&T denied the essential facilities,
existence and extent of cross-subsidization,\textsuperscript{222} economies of vertical integration, and market power are evident when one realizes that this case was the opening wedge in what eventually resulted in the divestiture of AT&T’s long distance lines from the local telephone systems.\textsuperscript{223} The divestiture will probably exacerbate disputes concerning coordination\textsuperscript{224} and revenue sharing between local and long distance companies.\textsuperscript{225} Moreover, at this time, the long run benefits of the divestiture are still to be demonstrated.\textsuperscript{226} In sum, the MCI case involved a vertically integrated natural monopoly in which the Seventh Circuit did little more than provide an additional remedy for a complex determination already made by the relevant regulatory agency.

In \textit{United Airlines v. Civil Aeronautics Board},\textsuperscript{227} the Seventh Circuit upheld two rules by the Civil Aeronautics Board (CAB)\textsuperscript{228} with respect to the six com-

\begin{footnotesize}
\textsuperscript{222} The Seventh Circuit rejected a charge of cross-subsidization, i.e., that AT&T used revenue derived from its long distance lines to cover costs of local telephone services. \textit{Id.} at 1122-25. See L. JOHNSON, \textsc{Competition and Cross-Subsidization in the Telephone Industry}, 41-49 (1982); R. SCHMALENSEE, \textsc{The Control of Natural Monopolies} 30-31, 108-09 (1979). Lavey & Carlton, \textsc{Economic Goals and Remedies of the AT&T Modified Final Judgment}, 71 Geo. L. J. 1497 (1983).


\textsuperscript{225} People’s Telephone Cooperative v. Southwestern Bell Telephone Co., 399 F. Supp. 561 (E.D. Tex. 1975). Revenue from long-distance calls must be allocated between local exchanges and long-distance companies based on the amount of capital devoted to long distance facilities. Local telephone companies had an incentive to increase the amount of equipment devoted to long-distance calls. When People’s constructed its own toll lines to connect directly to Bell by-passing existing lines owned by General Telephone, Bell refused to interconnect with People’s new lines. People’s charged that Bell and General Telephone had conspired to prevent it from increasing its share of capital devoted to long-distance calls and thereby prevented it from increasing its long-distance revenue. The court stayed the antitrust claim pending exercise by the Federal Communications Commission (FCC) of its primary jurisdiction in the matter. \textit{People’s Telephone Cooperative}, 399 F. Supp. at 562-63. The FCC ordered that the matter be investigated by an Administrative law judge. People’s Tel. Co-op., Inc. v. Southwestern Bell Tel. Co., 62 F.C.C. 2d 113 (1976); In Doniphan Telephone Co. v. AT&T, 34 F.C.C. 949 (1963), an independent telephone company wanted to construct switching and transmission facilities with connections to the Bell system at higher levels of the switching hierarchy than was usual. \textit{Doniphan Telephone Co.}, 34 F.C.C. at 962-64. The new equipment would have quadrupled Doniphan’s long-distance revenues. \textit{Id.} at 961. The FCC denied Doniphan’s request, finding it neither in the public interest nor desirable. These cases demonstrate the unworkability of a general access rule in a vertically integrated context.

\textsuperscript{226} See Lavey & Carlton, \textit{supra} note 222, at 1497.

\textsuperscript{227} \textit{United Airlines v. Civil Aeronautics Bd.}, 766 F.2d 1107 (7th Cir. 1985).

\textsuperscript{228} When the CAB went out of existence, the authority under which the rules were issued was

\url{https://researchrepository.wvu.edu/wvlr/vol88/iss4/7}
puterized reservation systems that are owned by airlines and provided to travel agencies. One of rules forbids price discrimination and biased displays of flight, fare, and other information;\textsuperscript{229} the other rule forbids the "delisting" or deletion of information about connecting flights of two airlines listed under a single airline's code name.\textsuperscript{230} In the Seventh Circuit's decision, Judge Posner said that "[p]rice discrimination, and denying a competitor access to an essential facility on equal terms (one way of describing the delisting of connecting flights of two airlines listed under the name of one), are traditional methods of illegal monopolization. . . ."\textsuperscript{231} Some airlines favor legislation that would require vertical divestiture of computerized reservation systems from the airlines and their sale to an independent data management firm.\textsuperscript{232} Although the CAB found that some of the airline owners of computerized reservation systems had substantial market power,\textsuperscript{233} it is not clear that the six-firm industry is a natural monopoly, in which case vertical divestiture may be unjustified.\textsuperscript{224}

In Byars v. Bluff City News Co.,\textsuperscript{235} an independent contractor in the business of distributing periodicals to small retail outlets brought an antitrust action against a regional distributor of periodicals that had terminated their contract.\textsuperscript{236} There was evidence that national distributors may have regarded regional distributors as local natural monopolies in the least cost or subadditivity sense; that is, industry experience showed that where there were two or more regional distributors competing with each other, confusion and high rates of return of unsold merchandise usually occurred.\textsuperscript{237}

\textsuperscript{229} 14 C.F.R. § 255 (1980). However, the rule does not prohibit biased information displays for "secondary" screens that airlines can set up through special programming and make available to systems users. For example, a travel agent may hit a key to get a special set of displays favoring flights of United Airlines. 48 Antitrust \& Trade Reg. Rep. (BNA) 505 (March 21, 1985).


\textsuperscript{231} 49 Antitrust \& Trade Reg. Rep. (BNA) 199 (July 25, 1985).

\textsuperscript{232} Sabre, owned by American Airlines, and Apollo, owned by United Airlines, account for 80% of all travel agent revenues from automated ticket sales. Four other air carriers account for the remaining sales. 48 Antitrust \& Trade Reg. Rep. (BNA) (March 21, 1985).

\textsuperscript{233} 49 Antitrust \& Trade Reg. Rep. (BNA) 198-99 (July 25, 1985).

\textsuperscript{234} The Justice Department is currently studying the matter. The smaller computerized reservation systems may be able to combine and become an effective competitor to the two major systems.

\textsuperscript{235} Byars, 609 F.2d 843.

\textsuperscript{236} In Klearflax Linen Looms, 63 F. Supp. 32, the only manufacturer of a particular type of linen rug refused to supply one of its distributors who had successfully underbid it for a government contract; it also reduced the distributor's discount level by reducing its status to that of a jobber. The district court held that these measures showed a purpose "to monopolize the sale of linen rugs in the line of commerce involved in the government contract business." However, the market was surely too narrowly defined; linen rugs are only one type of rug, and rugs are only one type of floorcovering. Moreover, there was no patent, no secret process, no large capital requirement to enter this market, and no natural monopoly.

\textsuperscript{237} To minimize these problems, national distributors have made independent decisions to deal with only one regional distributor whenever possible. Byars, 609 F.2d at 852. "There is of course the possibility that distribution will be monopolized."

\textsuperscript{238} AREEDA \& D. TURNER, supra note 9.
The Sixth Circuit reversed a district court’s decision in favor of the regional distributor, and remanded the case for an assessment of whether its refusal to deal was justifiable on efficiency grounds; whether it had a specific intent to monopolize,238 citing Eastman Kodak Co. v. Southern Photo Materials Co.;239 whether it engaged in predatory “dirty tricks”;240 and whether an injunction ordering defendant to deal with the plaintiff was feasible or would require the court to continuously monitor the price charged by the defendant to the plaintiff.241 On remand, the district court found that Bluff City’s conduct was fair competition and not “dirty tricks.”242

In Paschall v. Kansas City Star Co.,243 the owner of the only two newspapers

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238 Byars, 609 F.2d at 859.
239 Eastman Kodak, 273 U.S. 359. Plaintiff had been an Atlanta dealer in Kodak and other photographic supplies. Kodak had acquired control of all competing dealers in Atlanta; when plaintiff refused to sell its business to Kodak, Kodak refused to sell supplies to plaintiff except at retail prices. The Supreme Court affirmed a jury verdict finding a violation of § 2. Plaintiff had alleged that the refusal to deal was in furtherance of a plan to monopolize the manufacture and sale of photographic equipment and supplies, which had been held unlawful in a preceding government action, United v. Eastman Kodak, 226 F. 62 (W.D. N.Y. 1915). Kodak had bought 20 competing manufacturers, dismantled plants and extracted covenants not to compete. The Court indicated that Kodak’s refusal to deal in light of these facts “sufficiently tended to indicate such [anticompetitive] purpose” to “warrant the submission of this question to the jury.” Eastman Kodak, 273 U.S. at 375. Notwithstanding this background, in Byars, the Sixth Circuit characterized Kodak as a case which “comes seriously close to establishing an absolute duty to deal since it permitted a finding of illegal intent where the only evidence of monopolist purpose was Kodak’s desire to buy out retail distributors and its inability to provide an independent business reason for its refusal to deal.” 609 F.2d at 855. The Sixth Circuit also pointed out that the intent test and the bottleneck or essential facility doctrine overlap. Byars, 609 F.2d at 856.

240 There was some testimony indicating that some of plaintiff’s magazines had been removed from racks in retail outlets and that defendant had made disparaging remarks about plaintiff and his financial condition. Byars, 609 F.2d at 854.

241 “In the ordinary case, however, the difficulty of setting a price at which the monopolist must deal might well justify withholding relief altogether. In this case, we have a history of previous dealing between the parties where they set a price—10½% below wholesale. As in Poster Exchange, Inc. . . ., this greatly facilitates the structuring of a decree.” Byars, 609 F.2d at 864.

242 Byars, 683 F.2d at 981, 983.
in a city vertically integrated its distribution system by changing from independent distributors to delivery agents. It justified the change as enabling it to simplify subscription collections, to provide readers with better, more responsive service, and to set an area-wide uniform retail price, which facilitates in-paper advertising for new subscriptions. The Eighth Circuit, en banc, reversed a panel and accepted the optimum monopoly price theory discussed above; it held that the newspaper’s vertical integration had not violated the Sherman Act. It also pointed out that “every other antitrust case brought against a newspaper publisher challenging the newspaper’s decision to forwardly integrate into distribution has been resolved in favor of the newspaper.” Such unanimity is understandable given the plausible efficiency justifications for vertical integration in the newspaper business, competition from other media, plus a healthy fear of judicial utility regulation.

On the other hand, a dissenting judge pointed out that ninety-two percent of the readers would pay more and only eight percent would pay a lower retail price under the new system. The majority conceded that “[i]ndeed, it is said that vertical integration frequently is followed by price increases. . . . [citing theoretical support from the economics literature] And even if Star Co. is able to achieve

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244 "The defendant was a monopolist in Paschall..." P. Areeda & D. Turner, supra note 9, at ¶ 729.7c-199 (Supp. 1980). The publishers “road to dominance in the Kansas City market, however, was marred by a conviction for attempted and actual monopolization in violation of § 2 of the Sherman Act.” Paschall, 727 F.2d at 694. See Kansas City Star Co., 240 F.2d 643.


246 Areeda and Turner theorize that the publisher’s circulation goals are not fully shared by an independent wholesaler because increased circulation volume is more valuable to the publisher than to the dealer since increased circulation increases the former’s advertising revenue as well as the margin of price over cost per unit. P. Areeda & D. Turner, supra note 9, at ¶ 729.7a (Supp. 1982).


248 See Gamco, Inc., 194 F.2d at 488 n.4, discussed above as an unincorporated natural monopoly or simple access case, in which the First Circuit held that the owner of the monopoly could not prohibit one of its tenants from vertically or horizontally integrating.

249 Economists, who have evaluated forward integration by a monopolist, have often asserted that the monopolized input is used in variable proportions at the second stage and have estimated the traditional welfare tradeoffs between favorable increase in productive efficiency (the integrated monopolist will employ efficient factor proportions, whereas an unincorporated second stage firm will substitute away
distribution economies by vertical integration, such savings may not result in lower retail prices.\(^{212}\)\(^{222}\)

VI. HORIZONTAL PRICE FIXING AND NATURAL MONOPOLY

Although the first two cases in this section are local natural monopoly cases in which access by competitors is an issue,\(^{223}\) the third case is public good-natural monopoly in which the terms of access by customers is at issue,\(^{224}\) and the fourth case is a public good-natural monopoly which may be characterized as one involving the terms of access by competitors and customers,\(^{225}\) these cases have a common feature which is that each involves a natural monopoly that is a vehicle for collective price fixing. Unless justified by the existence of a natural monopoly, the courts have almost without exception\(^{226}\) held that collective price fixing is per se illegal.\(^{227}\) In the natural monopoly cases, the courts have employed a rule of reason. They have asked whether the market power inherent in an unregulated natural monopoly that collectively fixes prices is so great as to require the monopoly’s dissolution, judicial regulation of the natural monopoly’s conduct,\(^{228}\) or divestiture of the activity which involves collective price fixing because it is not part of the natural monopoly;\(^{229}\) or whether the efficiency of the natural monopoly justifies

\[\text{from the monopolized input if possible and possible reduction in consumer surplus because of a possible increase in final price (by using less of the monopolized input, the unintegrated second stage firm may be able to charge a lower price). The overall welfare tradeoff is indeterminate. McGee & Bassett, supra note 37, at 17, 27 n.28; Schmalansee, supra note 37, at 442; Hay, supra note 37, at 188; Warren-Boulton, supra note 37, at 783; R. Posner, supra note 20, at 198. But see, W. Bowman, Jr., PATENT AND ANTITRUST LAW: A LEGAL AND ECONOMIC APPRAISAL 76-88 (1973) (Bowman shows price may decline under his assumptions).}\]


\[\text{\(^{213}\) Terminal R.R. Ass’n, 224 U.S. 383; Aspen Skiing Co., 105 S. Ct. 2847.}\]

\[\text{\(^{214}\) Broadcast Music Inc., 441 U.S. 1.}\]

\[\text{\(^{215}\) National Collegiate Athletic Ass’n, 104 S. Ct. 2948.}\]

\[\text{\(^{216}\) Appalachian Coals, Inc. v. United States, 288 U.S. 344 (1933), overruled, Copperweld Corp. v. Independence Tube Corp., 467 U.S. 752 (1984) was the only important deviation from the \textit{per se} rule in concerted price fixing cases; it occurred in the slough of the Great Depression and involved one of the sickest of industries, coal, and one of the weakest of cartels (137 producers of bituminous coal in the Appalachian field had formed a common sales agency that had no power to restrain output of its members); scarcely half of the producers in the Appalachian region were members; any increase in the price of coal promised to reopen numerous mines shut down by low prices. The Supreme Court set aside the district court’s injunction restraining the association’s activities. However, the Court took the precaution of hedging its departure from the \textit{per se} rule by providing that if in actual operation the program should unduly burden interstate commerce or impair fair competition the Government could reopen the case. See D. Dewey, supra note 2, at 164-65.}\]

\[\text{\(^{217}\) United States v. Addyston Pipe & Steel Co., 85 F. 271 (6th Cir. 1898), modified and aff’d, 175 U.S. 211 (1899); United States v. Trenton Potteries Co., 273 U.S. 392 (1927); United States v. Socony-Vacuum Oil Co., 310 U.S. 150 (1940).}\]

\[\text{\(^{218}\) Terminal R.R. Ass’n, 224 U.S. 383.}\]

\[\text{\(^{219}\) National Collegiate Athletic Ass’n, 104 S. Ct. 2948.}\]
a *laissez-faire* policy with respect to the exploitation of its monopoly power or mandatory horizontal integration.261

In *United States v. Terminal Railroad Association*, an association of fourteen railroad companies owned all the terminal facilities and connecting bridges where twenty-four railroads came together and crossed the Mississippi River into St. Louis, Missouri. New members and nonowner users needed unanimous consent of existing members in order to use the facilities. Outsider railroads were unable to compete effectively with member railroads. In addition, the association, which fixed prices for the use of its facilities, engaged in monopolistic price discrimination against traffic originating in St. Louis and the surrounding area (short hauls).

Prior to the formation of the association, there had been considerable competition by three terminal systems that were combined to form it. Notwithstanding the feasibility of three systems, the association was probably a natural monopoly in the least cost or subadditivity sense. The railroad lines were not all parallel and competing, so that if the association were dissolved, a shipper near one terminal system may have had no direct railroad access if its destination were nearer one of the other systems. Thus, a horizontally integrated system would be more cost efficient than three separate systems.266

In commentary on *Terminal Railroad*, it is often assumed simplistically that the Supreme Court needed only to impose a duty to admit all railroads on equal terms in order to take advantage of the system’s efficiency-creating potential and yet restrain its monopolistic potential.267 The opposite extreme and equally incorrect commentary argues that (a) the monopolistic potential of a court approved, industry-wide cartel makes such a remedy ineffectual to protect consumers, or that (b) antitrust law should not be used to fill in a hiatus in utility regulation.269

\[\text{260} \text{ Broadcast Music Inc., 441 U.S. 1.}\]
\[\text{261} \text{ Aspen Skiing Co., 105 S. Ct. 2847.}\]
\[\text{262} \text{ Terminal R.R. Ass'n, 224 U.S. 383.}\]
\[\text{263} \text{ Six railroads organized the terminal association in 1899. Id. at 395-97.}\]
\[\text{264} \text{ An act of Congress forbidding ownership of both bridges across the Mississippi by existing terminal companies was later rescinded by a subsequent act of Congress. Id. at 393.}\]
\[\text{265} \text{ Id. at 398.}\]
\[\text{266} \text{ Areeda and Turner characterize *Terminal Railroad* as a vertical integration case. P. Areeda & D. Turner, supra note 9, at 729g-243. Sullivan also characterizes *Terminal Railroad* in terms of its vertical effects. L. Sullivan, supra note 5, at 130-31.}\]
\[\text{267} \text{ "Assuming that the railroads continued to compete with each other, the jointly operated transfer system would be unable to earn monopoly profits." H. Hovenkamp, supra note 13, at 283. This statement ignores the railroads' ability to use the association as a cartel to exploit shippers. See also L. Sullivan, supra note 5, at 126-28.}\]
\[\text{268} \text{ "[The Court's] decree required the defendants to grant competing railroads access on non-discriminatory terms. It is difficult to understand how such a decree protects the public; its purpose and effect are rather, to let defendants' competitors share in the monopoly position enjoyed by the defendants. Again we see a duty to divide monopoly profits equitably derived mysteriously from antitrust principles." R. Posner, supra note 20, at 208.}\]
\[\text{269} \text{ "It cannot be sound antitrust law that, when Congress refuses or omits to regulate some}\]
The Supreme Court dealt with these several issues by threatening alternative remedies. One remedy imposed three requirements on the association: it must 1) admit any existing or future railroad to joint ownership and control of the combined terminal properties on equal terms with the existing owners, 2) make the system available on nondiscriminatory terms to any railroad that wished to use it but did not want to become a joint owner, and 3) end price discrimination against traffic originating in St. Louis and short hauls. The alternative remedy was to dissolve the terminal association into three competing systems, one for each of the two bridges and one for the ferry system. In other words, the Supreme Court held that if the Terminal Association wished to remain as a horizontally integrated system in order to take advantage of the efficiency gains inherent in its natural monopoly (with the ability to fix prices), it would have to agree to forego monopolistic power both against other railroads and against shippers. Thus, the Court engaged in fairly explicit judicial utility regulation. Judge Posner has said, "the decree reads remarkably like the Interstate Commerce Act (not surprisingly since the court borrowed some of the express language of that act)."

In the recently decided Aspen Skiing Co. v. Aspen Highlands Skiing Corp., the defendant, Ski Co., operated skiing facilities at three of the four skiing mountains in Aspen, Colorado; the plaintiff, Highlands, owned a ski facility at the fourth mountain. Development of any major additional facilities had been hindered by practical and regulatory obstacles. Since skiers are generally interested in skiing on all four mountains in order to experience a variety of conditions and scenery, the four mountain area can be considered a natural monopoly because one firm can produce the four mountain "product" cheaper than two or more firms can.

aspect of a natural monopolist's behavior, the antitrust court will step in and, by decree, supply the missing regulatory regime." Id. at 211.

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270 Terminal R.R. Ass'n, 224 U.S. at 411-12.

271 Upon failure of the parties to come to an agreement which is in substantial accord with this opinion and decree, the court will, after hearing the parties upon a plan for the dissolution of the combination between the Terminal Company, . . . and the several terminal companies related to the Ferry and Merchants' Bridge Company, make such order and decree for the complete disjoinder of the three systems, and their future operation as independent systems, as may be necessary, enjoining the defendants, singly and collectively from any exercise of control or dominion over either of the said terminal systems, or their related constituent companies. . . .

Id. at 412.

272 "It is not easy to balance the efficiency gains of coordinated action against the loss of competition that may result, but the special need for coordinated action in network industries [like the railroad and telephone industries] must be recognized." Carlton & Klammer, supra note 173, at 446.

273 R. Posner, supra note 20, at 211 (this was written before Judge Posner was appointed to the Seventh Circuit).

274 Aspen Skiing Co., 105 S. Ct. at 2847.

275 Id. at 2850.

276 Id. at 2852.
For many years, the parties jointly offered a multi-day ski ticket that allowed a skier to use the lifts at any of the four mountains, and revenues were divided based on actual use at the four mountains. Beginning the 1978-79 ski season, Ski Co. discontinued the sale of the four mountain joint ticket and instead sold a joint ticket for its three mountains. It also engaged in deceptive advertising and took actions that made it extremely difficult for the plaintiff to market its own multi-area package to replace the joint offering, including raising the price of its single-day ticket, thereby making the Highlands' joint offering unprofitable (Highlands had to reimburse Ski Co. at the single-day ticket price when skiers used Highlands' joint ticket on Ski Co.'s mountains). Highlands' share of the market declined steadily thereafter, and it filed an antitrust suit alleging that the defendant had monopolized the downhill skiing market in violation of section 2 of the Sherman Act.

The Supreme Court held that the evidence was adequate to support a jury verdict for Highlands under the trial court's instructions concerning a monopolization offense. Moreover, it said, "[a]lthough Ski Co.'s pattern of conduct may not have been as 'bold, relentless, and predatory' as the publisher's actions in Lorain Journal, the record in this case comfortably supports an inference that the monopolist made a deliberate effort to discourage its customers from doing business with its smaller rival."  

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277 In the 1976-77 season, defendant refused to continue the joint ticket arrangement unless plaintiff would accept a fixed percentage of revenues. The following year, when plaintiff refused to accept a lower fixed percentage—considerably below its historical average based on usage—defendant discontinued its sale of the four mountain joint ticket and instead sold a joint ticket for its three mountains. Id. at 2851-52.

278 For example, "Ski Co. circulated [an] advertisement to national magazines labeled 'Aspen, More Mountain, More Fun. . . .' The advertisement depicted the four mountains of Aspen, but labeled only Ajax, Buttermilk and Snowmass. Buttermilk's label is erroneously placed directly over Highlands Mountain." Id. at 2853 n.12.

279 Defendant discontinued the 3-day, 3-area pass. Assuming a person came to Aspen for six days, with the 3-day ticket, he or she could ski on the defendant's mountains for three days and then there would be three days in which to ski on plaintiff's mountain. But when defendants only offered a 6-day, 3-mountain ticket, plaintiff maintained that it was "absolutely locked out of those people." Id. at 2853 n.13. Defendant refused to sell plaintiff any lift tickets, either at the tour operator's discount or at retail. Plaintiff attempted to develop an alternative product, the "Adventure Pack," which consisted of a 3-day pass at its mountain and three vouchers, each equal to the price of a daily lift ticket at defendant's mountains. The vouchers were guaranteed by funds on deposit in an Aspen bank, and were redeemed by Aspen merchants at full value. Defendant, however, refused to accept them. Later, plaintiff redesigned the Adventure Pack to contain American Express Traveler's Checks or money orders instead of vouchers. Defendant finally accepted these negotiable instruments in exchange for daily lift tickets. Despite some strengths of the product, the Adventure Pack met considerable resistance from tour operators and consumers who had grown accustomed to the convenience and flexibility provided by the all-Aspen ticket which did not require a visit to a ticket window every morning before gaining access to the slopes because it was worn visibly. Id. at 2851, 2853.

280 Aspen Highlands Skiing Corp., 738 F.2d at 1522.

281 Aspen Skiing Co., 105 S. Ct. at 2861.

282 A monopolist's right to refuse to deal is not unqualified (see the discussion in Section III of a monopolist's right to refuse to deal); when, as here, the monopolist made an important change in
With respect to the question of whether there is a duty to engage in horizontal price fixing with a competitor, euphemistically called "a duty to engage in a joint marketing program with a competitor," the trial court unambiguously instructed the jury that a firm possessing monopoly power has no duty to cooperate with its business rivals. On the other hand, relying on *Terminal Railroad*, the Tenth Circuit held that the multi-day, joint ticket could be characterized as an "essential facility" which defendant had a duty to market jointly with plaintiff. The Supreme Court declined to consider the relevance of the "essential facilities" doctrine partially because the plaintiff expressly chose not to rely on it, but said that a decision by a monopolist not to participate in a joint marketing arrangement with a horizontal competitor may give rise to liability under certain circumstances, which it chose not to specify.

No; Yes; Sometimes!

The Court also specifically declined to consider the possible anticompetitive consequences of the horizontal price fixing inherent in the joint marketing arrangement, partially because Ski Co. did not question its validity, saying only that "since the record discloses that interchangeable tickets are used in other multi-mountain areas which apparently are competitive, it seems appropriate to infer that such tickets satisfy consumer demand in free competitive markets." However, in a footnote the Court acknowledged that in 1975 a complaint had been filed by the Colorado Attorney General against the parties to this suit, alleging that negotiations over the joint ticket provided them with a forum for price fixing in violation of section 1 of the Sherman Act. That case was settled by an ineffectual consent

the pattern of distribution (for many years it had offered the joint ticket with Highlands), which caused it to forego short run profits (Ski Co. was apparently willing to forego daily ticket sales both to skiers who sought to exchange the coupons contained in Highlands' Adventure Pack, and to those who would have purchased Ski Co. daily lift tickets from Highlands if Highlands had been permitted to purchase them in bulk) and for which Ski Co. offered no efficiency justification, the Court said that the jury may well have concluded that Ski Co. was more interested in reducing competition in the Aspen market over the long run by harming its smaller competitor. *Aspen Skiing Co.*, 105 S. Ct. at 2861.

*Id.* at 2856.

*Id.* at 2857.

*Id.* at 2855-56.

*Id.* at 2862 n.44.

*Id.* at 2856. When asked about the essential facility doctrine by Justice O'Connor at oral argument, Highlands' counsel said that, while his argument was not based on the essential facility doctrine, the doctrine was a proper analogy for the Tenth Circuit to use. However, at Justice Blackmun's urging, plaintiff's counsel admitted that he would just as soon "remain apart" from the essential facility doctrine. 48 ANTITRUST & TRADE REG. REP. (BNA) 537 (March 28, 1985).

*Aspen Skiing Co.*, 105 S. Ct. 2857.

Ski Co. was not in a position to question the validity of the joint marketing arrangement because it participated in the interchangeable ticket programs in at least two other markets. *Id.* at 2859 n.30. Thus, the Court did not consider the circumstances that might permit such combinations in the skiing industry; nevertheless it cited NCAA v. Board of Regents, 104 S. Ct. 2948 (1984); Broadcast Music, Inc., 441 U.S. at 18-23, and Continental T.V. v. GTE Sylvania, Inc., 433 U.S. 36, 51-57 (1977). *Aspen Skiing Co.*, 105 S. Ct. at 2855 n.22.

*Aspen Skiing Co.* 105 S. Ct. at 2858.
decree that permitted the continuation of the joint ticket provided that the parties set their own ticket prices unilaterally before negotiating the terms of the joint ticket. Such a decree is ineffectual because the single ticket and joint ticket prices are mutually interdependent as was evident when defendant raised the price of its single-day ticket thereby making the plaintiff’s three-day joint offering unprofitable.292

Thus, the issue of balancing the efficiency potential of the natural monopoly against the monopolistic power inherent in the horizontal price fixing was not squarely faced by the Court in *Aspen Skiing* as it was in *Terminal Railroad*. However, since the monopoly power of the Aspen Ski area is limited due to ample competition from other ski areas, the Court’s implicit balancing in favor of the horizontal price fixing was probably correct.293

Broadcast Music, Inc. v. Columbia Broadcasting System (BMI v. CBS)294 is another case that involved the use of a public good-natural monopoly as a vehicle for collective price fixing. Composers, publishers, and others who own copyrighted compositions have the exclusive right to perform them publicly or to license others to perform them. The market for such performance rights is vast: radio and television broadcasting, motion pictures, live performances, juke boxes, etc.

In some markets, such as radio, there are severe impediments to individual transactions. First, radio stations need quick access to thousands of compositions daily, so the cost of individual transactions is prohibitive.295 Second, since radio broadcasts are ephemeral, someone may broadcast a song on a distant radio sta-

292 When the plaintiff marketed its own multi-area package in order to replace the defendant’s joint offering, defendant raised the price of its single-day price thereby making the plaintiff’s joint offering unprofitable. *Aspen Highlands Skiing Corp.*, 738 F.2d at 1522.

293 See *United States v. Griffith*, 334 U.S. 100 (1948), in which the defendants had interests in theatres in 85 towns, 53 of which had no competing theatres. In many of the small towns its theatres were undoubtedly natural monopolies. Moreover, there were clearly efficiencies in using a common agent to negotiate with motion picture distributors for the entire circuit. The government charged that these agreements with distributors granted Griffith exclusive privileges over their competitors (in towns where there were more than one theatre) that prevented them from obtaining enough first- or second-run motion pictures to operate successfully. The Supreme Court pointed out that if such a horizontally integrated circuit had only one monopoly town it would have little ability to extend its monopoly, but that as the number of monopoly towns increased it could have "crushing effect on competitors in other places ... ." *Griffith*, 334 U.S. at 107. Clearly, the entire circuit was not a natural monopoly, and the potential extension of the local natural monopoly power from horizontal integration of the theatre circuit clearly outweighed any efficiency benefits. In International Boxing Club of New York v. United States, 358 U.S. 242 (1959), the Supreme Court ruled that respondents, who had monopolized championship boxing promotions in the United States, must for the next five years offer leases of all the stadiums that they controlled to other promoters at a fair and reasonable rental, to be determined by the Court if the parties could not agree.


tion without the owner being aware of it. Theft of intellectual property by "free riders" is a significant problem in the radio broadcast market, because performance rights are a public good. In order to deal with these problems, copyright owners grant BMI a nonexclusive license that allows it to sell "blanket licenses" to radio broadcasters. A blanket license permits a licensee to perform any composition owned by BMI's members. BMI enforces its members' rights by the relatively inexpensive process of monitoring radio broadcasts. The license fees charged for a blanket license are usually a percentage of the gross revenue derived from the performance. The copyright royalties that owners receive are a function of gross revenue from broadcasts and the number of times the particular composition is performed. A performance rights organization that employs a blanket license is a natural monopoly in the least-cost sense because it costs almost nothing in transaction and enforcement costs to add an additional composition to the performing rights library in comparison to these costs if each composer dealt individually. The reasoning is the same as that used to show that the Associated Press is a natural monopoly.

In other markets, such as motion pictures, performance rights are sold by the individual copyright owner through a broker to an individual motion picture producer, who buys both the right to record the composition, known as the synchronization rights, as well as the performance rights from an individual copyright owner. The individual marketing of performance rights in the motion picture industry is the result of judicial intervention brought about by an antitrust suit in which the courts held that the use of a blanket license in the motion picture industry violated the Sherman Act.

The crux of BMI v. CBS was whether the Supreme Court should require individual licensing of performance rights for use on television as courts have in the motion picture industry or whether it should allow blanket licensing of performance rights as is used in the radio industry. The issue distills down to whether television utilizes music more like motion pictures or like radio.

There was evidence that approximately ninety percent of television broadcasts were recorded on tape for subsequent showing similar to motion pictures. Moreover, the Court was aware that the blanket license fundamentally altered the price structure of the market. Horizontal price fixing by composers replaced the sale of individual compositions by copyright owners so that price competition among the sellers was completely eliminated. Against the monopoly power inherent in the

294 H. HOVENKAMP, supra note 13, at 121-22. See the discussion of public goods and the free rider in Section II C.

blanket license, the Court balanced the efficiency creating potential due to the natural monopoly aspects of the arrangement and the fact that the performance right licenses conferred on BMI by copyright owners were non-exclusive. Any owner could sell the right to perform a single composition on an individual transaction basis. It refused to apply the per se rule against horizontal price fixing to blanket licensing and held that CBS had failed to prove that composers would not deal on an individual basis and therefore that it did not have a choice between individual and blanket licenses.\textsuperscript{298} Since, in general, copyright owners' collective market power is so much greater than each individual copyright owner's market power, the likelihood that any but the most famous copyright owners would willingly deal on an individual basis is remote. It is possible that the Court allowed the blanket license to be used in television because it believed that the monopoly power inherent in the blanket license balanced the monopoly power of the three major television networks.\textsuperscript{299}

\textbf{National Collegiate Athletic Association v. Board of Regents (NCAA)}\textsuperscript{300} involved a dispute between a standard-setting natural monopoly (i.e., a public good-natural monopoly) and several of its members, which can be thought of as concerning a dispute over the terms under which competitors will have access to a natural monopoly. It can also be described as a case in which a natural monopoly was used as a vehicle for horizontal price fixing.

The NCAA sets college football standards as to the number of games allowed and eligibility of players. The NCAA entered into a television contract with two networks that stipulated "ground rules" concerning minimum aggregate compensation during a four-year period, price per televised game, total number of games broadcast, and restricted the number of times that each member team's football games could be televised. The Supreme Court said that the NCAA is a special "network" industry\textsuperscript{301} in which "horizontal restraints on competition are essential if the product [football games] is to be available at all..."\textsuperscript{302} The Court held that

\begin{footnotesize}
\begin{enumerate}
\item See also Buffalo Broadcasting Co., Inc. v. American Soc'y of Composers, Authors & Publishers, 744 F.2d 917 (2d Cir. 1984), in which the Second Circuit reversed the district court and upheld the legality of blanket licensing arrangements. The court rejected the argument that blanket licensing imposed on independent stations was more anticompetitive than blanket licensing imposed on large networks because the independents would have a far more difficult time negotiating individual licenses. The Second Circuit did not reject the argument in principle, but held that it had not been established in this case.
\item See Cirace, supra note 297, at 281-86.
\item National Collegiate Athletic Ass'n, 104 S.Ct. 2948.
\item See Carlton & Klammer, supra note 173, at 446. NCAA is more aptly characterized a natural monopoly than a network industry. Some network industries are also natural monopolies. However, it is difficult to prove that a network industry is a natural monopoly since if each member of the network is to be connected to all other members, the number of possible connections rises more rapidly than the number of members. As discussed in note 52, in order to argue that local telephone service, which is a paradigm example of a network, is a local monopoly, one has to argue that the the increase in connection costs is offset by a quality increase consequent on each subscriber's being able to reach more customers as the network increases in size. 2 A. Kahn, supra note 52, at 123-24.
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the television contract must be evaluated under the rule of reason rather than the per se rule, but that under the rule of reason the agreement violated the antitrust laws. It said that NCAA's television plan, which restrained price and output, had significant potential for anticompetitive effects without procompetitive efficiencies. According to the Court, NCAA football could be marketed just as effectively without the television plan.\(^{303}\) The Court said that the NCAA imposes a variety of other restrictions designed to preserve amateurism that are much better tailored to the goal of competitive balance than is the television plan.\(^{304}\) However, by adopting a rule of reason approach, the Court implicitly acknowledged that the NCAA television restrictions cannot be said to be totally unrelated to the goal of preserving amateurism or the legitimate purposes of the natural monopoly, otherwise it would have held that the horizontal price fixing instituted by this standard-setting natural monopoly was per se illegal. When not an integral part of a natural monopoly, horizontal price fixing by standard-setting organizations is per se illegal (e.g., trade associations\(^{305}\)). In NCAA, the Supreme Court in effect held that the television contract was an activity that was not required for the efficient functioning of the natural monopoly.\(^{306}\)

The cases in this section all involved the use of a natural monopoly as a vehicle for horizontal price fixing. In these cases, which are the only major exceptions to the per se rule against price fixing, the Supreme Court has employed the rule of reason. In Terminal Railroad, the Supreme Court engaged in judicial utility regulation concerning horizontal pricing. In Aspen Skiing and BMI v. CBS, it held that the efficiency aspect of the horizontal price fixing (integration of pricing was necessary for the natural monopoly to be realized) outweighed its anticompetitive impact; it made no attempt to judicially regulate the market power of these natural monopolies. In NCAA, the Court held that horizontal price fixing was not justified by efficiency considerations because it was not necessary to the operation of the natural monopoly and therefore must be replaced by individual bargaining.


\(^{304}\) Moreover, the Court said that unlike the joint selling arrangement in BMI v. CBS, there was no new product or otherwise unattainable efficiencies. National Collegiate Athletic Ass'n, 104 S.Ct. at 2967.


\(^{306}\) See National Soc'y of Professional Eng'rs v. United States, 435 U.S. 679, 696 (1978), in which a professional association of engineers defended a canon that prohibited members from bidding competitively for jobs. The defense was that unrestrained competitive bidding would motivate engineers to cut corners in an effort to produce the lowest bid. The defendants argued that unsafe projects that would injure the public might result if price competition were not curbed. The Supreme Court responded that "the Rule of Reason does not support a defense based on the assumption that competition itself is unsafe."
VII. SUMMARY & CONCLUSIONS

Since its inception the essential facility doctrine has remained vaguely formulated. A business or group of businesses that controls a scarce facility has an obligation to give competitors reasonable access to it. The fact patterns to which the doctrine applies have never been defined or limited by courts or commentators. The reason that the doctrine has not been clarified is that it is inherently ambiguous. The phenomena described by the doctrine are more accurately analyzed by the theory of natural monopoly. It was shown that there are two types of natural monopoly cases in antitrust law: local natural monopoly cases, of which Aspen Skiing is representative, and public-good natural monopoly cases, of which Associated Press is representative. In addition, the theory of natural monopoly encompasses a greater number of cases than does the essential facility doctrine. For example, BMI v. CBS, which is generally thought to be sui generis, is explained by the theory of natural monopoly. In sum, essential facility cases are a poorly defined subset of all natural monopoly cases.

With respect to natural monopoly cases, some courts and commentators have emphasized a monopolist’s duty to give competitors reasonable access, others have emphasized that courts are not well suited for continuous supervision of businesses and should not interfere in decisions more efficiently made by businesses. In order to distinguish those natural monopoly cases in which reasonable access is paramount from those in which complex efficiency considerations and judicial utility regulation are more likely to be involved, the cases were classified into unintegrated, vertically integrated, and horizontally integrated cases. The explicit definitions of vertical and horizontal integration used in this article are different than those implicitly used by other commentators and led to different characterizations of the cases as well as different analyses and conclusions.

Unintegrated natural monopoly cases are primarily simple access cases typified by Gamco in which there is a duty to admit competitors up to the limits of the natural monopoly. Judicial utility regulation is rarely implicated in these cases. Other unintegrated cases involve refusals to deal with buyers or sellers. In cases in which a natural monopoly’s refusal to deal is economically motivated, a duty to deal should be imposed subject to the qualification that courts should not substitute their business

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369 Cantor, 428 U.S. 579 (1976). Cantor concerned a private electric utility’s program of free distribution of light bulbs to its customers that was challenged by competitor firms which sold light bulbs. According to the subadditivity definition, a firm that distributes electricity and light bulbs will not have lower costs than two firms, one of which sells electricity, the other light bulbs, because electricity and light bulbs are complements in use but not in production. Thus, the light bulb distribution was not part of the natural monopoly of electricity distribution. See Baumol, Bailey & Willig, supra note 64, at 350-51. See the discussion of natural monopoly in Section II B. The Supreme Court held that the free light distribution was an unlawful restraint of trade and was not saved by the state action exemption even though the program was part of a state-approved tariff. The Court was correct in not allowing the horizontal integration of the two activities since the anticompetitive potential in the light bulb market clearly outweighs any efficiency gains from integration.
judgment for decisions most efficiently made by business. Courts should not have great difficulty distinguishing when an economically motivated refusal to deal involves decisions requiring business judgment, such as in OAG, from those in which it does not, such as Lorain Journal.

With respect to vertically integrated natural monopoly cases, the courts must balance the potential efficiencies of integration against the possibility that if a natural monopolist is allowed to vertically integrate a potentially competitive stage, there may be substantial adverse efficiency effects on costs or progressiveness. The case law does not support a general duty of access; a full rule of reason analysis is required.

Although access by competitors and customers is required in horizontally integrated natural monopoly cases, the more important and difficult issue requires courts to determine whether the collective price fixing is necessary for the efficient functioning of the natural monopoly, and if so, whether it should be subject to restriction or regulation, or whether the natural monopoly should be dissolved into more than one entity in order to reduce its market power despite the loss. These cases, Terminal Railroad, Aspen Skiing, BMI v. CBS, and NCAA, in which the Supreme Court has employed a rule of reason approach, are the only major exceptions to the rule that horizontal price fixing is per se illegal.