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CAN CONSPIRACY THEORY SOLVE THE "OLIGOPOLY PROBLEM"?

RANDALL DAVID MARKS*

Plaintiffs in antitrust litigation traditionally prove price fixing by presenting direct evidence of direct communication among the defendants: at trial, a witness who earlier participated in price fixing discussions testifies against his or her co-conspirators. This approach, relying on evidence of clandestine deals hatched in "smoke filled hotel rooms," has worked in many markets, but it fails to remedy more subtle forms of collusive behavior.

Oligopoly markets, in particular, present intractable problems of proof in antitrust litigation. Absent direct evidence of collusion, courts require at least some circumstantial evidence of enjoinable conduct which, taken together with evidence of consciously parallel business behavior,² proves that an improper agreement to restrain competition exists. As participants in a market characterized by only a small number of competitors, oligopolists have a unique ability to coordinate their business decisions. Theoretically, when a market is structured to allow perfect competition, buyers and sellers have no ability to influence the market price—instead, market forces ensure that price will equal marginal cost. Because of the small number of competitors in an oligopoly, however, each firm has the theoretical power to influence the price/output options available to itself and others. As a result, government enforcement agencies and academics fear that oligopolists can achieve supracompetitive pricing without detection.

Over the last decade, the Federal Trade Commission (FTC or the Commission) has tackled the oligopoly problem using two novel approaches. First, the Commission attempted a structural remedy

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^{1.} See infra text accompanying notes 17-18 (describing oligopoly market model).

^{2.} See infra text accompanying notes 61-63.

by trying to eliminate the cause of the problem—highly concentrated markets—rather than attempting to police the conduct of oligopolists. The government hoped to deconcentrate industries whose dominant firms engaged in noncompetitive behavior by showing that the industry structure constituted a "shared monopoly" and then ordering divestitures. It tested this shared monopoly theory in the ready-to-eat cereal market, but then publicly abandoned it when the Commission dismissed its complaint in response to heavy congressional pressure. The length and expense of the proceeding, uncertainty about judicial acceptance of "shared monopoly" arguments, and skepticism concerning the likely costs and benefits of industry restructuring contributed to the lack of congressional support.

Second, the Commission attempted a conduct remedy by trying to prohibit practices that might facilitate supracompetitive pricing.

Similarly, the Commission issued a complaint charging eight large petroleum companies with maintaining a shared monopoly but dismissed it after eight years of discovery. In re Exxon Corp., 98 F.T.C. 453 (1981). It also investigated the automobile industry (General Motors investigation) on a shared monopoly theory but issued no complaint.

^{3.} The meaning of the term "shared monopoly" is elusive. George Hay, for example, identifies three interpretations, each of which involves different conduct by oligopolists: interdependent pricing, use of facilitating practices, and maintenance of monopoly power by excluding entrants (which he identifies as the theory tested by the Commission). Hay, Oligopoly, Shared Monopoly, and Antitrust Law, 67 CORNELL L. Rev. 439, 472 n.125 (1982).

FTC Commissioner Pertschuk interpreted the Commission's complaint in *In re* Kellogg Co. as "predicated upon the allegation of high concentration, as evidenced by a three-firm concentration exceeding 80%; poor competitive performance, as measured by sustained high profits and the absence of price competition; and high barriers to entry caused by exclusionary conduct of members" 99 F.T.C. 8, 281 (1982) (dissenting from denial of complaint counsel's appeal of administrative law judge's dismissal of complaint). Areeda and Turner appear to favor a similar standard: "As with single-firm monopoly, full feasible relief against shared monopoly should on principle be available against firms which have engaged in exclusionary conduct having a significant causal relation to shared monopoly power." P. Areeda & D. Turner, 3 Antitrust Law: An Analysis of Antitrust Principles and Their Application ¶ 840b (1978).

^{4.} In re Kellogg Co., 99 F.T.C. 8, 269 (1982) (denying complaint counsel's appeal dismissal and vacating initial decision).

^{5.} In commenting on the dismissal, Commissioner Bailey stated that the Commission "should not undertake to restructure an industry under Section 5 of the Federal Trade Commission Act without a clear supportive signal from the Congress. In this case, the signals are, for the present, quite to the contrary — as they were not so apparently in 1972 when this complaint issued." *In re* Kellogg Co., 99 F.T.C. 8, 288 (1982) (separate statement of Commissioner Bailey).

In In re Ethyl Corp., the Commission prohibited the use of "facilitating practices" by lead additives producers without alleging or proving an agreement.⁶ In vacating Ethyl Corp., the Second Circuit's opinion in E.I. DuPont de Nemours & Co. v. Federal Trade Commission all but destroyed the facilitating practices approach by imposing proof requirements that appear as stringent as those for establishing an agreement,⁷ thereby eliminating the benefit of the approach.

Rejection of both the shared monopoly and facilitating practice approaches has left government agencies and private plaintiffs seeking another theory with which to challenge oligopoly misbehavior. Richard Posner's "economic approach" to proof of conspiracy arguably provides such a theory. It would not compel courts to abandon the requirement that the plaintiff allege a collusive agreement or conspiracy; rather, the plaintiff would use economic evidence to prove agreement without showing actual communication among the defendants. Because it fits more easily into the traditional legal framework, Posner's approach avoids some of the limitations of the shared monopoly and facilitating practice approaches. Posner argues that "[i]f the economic evidence . . . warrants an inference of collusive pricing, there is neither legal nor practical justification for requiring evidence that will support the further inference that the collusion was explicit rather than tacit."8 Posner thus would impose liability under the traditional Sherman Act theory of conspiracy to restrain competition. He expands the reach of traditional conspiracy theory, however, by emphasizing use of "economic evidence" evidence of economic structure, conduct, and performance—to show collusion, rather than the "cops and robbers" approach of seeking evidence of interfirm communication.⁹ In effect, he focuses attention on the result of collusive behavior (anticompetitive pricing) rather than on the means by which the results are obtained (enjoinable conduct).

^{6.} The Commission prohibited the use of delivered pricing, advance notice of price increases, and most favored nations clauses. In re Ethyl Corp., 101 F.T.C. 425 (1983), jud. vacated sub nom. E.I. Du Pont de Nemours & Co. v. FTC, 729 F.2d 128 (2d Cir. 1984). See generally Clark, Price-Fixing Without Collusion: An Antitrust Analysis of Facilitating Practices After Ethyl Corp., 1983 Wis. L. Rev. 887 (1983) (providing an excellent and comprehensive legal and economic analysis of facilitating practices).

^{7. 729} F.2d at 139.

^{8.} R. Posner & F. Easterbrook, Antitrust: Cases, Economic Notes and Other Materials 341 (2d ed. 1981); R. Posner, Antitrust Law: An Economic Perspective 71 (1976) (identical language).

^{9.} R. Posner, supra note 8, at 47.

Posner proposes a two-step analysis for determining when economic evidence justifies an inference of collusive pricing. First, one identifies "those markets in which conditions are propitious for the emergence of collusion." Second, one determines "whether collusive pricing in fact exists in such a market." To facilitate the latter task, Posner identifies nine factors that indicate collusive behavior. 13

If a court finds a violation according to these criteria, Posner argues that "[t]he appropriate remedy in a collusion case is the same regardless of the nature of the evidence used to support the inference of collusion: an injunction, fine, or damage award which allows the defendants complete competitive flexibility, and forbids only the (explicit or tacit) collusive agreement itself." In other words, Posner is not proposing a new cause of action with a special remedy, but rather, in his view, a slight modification of the evidentiary requirements for a Sherman Act collusion case. 15

^{10.} Posner identifies the following conditions as favorable to collusion: (1) high seller concentration, (2) no fringe of small sellers, (3) inelastic demand at competitive price, (4) long entry time, (5) many customers, (6) homogeneous product, (7) principal firms selling at the same level of distribution, (8) price competition relatively important, (9) high ratio of fixed to variable costs, (10) static or declining demand, (11) sealed bidding, and (12) past anticompetitive behavior. *Id.* at 55-61; R. Posner & F. Easterbrook, *supra* note 8, at 336-38.

^{11.} R. Posner, supra note 8, at 55.

^{12.} The factors are: (1) stable relative market shares, (2) price discrimination, (3) exchange of price information, (4) regional price variations, (5) identical bids, (6) sudden price, output, and capacity changes (which may mark the formation of a cartel), (7) industry-wide resale price maintenance, (8) declining market shares of industry leaders, and (9) price positively related to concentration. R. Posner & F. Easterbrook, supranote 8, at 339-40. Concerning the last factor, Posner explains that "assuming plausibly that a cartel will be more effective the more concentrated the market is, we would expect price in a cartelized market to move with changes in concentration, and in the same direction." Id. at 340.

^{13.} Posner's list was a bit different in 1976. See R. Posner, supra note 8, at 55-75. The ninth factor (the price/concentration relationship) is new, while four factors included in 1976 — amplitude and fluctuation of price changes, demand elasticity at market price, level and pattern of profits, and basing point pricing — are no longer listed. Posner and Easterbrook state that the amplitude, frequency, and direction of price changes "sometimes might be instructive." R. Posner & F. Easterbrook, supra note 8, at 340. Nothing is said about demand elasticity at market price or basing point pricing, although subsequent discussion indicates that basing point pricing can be anticompetitive. Id. at 345. Posner has apparently changed his position concerning profits: the casebook concludes that profits are not a very good indication of the existence of a cartel although "[i]t may be more promising to look at the profits of the fringe producers," which will increase after a cartel forms. Id. at 341 n.5.

^{14.} R. Posner, supra note 8, at 65.

^{15.} Thus, although strongly criticizing the traditional view of oligopoly behavior as expounded by Donald Turner, see infra text accompanying notes 34-50, Posner describes the issue dividing him and Turner as "the narrow one [of] whether some evidence of

This Article explores the usefulness of Posner's conspiracy approach to plaintiffs faced with the "oligopoly problem." Does the caselaw suggest that conventional theories of conspiracy, coupled with economic evidence alone, can be used effectively to attack anticompetitive behavior by oligopolists?

To answer this question, part I begins with a brief economic analysis of oligopoly behavior itself. Economists have debated the extent to which oligopolists can achieve supracompetitive pricing without an explicit agreement. Part I reviews this debate to demonstrate that economic analysis cannot easily distinguish competitive performance by oligopolists from noncompetitive performance. Apparently in response to the economic uncertainties involved, the courts have assumed that oligopolists can price noncompetitively without reaching an agreement. They therefore demand at least circumstantial evidence of an "agreement."

Part II reviews the general law of circumstantial proof of agreement in the context of antitrust litigation. While courts have not demanded that a plaintiff prove the terms of an agreement to find liability for collusion, they have universally refused to infer agreement from evidence of noncompetitive performance alone, perhaps because of their assumption that noncompetitive performance can result from unilateral behavior. The rule of "conscious parallelism plus" exemplifies this middle-of-the-road approach to the oligopoly problems. Posner's economic approach is consistent with the thrust of this rule, but because he argues that significant noncompetitive performance does not exist absent an illegal agreement, he would allow the economic evidence to stand alone.

Part III analyzes specific cases to ascertain, with as much precision as possible, the courts' willingness to find collusion when confronted by various kinds of circumstantial evidence. Evaluation of such evidence tends to become highly subjective, however, given the factual complexities involved and our limited understanding of economic relationships. Thus, even at its best, antitrust litigation has been fraught with uncertainty. Nevertheless, some patterns emerge from the caselaw. To explore these effectively, the cases have been organized into three groups according to the analytical problems presented. Subsection A briefly discusses the "easiest" cases: those involving obvious concerted action, but in which the court must find

actual communication among the alleged colluders should be required, as corroboration for the economic evidence." *Id.* at 76.

a link between the concerted action and noncompetitive performance. Typically, these cases involve trade associations that have coordinated industry-wide use of various facilitating practices (delivered pricing, for example). Subsection B discusses cases in which the courts have been asked to infer, from conduct and performance evidence, that firms secretly and expressly agreed to fix prices. Subsection C turns to implicit agreement cases, in which the court knows what the firms have done and must decide whether such conduct shows sufficient commitment to warrant implying an agreement.

Part IV contains my conclusions concerning the limited utility of Posner's approach as a solution to the oligopoly problem. The courts refuse to accept economic evidence of noncompetitive performance alone as proof of conspiracy. Moreover, when such evidence is used, it is likely to be more ambiguous than Posner assumes. However, it is at least theoretically possible to prove an antitrust violation without direct evidence that the defendants communicated among themselves, and a few cases have resulted in liability based on either an inferred or implied agreement with only minimal evidence of direct communication. While the conspiracy framework probably will not be expanded as far as Posner recommends, for now his approach seems to be the only viable way to attack the more subtle forms of oligopolist misbehavior.

I. ECONOMIC ANALYSIS OF THE OLIGOPOLY PROBLEM

Economic analysis is insufficiently refined to detect price fixing by oligopolists with a high degree of confidence. Because the small number of competitors in an oligopoly arguably allows the member firms to coordinate their behavior without a formal agreement, distinguishing collusive from noncollusive behavior on the basis of economic evidence is inherently difficult.

A. The Nature of an Oligopoly

Economists have traditionally defined three primary market structure models: perfect competition, monopoly, and oligopoly.¹⁶ The perfect competition model assumes many identical buyers and sellers of an identical product blessed by perfect information and

^{16.} See generally F. Scherer, Industrial Market Structure and Economic Performance 9-44, 151-168 (2d ed. 1980); Hay, supra note 3, at 443-44. A fourth model, monopolistic competition, relaxes the competitive assumption of homogeneous products. See infra note 17.

easy entry and exit. Economic theory maintains that in such a market, the "invisible hand" of competition causes price to equal marginal cost and promotes the optimal allocation of resources in all markets. For our purposes, the most crucial assumption of the perfect competition model is that buyers and sellers lack discretion over pricing. As "price takers," they may choose to buy or sell at the market price, but they cannot influence that price.

The monopoly model also assumes many buyers, an identical product, and perfect information but, of course, only one seller protected from new entrants. Rather than being a price taker, the monopolist is a price setter. Price is a function of the monopolist's output subject to the constraint of a negatively sloped demand curve. Any price increase is accompanied by a corresponding reduction in the quantity sold. To maximize its profits, the monopolist sets its output so that marginal cost equals marginal revenue.¹⁷ Absent significant economies of scale, output is lower and the equilibrium price is higher in a monopoly market than they would be in a competitive market. The resulting resource allocation is suboptimal.

The oligopoly model assumes many buyers, an identical product, ¹⁸ entry barriers, and perfect information, but assumes a small number of competing firms. Each firm influences the price/output options available to its rivals. Thus, in theory, firms can choose to behave either independently or interdependently. Independent behavior ignores the reactions of other firms. Interdependent behavior, on the other hand, is behavior that is rational only if competitors behave similarly. For example, an interdependent price increase is one that maximizes profits only if competitors match it. Interdependent behavior can range from unilateral business decisions, which take reactions by rivals into account, to fullblown cartels, which achieve results little different from a monopoly. As in all

^{17.} The degree of market power over price in a monolopistic market is restricted by the availability of a large number of close, but imperfect, substitutes. There are many buyers and sellers, easy entry and exit, and perfect information, but firms sell differentiated products and thus have some degree of individual market power. While performance will be somewhat noncompetitive, firms in a monopolistically competitive market have only a little more market power (ability to influence price) than firms in a competitive market.

^{18.} An oligopoly can also exist if firms sell differentiated products although such differentiation makes collusion more difficult. See F. Scherer, supra note 16, at 200-05. But see Davidson, The Competitive Significance of Segmented Markets, 71 Calif. L. Rev. 445, 455-59 (1983), suggesting that the individual market power created by product differentiation makes competitive problems in an oligopoly more serious.

small-number cases, the degree of coordination achieved is idiosyncratic. The greater the coordination of behavior, however, the greater the industry's collective profits. The resulting price and output will fall somewhere between the levels found in a monopoly and those found in a perfect competition market, with the result determined by the degree of coordination achieved.

B. Coordinated Behavior—and Misbehavior

To elevate prices or restrict output, and thereby earn supracompetitive profits, firms must accomplish several tasks. First, they must establish a consensus price or price schedules. The greatest threat to the ensuing price-fixing agreement is the urge to cheat. Since the price fixed by the colluding firms is above marginal cost, a firm can charge just under the collusive price and sell additional output. The second task of colluders, therefore, is to enforce the consensus by detecting and punishing cheaters. In addition, firms that are not parties to the conspiracy may undercut the consensus by expanding their output, entering the market, or selling substitute products. Unless the structure of the market—or the actions of the colluders—prevents erosion of the collusive price from competition by fringe firms, entrants, and substitute products, the price-fixing agreement will soon deteriorate. 20

The ease with which firms can accomplish these tasks determines the likelihood that they will decide to collude.²¹ Market characteristics, in turn, affect the ease or difficulty of accomplishing these tasks. For example, as the number of sellers in a market decreases, agreement among them becomes easier to reach.²² Moreover, cheating is easier to detect in markets in which demand is

^{19.} Moreover, having set a collusive price, the firms must then allocate sales among themselves.

^{20.} The Organization of Petroleum Exporting Countries (OPEC) was beyond the reach of American antitrust law and thus in theory had the opportunity to create a long-lasting cartel. OPEC, however, has had some difficulty reaching a consensus, in part because oil has many grades and the oil producing nations have varying interests. Moreover, the cartel has been unable to prevent cheating by its members. Finally such non-OPEC members as Great Britain have undercut its price and consumers have substituted other forms of energy (coal, natural gas, conservation) for oil. For these reasons, OPEC has lost its once firm control over oil prices.

Judge Frank Easterbrook of the Seventh Circuit asserts that "[c]artels...rarely last five years." Easterbrook, *The Limits of Antitrust*, 63 Texas L. Rev. 1, 33 (1984).

^{21.} R. Posner, *supra* note 8, at 47. The costs of gathering information, negotiating consensus prices and output levels, monitoring the agreement, and punishing cheaters are often called the transaction costs of collusion. If these costs are high relative to the expected gains from collusion, collusion will not occur.

^{22.} Other structural factors also influence the ease with which a common price may

stagnant and predictable rather than growing explosively: if the colluders begin to lose market shares, they will suspect cheating.

Having few rivals, oligopolists are more likely than firms in more competitive markets to have the ability and incentive to collude. Oligopolists can coordinate their business decisions in three ways: by interdependence, express agreement, or implicit agreement.²³ Agreements to fix prices are of course illegal, whether express or implied. By contrast, interdependent pricing, in which the firms set prices²⁴ unilaterally but in anticipation of their rivals' reactions, is legal. Interdependent pricing is characterized by "nonenjoinable conduct," that is, by conduct that cannot be sensibly controlled through an injunction, because such an order must be extremely (if not impractically) complex and regulatory to produce its desired effect. Under this definition, virtually all authorities would characterize a firm's interdependent price and output decisions as nonenjoinable conduct and, therefore, legal.²⁵ Interdependent pricing, however, may prove ineffective because lack of communication creates too much uncertainty among the firms. Indeed, Posner and others reject the notion that interdependent pricing alone can elevate price above a competitive level.26

To increase the effectiveness of their price fixing, firms may engage in "enjoinable conduct." Enjoinable conduct is any activity

be established, e.g., the number of variables on which agreement must be reached and the degree to which the firms perceive their interests in the same way. Thus firms find it fairly easy to reach a consensus on a homogeneous product with few variations, e.g., corn, but more difficult to reach a consensus on a differentiated product of various sizes and quality, e.g., automobiles. But cf. Davidson, supra note 18, at 455-59. Moreover, firms with similar cost functions, market shares, and expectations of the future will find it easier to agree because all their interests are likely to be served by the same level of prices. See, e.g., R. Posner, supra note 10; F. Scherer, supra note 16, at 169-228.

- 23. Express and implicit agreements are obviously forms of interdependent behavior. In this article, however, "interdependent behavior" refers only to business decisions made with recognition of rivals' responses but without the commitment necessary to establish an express or implicit agreement.
- 24. Alternatively, firms may restrict output or engage in particular business practices, e.g., delivered pricing, based on assumptions about their competitors' probable responses.
- 25. E.g., Turner, The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusals to Deal, 75 HARV. L. REV. 655, 669-70 (1962) (reviewing the difficulties of fashioning a remedy to interdependent pricing).
 - 26. See infra text accompanying notes 31-40.
- 27. The most effective method of coordinating business decisions is by merging to create a monopoly. Merger policy is beyond the scope of this paper. It is, however, worth noting that to the extent that firms can price noncompetitively without reaching an agreement, a vigorous antimerger policy may be warranted. To the extent that noncompetitive performance is difficult without an agreement, or that the government can detect anticompetitive agreements, a more relaxed policy may be appropriate.

for which a simple conduct order is an effective and constructive remedy if the activity is judged harmful. In the price fixing context, it is useful to distinguish between two types of enjoinable conduct: (1) direct communication (for example, meetings) and (2) facilitating practices, which are other forms of avoidable conduct that assist in the coordination of pricing and output levels. Examples of facilitating practices include the maintenance of delivered pricing systems, the use of price books and particular contract clauses (such as "most favored nations" clauses), and the exchange of price information.²⁸

Enjoinable conduct that affects price or output is generally unlawful. The law treats express agreements about prices particularly harshly. Not only may a court award treble damages to a victim of price fixing, but the price fixers themselves may face jail terms. As a result, firms virtually always communicate secretly when forming express agreements regarding prices, output levels, or practices that facilitate supracompetitive pricing. Alternatively, to lessen the risk of detection, firms may engage in conduct that provides enough certainty to elevate price or restrict output, but falls short of a formal agreement. For example, firms may merely exchange price information. In either case, the small number of firms in an oligopoly will make illegal coordination easier both to accomplish and to hide.

C. The Heart of the Oligopoly Problem

Because oligopolists have a special ability and incentive to collude, antitrust scholars and enforcement agencies have long been troubled by the possibility that they are behaving noncompetitively. To remedy such behavior, however, courts must be able to distinguish illegal agreements from legal, interdependent conduct. The issue at the heart of the "oligopoly problem" is whether oligopolists can price noncompetitively in the absence of explicit agreement. In other words, does the existence of noncompetitive performance (price above marginal cost, restricted output, or high profits) indicate that firms have secretly fixed prices? If oligopolists can coordinate their behavior only by engaging in enjoinable conduct, then evidence of noncompetitive performance itself is strong evidence of secret enjoinable conduct. Further evidence about conduct would be unnecessary.

Classical economic theory assumes that in an oligopoly in which each seller knows the precise shape of the demand curve and its own

^{28.} See Clark, supra note 6; Hav, supra note 3.

and its rivals' cost curves, firms will price interdependently.²⁹ As a result, price will be above, and output below, the competitive level. Thus, economists traditionally have believed that oligopolists can price supracompetitively without communicating.³⁰

Posner and others question this view.³¹ For example, one commentator points out that "it appears that even in highly concentrated industries competition is suppressed with great difficulty and only as a result of deliberate efforts by members of an industry to reach an express or tacit agreement."³² If even open, explicit agreements regarding price break down, then it seems unlikely that supracompetitive pricing could be achieved without any agreement whatsoever. Oligopolistic markets will therefore behave competitively absent some agreement. The turbulent history of OPEC demonstrates the validity of this argument.³³

Posner makes a more theoretical challenge as well,³⁴ attacking the premises of the conventional theory as expressed in an influential article by Donald Turner.³⁵ Turner suggests several reasons why oligopolists can sometimes achieve supracompetitive performance without express or tacit agreement. For example, he assumes that an oligopolist will be reluctant to undercut competitors' prices because of the speed of detection and retaliation—competitors will quickly match the new price and any competitive edge gained by the original cut will be negligible.³⁶ Posner, on the other hand, argues

^{29.} See A. Cournot, Researches Into the Mathematical Principles of the Theory of Wealth (N. Bacon trans. 1963).

Some commentators have termed such interdependent pricing "tacit collusion." E.g., R. Posner, supra note 8, at 40; Blechman, Conscious Parallelism, Signalling and Facilitating Devices: The Problem of Tacit Collusion Under the Antitrust Laws, 24 N.Y.L. Sch. L. Rev. 881 (1979). I have used the terms "interdependent pricing" or "interdependent behavior" rather than "tacit collusion" because "collusion" generally connotes some sort of express agreement.

^{30.} More precisely, they believe that price will normally be above marginal cost in an oligopoly. F. Scherer, *supra* note 16, at 168; Hay, *supra* note 3, at 443-44; *see also* Turner, *supra* note 25, at 665-71.

^{31.} See, e.g., Demsetz, Two Systems of Belief About Monopoly, in INDUSTRIAL CONCENTRATION: THE NEW LEARNING 166-67 (Goldschmid, Mann, & Weston eds. 1974).

^{32.} Blechman, supra note 29, at 892.

^{33.} See supra note 20. OPEC's power, however, lasted perhaps a decade before breaking down even though the market for oil is not highly concentrated.

^{34.} R. Posner, supra note 8, at 42-46; R. Posner & F. Easterbrook, supra note 8, at 332-35.

^{35.} Turner, supra note 25, at 665-73. George Hay appears to agree with the Turner theory. Hay, supra note 3, at 443-44.

^{36.} Turner, supra note 25, at 665-66.

that there will be a time lag sufficient to make price cutting worth-while.³⁷ Some of the price cutter's increased sales will come from new customers responding to lower prices, so that competitors might not see a sharp decline in their own sales. Hence, in Posner's view, detection by competitors will be slower than Turner believes.

Posner also criticizes Turner's assumption that oligopolists can use price leadership to reach a supracompetitive price in the first place.³⁸ Posner argues that if one member of a market set a supracompetitive price, a rational competitor would just cut its own price. If its cheating were detected, the price cutter would quickly raise its price back to the supracompetitive level of its rivals. Because Turner's price leadership theory fails to recognize this incentive to cheat, Posner concludes that Turner overestimates oligopolists' ability to maintain supracompetitive prices through price leadership alone.³⁹ Posner does not say whether he believes that pricing in an oligopoly should reach a competitive equilibrium, but he obviously believes that performance will be significantly better than does Turner — unless the firms use enjoinable conduct to reach and enforce an anticompetitive consensus regarding price or output.

Finally, Posner explicitly criticizes Turner's assertion that oligopolists are merely acting rationally when they refuse to compete on price. Turner maintains that

the behavior of a rational oligopolist in setting his price is precisely the same as that of the rational seller in an industry consisting of a very large number of competitors The rational oligopolist simply takes one more factor into account—the reactions of his competitors to any price change that he makes.⁴⁰

II. LEGAL ANALYSIS: CONSPIRACY AND THE OLIGOPOLY PROBLEM

Section 1 of the Sherman Act prohibits "every contract, combination in the form of trust or otherwise, or conspiracy, in restraint

^{37.} R. Posner, supra note 8, at 44.

^{38.} Price leadership occurs when oligopolists base their pricing decisions on the decisions of the price "leader," frequently the industry's dominant firm. Generally, the price leader initiates a price increase (or decrease) and other firms either match the increase or announce a different price. There may be several rounds of price announcements before a new consensus price is reached, but the indirect communication may be as effective as direct negotiations. See F. Scherer, supra note 16, at 176-84; Hay, supra note 3, at 446, 453-54; Washburn, Price Leadership, 64 VA. L. Rev. 691 (1978).

^{39.} R. Posner, supra note 8.

^{40.} Turner, supra note 25, at 665.

of trade. . . ."⁴¹ While the plain language of section 1 condemns literally every restraint of trade, the courts have long interpreted it to proscribe only "unreasonable" restraints.⁴² A plaintiff, therefore, must prove two elements to establish liability under section 1: concerted activity and an unreasonable effect.⁴³ This Article focuses on the first element, concerted action, because the issues surrounding proof of such activity are central to the oligopoly problem.

The simplest method of establishing concerted activity is to produce a written contract or some other evidence of an illegal agreement. Many Justice Department price fixing cases rely primarily on just such evidence: testimony of an executive who had earlier participated in price fixing discussions.⁴⁴ A naked (open) agreement regarding price or output is per se illegal, however, and as a result, virtually all anticompetitive conspiracies are secret. Often direct evidence is unavailable, and circumstantial proof becomes necessary. The following discussion outlines the general law of circumstantial proof of agreement.

A. Noncompetitive Performance Alone Does Not Prove Collusion

While economists seem to be leaning toward the view held by Posner⁴⁵ that oligopolists cannot price noncompetitively absent enjoinable conduct, the courts have not accepted this premise. The rule that some proof of enjoinable conduct must exist to support a finding of price fixing seems firmly established.

Current precedent strongly suggests that interdependent pricing unaccompanied by enjoinable conduct is legal, even if such pricing is supracompetitive. As one court pointed out, "Clearly parallel pricing alone is insufficient to establish an antitrust violation. In fact, price identity may be the expected and normal result when the product is identical or fungible, even though there is no agreement

^{41. 15} U.S.C. § 1 (1982).

^{42.} L. Sullivan, Antitrust Law 165-74 (1977). Sullivan points out that Congress could not have meant to prohibit every contract that restrains trade. Such an interpretation would in effect prohibit all contracts because each time a "buyer closes a deal with a seller, the contract binds both to a particular course and by so doing limits or restrains the commercial opportunities of other sellers who would like to make the sale and of other buyers who might have bought the goods." *Id.* at 164.

^{43.} A plaintiff must also satisfy the section 1 jurisdictional requirement that the concerted activity restrain interstate or foreign commerce.

^{44.} E.g., United States v. Foley, 598 F.2d 1323, 1331-34 (4th Cir. 1979), cert. denied, 444 U.S. 1043 (affirming conviction of real estate brokers for price fixing based on evidence regarding dinner conversation and subsequent attempt to coerce compliance with consensus price).

^{45.} See supra note 31.

and the costs for the participating companies are not the same."⁴⁶ In reality, however, the results in the case law may have turned as much on the absence of convincing evidence of poor performance as on the failure to prove *more* than supracompetitive performance.⁴⁷ Nevertheless, the Federal Trade Commission recently stated that the FTC Act does "not prohibit oligopolistic pricing *alone*, even supracompetitive parallel prices, in the absence of specific conduct which promotes such a result."⁴⁸

Judicial unwillingness to accept supracompetitive pricing alone as dispositive evidence of collusion may result, in part, from historical accident: the Turner view won acceptance first. The legal process, of course, relies heavily on application of existing rules to new fact situations and, for better or worse, changes direction slowly. Having once formulated requirements based on the assumption that supracompetitive prices can exist without collusion and merely as the result of interdependent pricing, courts seem reluctant to change their world view and accept Posner's approach.

More fundamentally, the courts are perhaps loath to impose the

^{46.} Federal Trade Commission v. Lukens Steel Co., 454 F. Supp. 1182, 1190 (D.D.C. 1978) (holding evidence insufficient to establish that defendants had violated a prior FTC order prohibiting price fixing); accord United States v. FMC Corp., 306 F. Supp. 1106, 1117, 1139 (E.D. Pa. 1969) (insufficient evidence of conspiracy to increase prices in violation of the Sherman Act).

Moreover, the Supreme Court has held that individual decisions to follow a price leader does not violate the law. "[T]he fact that competitors may see proper, in the exercise of their own judgment, to follow the prices of another manufacturer, does not establish any suppression of competition or show any sinister domination." United States v. International Harvester Co., 274 U.S. 693, 708-09 (1927) (monopolization case; no evidence of anticompetitive conduct or performance); accord Esco Corp. v. United States, 340 F.2d 1000, 1007 (9th Cir. 1965) (court found defendant's actions went beyond mere price leadership); Independent Iron Works v. United States Steel Corp., 322 F.2d 656, 665 (9th Cir.), cert. denied, 375 U.S. 922 (1963) (in dictum, court indicated that similarity of prices in the sale of a standardized product does not by itself prove collusive price fixing).

^{47.} E.g., State v. SuperAmerica, 559 F. Supp. 298 (D. Mont. 1983). In SuperAmerica the court rejected Montana's claim that a gas station's consciously parallel pricing, posting of its prices on large signs, and surveys of competitor prices established that it was colluding with its competitors. The court held that because the parallel pricing was the result of SuperAmerica's unilateral policy to sell gasoline at a price lower than its competitors, the effect was procompetitive. The court concluded that the station had not fixed prices because (1) its pricing was consistent with its business interests, (2) it had a policy of selling at the lowest price in the market, and (3) it had instructed its employees not to discuss pricing with its competitors, instructions which they apparently obeyed. Id. at 301.

The station's competitors' complaints to both the station and to the State of Montana about the station's low prices suggest that the case had no basis. Perhaps as a result, Montana sued none of the firms with which SuperAmerica allegedly conspired.

^{48.} Ethyl, 101 F.T.C. at 598 (emphasis in original).

unusually severe sanctions for price fixing absent some certainty that the alleged perpetrators have in fact colluded. In effect, courts seem to demand proof of avoidable conduct by competitors as a basis for presuming that they acted with mens rea, or wrongful intent, before invoking the full force of the law.⁴⁹ Although mens rea, of course, is formally required only for criminal liability, it serves in civil antitrust litigation both to justify imposing severe sanctions and to delineate types of poor performance that are amenable to judicial intervention. For if supracompetitive pricing can also result from an oligopolist's rational evaluation of its market, clearly wrongful intent cannot be proved by demonstrating noncompetitive performance alone. Enjoinable conduct thus serves as proof of wrongful intent. Moreover, the rationale for requiring evidence of enjoinable conduct is strengthened by the complexity and imprecision involved in measuring performance. While evidence of avoidable conduct is not equivalent to the testimony of someone present when the firms conspired, it does assure the court that the treble damage penalty falls only on those who have taken some avoidable step.

The legal concern about effective remedies suggests an additional explanation for the different focuses of economics and law.⁵⁰ Economists attempt to foster market efficiency and social welfare by providing accurate descriptive theories and techniques. Consequently, economic tests attempt to measure the results of collusive behavior rather than the behavior itself. Economic tests for oligopolies, therefore, customarily measure deviation from the competitive equilibrium (Pareto optimality) relative to a monopoly case. The judicial system, on the other hand, engages in fact-finding to determine when a limited number of remedies should be employed. A conduct order regulating pricing would often be impractically complex, overly rigid, and beyond judicial competence. As a result, legal tests tend to look to the collusive behavior itself, rather than to the economic results of such behavior, because only certain kinds of conduct justify imposing legal remedies and only certain kinds of conduct are amenable to change by those remedies.

Furthermore, since monopoly pricing by a *lawful* monopolist (for example, one which obtained its monopoly by patent) is legal,

^{49.} See, e.g., United States v. United States Gypsum Co., 438 U.S. 422 (1978).

^{50.} I am grateful to Professor Joseph Craycraft of the University of Cincinnati for this observation. Posner also notes that "lawyers... are more comfortable with conspiracy doctrine than price theory...." R. Posner, supra note 8, at 41.

by analogy oligopoly pricing should be legal absent enjoinable conduct.⁵¹ For all these reasons, courts do not accept supracompetitive pricing alone as sufficient proof of collusion.

There may be an exception to the basic rule that poor performance, without more, is insufficient to support an inference of agreement: the case in which firms submit identical sealed bids on successive occasions and cannot explain why the bids were identical. No decision has based liability on such evidence,⁵² but Phillip Areeda has suggested that identical sealed bids on a custom-made product would be a factor indicating conspiracy.⁵³ Yet even this possible exception is at best a poor example of economic evidence used to prove collusion. Identical bids are convincing not so much as economic evidence of poor performance, but because they seem so unlikely to result absent secret communication.

B. Proof of the Terms of an Agreement Is Not Required

While refusing to base a finding of collusion on noncompetitive performance alone, the courts have never required a plaintiff to prove the specific terms of a collusive agreement. Plaintiffs have often relied upon proof of parallel business behavior in conjunction with additional evidence sufficient to establish an agreement. To prove an antitrust violation using circumstantial evidence, plaintiffs must currently meet a standard referred to as the rule of "conscious parallelism plus." This section examines that standard, along with its limitations, and demonstrates that while Posner's "economic approach" is consistent with the thrust of the rule, it is subject to many of the same limitations and uncertainties.

1. The Supreme Court's Teachings.—The Supreme Court has expressly rejected the notion that to prove conspiracy a plaintiff must prove the details of an agreement to affect price or output. In American Tobacco Co. v. United States, the Court noted:

No formal agreement is necessary to constitute an unlawful conspiracy. . . . The essential combination or conspiracy in violation of the Sherman Act may be found in a course of dealings or other circumstances as well as in any exchange of words. Where the circumstances are such as to warrant

^{51.} Turner, supra note 25, at 667-68.

^{52.} Several cases have included identical sealed bids as part of the evidence. See, e.g., C-O-Two Fire Equip. Co. v. United States, 197 F.2d 489 (9th Cir.), cert. denied, 344 U.S. 892 (1952).

^{53.} P. Areeda, Antitrust Analysis 373-74 (3d ed. 1981).

a jury in finding that the conspirators had a unity of purpose or a common design and understanding, or a meeting of minds in an unlawful arrangement, the conclusion that a conspiracy is established is justified.⁵⁴

In American Tobacco, perhaps the best known oligopoly case, the Supreme Court upheld a jury verdict that the three major U.S. tobacco companies conspired to restrain trade and monopolize, attempted to monopolize, and monopolized the purchase of leaf tobacco (the essential raw material) and the sale of cigarettes.⁵⁵ It is unclear, however, whether the Court relied on direct evidence of communication among the firms in reaching this decision. While the government did offer evidence of a meeting (the only instance of direct communication it cited),⁵⁶ the court of appeals did not dwell on the incident and the Supreme Court did not discuss it at all. Although the tone of both opinions suggests that neither court would have reversed the jury verdict even absent evidence of the meeting,⁵⁷ the "economic evidence" of parallel behavior offered in American Tobacco almost shouted the presence of hidden collusive conduct.⁵⁸ Thus, while it is likely that the decision would be upheld

^{54. 328} U.S. 781, 809-10 (1946). Since the Court limited its grant of certiorari to the appropriateness of the jury instructions regarding the issue of whether actual exclusion of competitors is necessary to the crime of monopolization under § 2 of the Sherman Act, 324 U.S. 836 (1944), the Court's discussion was largely dictum.

^{55.} Among the factors on which the Supreme Court relied were the defendants' refusal to purchase tobacco unless all of the defendants were present; their fixing the price of tobacco and then bidding up the price to the agreed level (so that all tobacco would be purchased at the same price); their identical list prices and discounts over a period of years; price leadership; high profits despite the Depression; lack of an economic justification for a price rise, selling of some brands at a loss to exclude cheaper competition, followed by price rises; and the declining market shares of the leaders. 328 U.S. at 800-01.

^{56.} The appellate court opinion reported that the defendants' representatives met at least once "with representatives of dealers, jobbers, and other cigarette companies, and participated in a demand that the 10-cent brands be raised to 11 cents a package" American Tobacco Co. v. United States, 147 F.2d 93, 106 (6th Cir. 1944), aff d, 328 U.S. 781 (1946).

^{57.} For example, the court of appeals pointed out, "[I]t is settled that the essential agreement, combination, and conspiracy in violation of the Sherman Act may be implied from, or found in a course of dealing or other circumstances, as well as through an exchange of words." *Id.* at 107. The Supreme Court used almost identical language in its opinion. 328 U.S. at 809.

^{58.} In many ways, the case presented a classic example of inferred conspiracy. The defendants together had a 90-plus percent market share when the conspiracy began — a total which dropped, as expected, in response to new entry and fringe expansion in the wake of anticompetitive pricing. Prices were consistently uniform and changed (nearly always upward) infrequently. Profits were high. Moreover, some of the defendants' actions were completely inexplicable in the absence of a conspiracy, such as their refusal to purchase tobacco in the absence of their competitors and their purchasing of low grade

today—because the evidence seems at least as strong as in more recent cases in which liability has been found—the case is weak precedent regarding the use of parallel behavior to prove an antitrust violation. Its facts are so striking that any modern case would be easily distinguished.⁵⁹

In 1954, several years after American Tobacco, the Supreme Court's decided the Theatre Enterprises, Inc. v. Paramount Film Distributing Corp. 60 and expressly imposed more stringent requirements for inferring an agreement from parallel business behavior. After noting that conscious parallelism alone is not enough to establish liability under section 1 of the Sherman Antitrust Act, the Court added its famous dictum that "[c]ircumstantial evidence of consciously parallel behavior may have made heavy inroads into the traditional judicial attitude toward conspiracy; but 'conscious parallelism' has not vet read conspiracy out of the Sherman Act entirely."61 Theatre Enterprise is distinguishable from American Tobacco on at least two grounds: there was a jury verdict finding no liability, 62 and the defendants offered plausible justifications for their conduct. 63 Regardless of the impact these distinctions might have had, the Court's dictum was unequivocal: plaintiffs must prove more than consciously parallel business behavior.

2. The "Plus Factors" Approach.—To establish that defendants' behavior is consciously parallel, a plaintiff must prove three

tobacco which was of use only to the new firms trying to underprice them. It is hard to imagine firms engaging in such blatantly anticompetitive conduct today.

^{59.} Discussed below is a case that may be "the exception which proves the rule." For discussion of Wall Products Co. v. National Gypsum Co., 326 F. Supp. 295 (N.D.Cal. 1971), see *infra* notes 154-60 and accompanying text. It too involved blatant anticompetitive conduct where the only direct evidence of communication was the exchange of price information. The court found the exchange of price information legal and then largely ignored that finding in holding the evidence sufficient to support a jury verdict for the plaintiffs.

^{60. 346} U.S. 537 (1954).

^{61. 346} U.S. at 541. This case concerned the refusal of several film distributors to allow the plaintiff, a theatre owner, to show their films. The defendants introduced evidence showing an independent business justification for their refusal to deal by arguing that they normally granted only exclusive licenses for first run pictures and that the plaintiff did not have a sufficiently large market area to justify such a license. Moreover, they convincingly attacked plaintiff's good faith. The jury found for the defendants and the plaintiff appealed, arguing that the trial court should have directed a verdict in its favor. The Fourth Circuit and the Supreme Court affirmed.

^{62.} Indeed, it is unlikely, since the burden of proof in a collusion case is on the plaintiff, that a court could ever rule that liability had been established as a matter of law, i.e., without submission to the jury.

^{63. 346} U.S. at 539-40.

elements: that business behavior was in fact parallel, that competitors "were conscious of each other's conduct," and that "their awareness was an element in their decisional process." Proving these three elements, however, does not end the analysis. To establish an agreement "a plaintiff who alleges a conspiracy to fix prices in violation of the Sherman Act must present, along with evidence of the defendant's consciously parallel pricing behavior, evidence of something more, of so-called 'plus factors.' "65 A plus factor is some additional, independent evidence supporting a finding of agreement to fix prices, refusal to deal, or otherwise restrain competition. 66

The courts have designated certain types of conduct and performance evidence as "plus factors." Moreover, they have established two general tests for deciding whether particular behavior qualifies as a "plus factor": whether it is contrary to each firm's independent self-interest, and whether there is a motive for concerted action.

(a) Conduct Against Individual Self-Interest.—The most frequently cited plus factor is conduct contrary to the self-interest of each firm acting independently. Such behavior is identified by determining, on a case-by-case basis, whether the conduct at issue would be beneficial, and hence would occur, only if all of the firm's rivals behaved similarly.⁶⁸ Analogously, courts have sometimes premised findings

^{64.} State v. SuperAmerica, 559 F. Supp. 298, 302 (D. Mont. 1983), citing Schoenkopf v. Brown & Williamson Tobacco Corp., 637 F.2d 205, 208 (3d Cir. 1980).

^{65.} State v. SuperAmerica, 559 F. Supp. 298, 302 (D. Mont. 1983); see also Levitch v. Columbia Broadcasting System, Inc., 495 F. Supp. 649, 674 (S.D.N.Y. 1980), aff d, 697 F.2d 495 (2d Cir. 1983) ("[I]n order to support a finding of conspiracy as a result of consciously parallel conduct, a plaintiff must present additional facts or circumstances tending to show that the actions of the alleged co-conspirators were interdependent or somehow concerted.").

^{66.} Blechman, supra note 29, at 885, 887.

^{67.} P. AREEDA, ANTITRUST ANALYSIS, supra note 53, at 371-82, is the best compendium of plus factors available and I have relied on it extensively.

^{68.} E.g., Bogosian v. Gulf Oil Corp., 561 F.2d 434, 446 (3d Cir. 1977), cert. denied, 434 U.S. 1086 (1978) (reversal of dismissal of complaint before discovery; service station owners' class action challenging suppliers' requirement that each service station carry one brand); Milgram v. Loew's, Inc., 192 F.2d 579, 583 (3d Cir. 1951), cert. denied, 343 U.S. 929 (1952) (affirmed judgment against major film distributors for refusal to rent films to drive-in theatre); Pacific Tobacco Corp. v. American Tobacco Co., 1974 Trade Cas. (CCH) ¶74,991 (D. Ore. 1974) (summary judgment for manufacturers who refused to sell cigarettes to plaintiff planning to market them under brand name "Cancer"); for additional cases relying on this factor, see Blechman, supra note 29, at 885-86 nn. 26-27; see also Note, Conscious Parallelism and the Sherman Act: An Analysis and a Proposal, 30 Vanderbill L. Rev. 1227, 1243-44 (1977) (asserting that action inconsistent with

of conspiracy on parallel business decisions that are inconsistent with how competitive firms should react to general market forces.⁶⁹ In *American Tobacco*, for example, the Court found that the defendants' raising prices in the middle of the Depression was probative of conspiracy.⁷⁰

Commentators have criticized use of this factor to show improper agreement because not all interdependent behavior is necessarily collusive. Interdependent conduct may be inconsistent with each firm's self-interest when viewed individually, but be legal nonetheless.⁷¹ For example, Areeda suggests that two sellers in adjacent areas capable of selling into each other's territory, but which fail to do so, might be either dividing the market by agreement or merely behaving interdependently by avoiding reciprocal invasion of each other's market.⁷²

Despite its lack of discriminative value, the "against self-interest" factor can be useful in addressing a key question in conspiracy cases: whether the trier of fact can reasonably infer a conspiracy from all of the evidence. Thus, it can effectively screen out cases in which agreement cannot be present. If none of the alleged conduct is contrary to the firm's self-interest, the case probably should not go to the jury. Moreover, conduct against self-interest that appears "irrational" under any explanation other than conspiracy should be prima facie evidence of collusion. If the defendants cannot persuasively explain their parallel conduct—perhaps by demonstrating that their behavior was unilateral, though interdependent—it seems just to allow a trier of fact to conclude that they were colluding. Thus, once plaintiffs have shown that conduct was against self-interest, defendants would have the burden of providing a plausible alternative explanation. Use of this factor to shift the burden of proof is hardly

self-interest, plus conscious parallelism, should be prima facie evidence of a conspiracy to monopolize in shared monopoly cases).

^{69.} E.g., C-O-Two Fire Equip. Co. v. United States, 197 F.2d 489, 497 (9th Cir.), cert. denied, 344 U.S. 892 (1952); Bray v. Safeway Stores, 392 F. Supp. 851, case dismissed, 403 F. Supp. 412 (N.D. Cal. 1975); cf. Pevely Dairy Co. v. United States, 178 F.2d 363 (8th Cir. 1949), cert. denied, 339 U.S. 942 (1950) (no conspiracy where behavior is consistent with market forces).

^{70. 328} U.S. at 805. But see R. Posner, supra note 8, at 69 n.44, strongly criticizing the Supreme Court's reasoning in American Tobacco.

^{71.} Blechman, supra note 29, at 885, 897.

^{72.} P. AREEDA, supra note 53, at 378. Areeda explains that the sellers may be refraining "from selling in the other's territory in the hope that the other will refrain from selling in his and with the realization that selling across the boundary by one would almost surely invite a reciprocal invasion by the other." Id. Although some might label this a tacit agreement, Areeda suggests that it is better understood as an example of recognized interdependence.

onerous—defendants often make convincing arguments that they were behaving independently even when they were not. Moreover, merely shifting the burden would allow the courts to dispose of more extreme cases efficiently.

(b) Motive for Concerted Action.—The existence of a motive for concerted action is closely related to the "against self-interest" factor and some courts use the factors together as a two-pronged test. The motive factor, however, has also stood alone. Evidence of a motive for concerted action is "critical... for in the absence of a demonstration of how it would benefit a party to refuse to deal, the requisite inference of conspiracy does not follow from a mere coincidence of refusals to deal. This plus factor requires determining whether the firms involved had reason to act together. In other words, would the parallel behavior benefit them? Like the "against self-interest" factor, the motive factor has been criticized for failing to distinguish cases in which parallel conduct

^{73.} Venzie Corp. v. United States Mineral Products Co., 521 F.2d 1309, 1314 (3d Cir. 1975); Zenith Radio Corp. v. Matsushita Elec. Indus. Co., 513 F. Supp 1100, 1175 (E.D. Pa. 1981), aff'd in part, rev'd in part, 723 F.2d 238 (3d Cir. 1983), rev'd, 106 S. Ct. 1348 (1986).

^{74.} E.g., Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 106 S. Ct. 1348, 1360-61 (1986) (absence of motive to enter into predatory pricing conspiracy held dispositive); Ambook Enter. v. Time, Inc., 612 F.2d 604 (2d Cir. 1979), cert. dismissed, 448 U.S. 914 (1980) (summary judgment for defendants; advertiser challenged media practice of giving advertising agencies a 15% discount); Reading Indus. v. Kennecott Copper Corp., 477 F. Supp. 1150, 1157 (S.D.N.Y. 1979), aff d, 631 F.2d 10 (2d Cir. 1980), cert. denied, 452 U.S. 916 (1981); Wall Products Co. v. National Gypsum Co., 326 F. Supp. 295, 316 (N.D. Cal. 1971) ("In a highly concentrated, vertically integrated, interdependent industry protected . . . by enormous startup costs . . ., opportunities for collusion are extensive and the potential benefits to be realized great. When there is . . . consciously parallel conduct, as well as evidence of common motives for such conduct, strong inferences of collusion are permissible."); United States v. FMC Corp., 306 F. Supp. 1106, 1143 (E.D. Pa. 1969) (inelastic demand implies strong collective interest to maintain prices in face of excess supply); see also Blechman, supra note 29, at 886 n. 28.

^{75.} Venzie Corp. v. United States Mineral Products Co., 521 F.2d 1309, 1315 (3d Cir. 1975) (affirming a grant of judgment n.o.v. to defendants in a case in which plaintiffs alleged a concerted refusal to deal); see also Continental Cablevision v. American Elec. Power Co., 715 F.2d 1115, 1119 (6th Cir. 1983) (defendant utility companies had no reason to conspire because another party set their rates).

^{76.} In the Ambook case, for example, the court pointed out that each advertising agency had a strong, independent motive for maintaining a dual rate struture (each agency received 15% discount from the media): their survival. Ambook Enter. v. Time, Inc., 612 F.2d 604, 616 (2d Cir. 1979), cert. dismissed, 448 U.S. 914 (1980). The court acknowledged that the media, another alleged conspirator, had no incentive to participate (the private antitrust action was filed by a member of the media) and noted that there was ample evidence that the media was coerced into accepting the dual rate agreement. Id. at 616-17.

can be explained by interdependence alone from cases in which an agreement has occurred.⁷⁷ Because any degree of coordination will generally raise prices and lower output, the relevant question is whether such coordination was achieved—or could have been achieved—without agreement.

(c) Other Evidence.—The pervasiveness of the claimed parallel conduct is also relevant to a finding of conspiracy.⁷⁸ Some courts have regarded evidence of meetings among competitors prior to the occurrence of parallel behavior, such as nearly simultaneous price increases, as evidence of collusion.⁷⁹ In addition, facilitating practices such as delivered pricing and artificial product standardization, which alone constitute enjoinable conduct, have also supported a conspiracy finding.⁸⁰

Moreover, courts have occasionally held past antitrust violations relevant to a later claim, but without explaining the precise relevance of prior conduct.⁸¹ Posner agrees that "a 'record' of price fixing or related antitrust violations is some evidence that the structure of the market is favorable to collusion."⁸² In *Theatre Enterprises*, however, the Supreme Court refused to give weight to this factor because the prior antitrust violations occurred under different circumstances.⁸³

Finally, courts have occasionally relied on poor economic performance as a plus factor. For example, restriction of output,⁸⁴ and identical and nearly simultaneous price increases⁸⁵ have each been cited for this purpose.⁸⁶ In addition, submission of identical sealed

^{77.} P. AREEDA, supra note 53, at 375; see also Blechman, supra note 29, at 898-901 (general criticism of all plus factors).

^{78.} Blechman, supra note 29, at 886 n. 30.

^{79.} P. AREEDA, supra note 53, at 379-81 & 380 n.40.

^{80.} E.g., C-O-Two Fire Equip. Co. v. United States, 197 F.2d 489, 493 (9th Cir.), cert. denied, 344 U.S. 892 (1952). United States v. FMC Corp., 306 F. Supp. 1106, 1140 (E.D. Pa. 1969); United States v. Morton Salt Co., 216 F. Supp. 250 (D. Minn. 1962), aff d per curiam, 382 U.S. 44 (1965). See also Clark, supra note 6.

^{81.} P. AREEDA, supra note 53, at 374 n. 24; see, e.g., Norfolk Monument Co. v. Woodlawn Memorial Gardens, Inc., 394 U.S. 700, 703 n.* (1969) (per curiam); C-O-Two Fire Equip. Co. v. United States, 197 F.2d 489, 497 (9th Cir.), cert. denied, 344 U.S. 892 (1952); Milgram v. Loew's, Inc., 192 F.2d 579, 584 (3d Cir. 1951), cert. denied, 344 U.S. 892 (1952); Ball v. Paramount Pictures, Inc., 169 F.2d 317, 320 (3d Cir. 1948).

^{82.} R. Posner, supra note 8, at 61.

^{83. 346} U.S. at 541.

^{84.} Westinghouse Elec. Corp. v. Gulf Oil Corp., 588 F.2d 221, 226 (7th Cir. 1978).

^{85.} Pittsburgh Plate Glass Co. v. United States, 260 F.2d 397, 400 (4th Cir. 1958).

^{86.} At least one commentator has proposed high profit margins as a plus factor. Nye, Can Conduct Oriented Enforcement Inhibit Conscious Parallelism?, 44 A.B.A. ANTITRUST LAW J. 206, 220-21 (1975). The courts, however, have generally not used high profits as

bids on a custom-made product has also been suggested as a plus factor.⁸⁷

3. Conclusion.—As noted above, commentators have criticized the plus factors approach on the grounds that it does not in fact distinguish instances of mere conscious parallelism from those involving actual collusion with any precision. Moreover, the plus factors approach defines neither how many such factors are required, nor the quantum of evidence regarding each factor that would be sufficient to establish more than conscious parallelism. The most probative plus factors appear to be conduct against self-interest and use of facilitating practices, each of which might well support a finding of agreement on their own. The weakest factors probably include past anticompetitive conduct and high profits. But even given some convincing hierarchy of plus factors, the approach would still be analytically imprecise and its results unpredictable.

Courts have never explicitly required evidence of direct communication among the defendant firms as part of plus factor analysis. Nevertheless, this author is aware of no instance in which a price fixing agreement has been found without at least some direct evidence of actual communication. Moreover, in only a few cases has an agreement been inferred or implied with just minimal evidence of direct communication. Proof of such communication may be a defacto requirement; at the very least, it strengthens the case for liability considerably.

For Posner, proof of direct communication is unnecessary if supracompetitive performance is established through economic evidence. As discussed earlier, Posner argues that coordinated behavior among oligopolists is impossible absent agreement. Consequently, once such behavior is established (by identifying a

evidence of conspiracy. United States v. Charles Pfizer & Co., 367 F. Supp. 91, 101 n. 14 (S.D.N.Y. 1973); cf. Estate of Le Baron v. Rohm & Haas Co., 506 F.2d 1261, 1263 (9th Cir. 1974) (refusal to admit evidence of above-average profit margins was within the trial court's discretion). As a plus factor high profits have been criticized because of the difficulty in determining that certain profits are "high" and the possibility that interdependent decisions, rather than collusion, have caused such high profits. P. Areeda, supra note 53, at 378-79; Breit & Elzinga, Information for Antitrust and Business Activity: Line-of-Business Reporting, in The Federal Trade Commission Since 1970, at 115-18 (K. Clarkson & T. Muris eds. 1980); Blechman, supra note 29, at 887 n.32, 898; Fisher & McGowan, On the Misuse of Accounting Rates of Return to Infer Monopoly Profits, 73 Amer. Econ. Rev. 82 (March 1983). But see Long & Ravenscraft, The Misuse of Accounting Rates of Return: Comment, 74 Amer. Econ. Rev. 494 (June 1984).

^{87.} P. AREEDA, supra note 53, at 373-74 nn. 22-25. Areeda cites cases suggesting that courts have been willing to infer conspiracy from "evidence implying that the alleged conspirators expressly formulated a joint plan with each other." *Id*.

market favorable to collusion, and then evaluating the market in terms of his suggested factors), no further proof of agreement is required. Despite this difference, however, Posner's approach is consistent with the rule of conscious parallelism plus insofar as both theories recognize the use of circumstantial economic evidence to prove a conspiracy allegation.

Unfortunately, his analysis suffers from the same lack of precision and predictability that mars the plus factors approach. If virtually all of Posner's factors indicating collusion were present in an industry,⁸⁸ the inference of a conspiracy to fix prices would seem incontrovertible.⁸⁹ It is unclear, however, how many of the factors could be removed and still, in Posner's view, support a finding of price fixing. Of course, much would depend on the quantity and clarity of the evidence relevant to each factor.

Perhaps in response to criticism of the plus factors approach, a number of courts have articulated a related, but more general test for determining whether to infer an agreement. If the threshold requirement of consciously parallel behavior is present, the test is then whether the facts in the case "make the inference of rational independent choice less attractive than that of concerted action." This test may be as uncertain as the "plus factors" approach, but it is a step away from the mechanical search for plus factors and toward a more direct evaluation of the evidence.

^{88.} See supra note 12, discussing Posner's list of factors.

^{89.} There is precedent for enforcement action against industries which have structures less conducive to collusion and exhibit less performance evidence of collusion than Posner contemplates, i.e. exchange of price information, e.g., United States v. Container Corp. of America, 393 U.S. 333 (1969), basing point pricing, e.g., FTC v. Cement Institute, 333 U.S. 683 (1948), and identical bids, e.g., C-O-Two Fire Equip. Co. v. United States, 197 F.2d 489, 494, (9th Cir.), cert. denied, 344 U.S. 892 (1952).

^{90.} Bogosian v. Gulf Oil Corp., 561 F.2d 434, 446 (3d Cir. 1977), cert. denied, 434 U.S. 1086 (1978); accord Ambook Enter. v. Time, Inc., 612 F.2d 604, 615 (2d Cir. 1979), cert. dismissed, 448 U.S. 914 (1980) (Bogosian is "[a]s good a recent statement on the subject of conscious parallelism as any"); Weit v. Continential Illinois Nat. Bank & Trust Co., 467 F. Supp. 197, 210 (N.D. Ill. 1978); Federal Trade Commission v. Lukens Steel Co., 454 F. Supp. 1182, 1191 (D.D.C. 1978). See generally Zenith Radio Corp. v. Matsushita Elec. Indus. Co., 513 F. Supp. 1100, 1172-76 (E.D. Pa. 1981), aff d in part, rev'd in part, 723 F.2d 238 (3d Cir. 1983), rev'd, 106 S. Ct. 1348 (1986) (excellent survey of the law on inferring conspiracy from parallel conduct).

This approach is similar to that suggested by the Justice Department in its Amicus Curiae Brief to the Supreme Court in Weyerhaueser Co. & Williamette Indus., Inc. v. Lyman Lamb Co., 655 F.2d 627, 633 F.2d 101 (5th Cir. 1981) and Georgia-Pacific Corp. v. Lyman Lamb Co., 655 F.2d 627 (5th Cir. 1981), cert. dismissed, 103 S. Ct. 3100 (1983) (arguing that plaintiff's proof must "support a jury finding that the parallel conduct differed from the conduct to be expected if each firm acted in its own self interest as an independent competitor") Id. at 10.

Posner's approach fits well into this more flexible framework. Posner's basic point is that evidence of anticompetitive structure and performance, like evidence of conduct, can support an inference of agreement. The newer test contemplates weighing evidence of structure and performance, as well as conduct, to determine whether "rational independent choice" is more likely than "concerted action," without imposing the strained conceptual notion of so-called plus factors.

III. IN SEARCH OF AGREEMENTS

A review of particular cases in which the principles discussed above have been applied confirms that courts currently seem unwilling to embrace Posner's approach. A detailed examination of caselaw also offers some tenative guidelines suggesting the circumstances under which courts are most likely to find collusion based on evidence that falls short of proving the terms of an explicit agreement. The cases can be divided into three categories according to the type of analytical problem involved.

A. Express Agreements to Use Facilitating Practices

The "easiest" cases are those in which the presence of concerted action is undisputed. To impose liability, courts must simply find a link between the concerted action and noncompetitive performance.

The courts have often condemned agreements to use business practices that restrain competition, including information-gathering and dissemination programs,⁹¹ adherence to announced prices,⁹²

^{91.} United States v. American Linseed Oil Co., 262 U.S. 371 (1923) (reversal of dismissal of complaint against linseed oil manufacturers who hired information exchange bureau to gather data from them about their sales, prices, and terms); American Column & Lumber Co. v. United States, 257 U.S. 377, 409 (1921) (members of trade association agreed to report their sales, shipments, production, inventory, prices, and other information to the Association and in return received summaries and interpretations; court held that "the purpose of the organization, and especially of the meetings, was to bring about a concerted effort to raise prices regardless of cost or merit, and so was unlawful").

In two other information dissemination cases, the Court distinguished American Column and American Linseed Oil as involving competitively sensitive data. Cement Mfrs. Protective Ass'n v. United States, 268 U.S. 588 (1925) (gathering and dissemination of information shows no effect on price or production except as such would naturally occur in the trade); Maple Flooring Mfrs. Ass'n v. United States, 268 U.S. 563 (1925) (the lack of any effect on prices a factor in finding no violation).

^{92.} Sugar Inst. v. United States, 297 U.S. 553 (1936) (agreements to limit discounting and to maintain a delivered pricing system, limit quantity discounts, and eliminate consignment points were an unreasonable restraint of trade).

and basing point and other delivered pricing systems. Several patterns run through these cases. First, each involved a trade association and, thus, regular meetings among its members. Hence, resolving the issue of whether there was concerted action was relatively easy. Nevertheless, the courts buttressed their findings of concerted action by reciting the many detailed activities undertaken to effectuate the delivered pricing or data dissemination scheme. These recitations suggest a judicial need to establish a sort of mens rea to distinguish the defendants' activities from legitimate trade association activities. As one court pointed out, "it is difficult to discern how the various steps necessary to produce the result [of uniform delivered prices] could have been taken with such meticulous care and regularity in the absence of an agreement." 194

Second, the activities at issue in each case were facilitating practices: they did not set prices directly, but rather helped maintain price uniformity. Viewed in isolation, the individual practices themselves often appeared quite innocent. For example, the use of uniform freight rate books "standing alone may not mean much, if anything, but when used in the manner disclosed, it is a reasonable inference that they were part of the plan. . . ."95 It was the overall pattern of conduct, in addition to the fact that particular acts were done in concert with other firms, that the court found significant.

Third, in every case in which a violation was found, the court concluded both that prices were uniform and that the challenged practices had an anticompetitive effect. By contrast, in the two early cases in which it did not impose liability, the Supreme Court found

^{93.} FTC v. Cement Inst., 333 U.S. 683, 710 (1948) (to maintain collusive system, companies concertedly engaged in "boycotts; . . . organized opposition to the erection of new cement plants; selling cement in a recalcitrant price cutter's sales territory at a price so low that the recalcitrant was forced to adhere to the established basing point prices; . . . and preparing and distributing freight rate books. . . . "); Allied Paper Mills v. FTC, 168 F.2d 600 (7th Cir. 1948), cert. denied, 336 U.S. 918 (1949); Triangle Conduit & Cable Co. v. FTC, 168 F.2d 175 (7th Cir. 1948), aff d by an equally divided court sub nom. Clayton Mark & Co. v. FTC, 336 U.S. 956 (1949); Milk & Ice Cream Can Inst. v. FTC, 152 F.2d 478, 480 (7th Cir. 1946) (defendants also standardized their products, exchanged details of sales, and agreed to discounts and other terms and conditions of sales); United States Maltsters Ass'n v. FTC, 152 F.2d 161 (7th Cir. 1945) (practices also included a statistical reporting system, industry meetings, and a system whereby all price changes were immediately transmitted to all members); see generally Note, Conscious Parallelism in the Use of Delivered Price Systems: A Modified Per Se Standard of Review Under the Federal Trade Commission Act, 66 CORNELL L. Rev. 1194 (1981) (analysis of three standards of review for determining the legality of conscious parallelism in the use of delivered pricing systems).

^{94.} United States Maltsters Ass'n v. FTC, 152 F.2d 161, 165 (7th Cir. 1945).

^{95.} Milk & Ice Cream Can Inst. v. FTC, 152 F.2d 478, 482 (7th Cir. 1946).

no effect on prices. 96 However, the strength of the link between the practices and the result alleged has varied considerably. In Sugar Institute v. United States, for example, the court below found a direct link between the agreement to adhere to announced prices and the anticompetitive effect, 97 and the Supreme Court concurred. 98 In Federal Trade Commission v. Cement Institute, on the other hand, the Court pointed out that price uniformity and uniform delivered pricing had been "coincident" for many years, and that "[t]housands of secret sealed bids" turned out to be identical "down to a fractional part of a penny," thus merely implying that the basing point system promoted uniformity. 99

Fourth, in each case the court found grounds to reject the defendants' assertion that natural market forces gave rise to price uniformity. In *Cement Institute*, for example, the Court held that the Commission was authorized to ignore testimony by the respondents' economic experts that "competition alone could lead to the evolution of a multiple basing point system." The Court stated that this view "[c]ertainly . . . runs counter to what many people have believed, namely, that without agreement, prices will vary—that the desire to sell will sometimes be so strong that a seller will be willing to lower his prices and take his chances." Moreover, in *Sugar Institute* the Court pointed out that "because sugar is a standardized commodity, there is a strong tendency to uniformity of price," and therefore it is even "more important that such opportunities as may exist for fair competition should not be impaired." 102

B. Inferred Express Agreements to Restrain Competition

When firms do not openly act in concert, as in trade associations, proving the existence of an agreement to restrain competition is more difficult. This section considers "inferred agreement" cases—those involving allegations of secret express agreements in which the courts have considered whether to infer an agreement from evidence of conduct and performance. In cases of this type the

^{96.} Cement Mfrs. Protective Ass'n v. United States, 268 U.S. 588, 605 (1925); Maple Flooring Mfrs. Ass'n v. United States, 268 U.S. 563, 582-85 (1925).

^{97. 297} U.S. 553, 583 (1936).

^{98.} Id. at 589.

^{99. 333} U.S. 683, 713 (1948).

^{100.} Id. at 715; cf. Ethyl Corp., 101 F.T.C. at 636-37, where the Commission rejected the respondents' expert testimony that delivered pricing did not contribute to price-matching because prices could be matched without it.

^{101. 333} U.S. at 716.

^{102, 297} U.S. at 600.

plaintiff must prove more than just an unreasonable effect on competition; it must also prove the existence of both a common scheme—that is, an agreement—and a link between the agreement and poor performance. The cases discussed in this section are more recent than the trade association cases, perhaps because enforcement action against trade associations has driven anticompetitive activities "underground." Each of these cases involved direct evidence of direct interfirm communication as well as at least some analysis of the structure and performance of the market.

In C-O-Two Fire Equipment Co. v. United States, the Eighth Circuit affirmed criminal price-fixing convictions of four fire extinguisher producers. Circumstantial evidence suggesting the existence of an agreement included meetings among the defendants (although there was no direct evidence of what transpired at the meetings), "standardization of a product that is not naturally standardized," industry-wide resale price maintenance, identical sealed bids from all four companies on at least two occasions, an attempt by one firm to withdraw a mistaken bid that was slightly lower than those of its rivals, uniform delivered pricing, and price increases despite a surplus of extinguishers on the market.

In Morton Salt Co. v. United States, the government indicted four of the six firms that together controlled ninety-five percent of salt sales in a regional market.¹⁰⁵ The firms had exchanged "all the details of a fairly complicated pricing system."¹⁰⁶ In upholding their conviction in the district court, the Tenth Circuit observed that the market was oligopolistic, and thus

it is almost inevitable that the pricing policies of one company will be influenced and to some extent dictated by knowledge of probable countervailing action by its competition. And this perhaps detracts from the weight we should give to parallel pricing. But the presence of only a few friendly sellers and the stable demand for the product present a great opportunity and temptation to combine to maintain prices at an artificially high level profitable to all.¹⁰⁷

The court found "compelling" structural and performance evidence

^{103. 197} F.2d 489, 495 (9th Cir.), cert. denied, 344 U.S. 892 (1952).

^{104.} Id. at 493.

^{105. 235} F.2d 573, 577 (10th Cir. 1956).

^{106.} Id. at 577.

^{107.} Id.

that the case "present[ed] more than an example of conscious parallel business behavior." Although the court also discussed other evidence—including one firm's refusal to sell ice for resale because the customer was underselling the firms' competitors 109—the clear implication of the opinion is that the oligopolistic structure of the market, the exchange of pricing data, and price uniformity were enough to sustain the conviction.

A third case of the same genre is *United States v. FMC Corp.*, a civil action in which FMC was charged with conspiring to fix the prices of chlorine, soda ash, and caustic soda and to stabilize the price of caustic soda.¹¹⁰ FMC's competitors, the eight other chloralkali producers, had each consented to an injunction.¹¹¹ In a careful analysis of the industry's structure, conduct, and performance, Judge Higginbotham exonerated FMC on the price-fixing count but found it liable on the price stablization count.

Higginbotham found "credible evidence" that factors other than agreement were sufficient to explain the uniformity of list prices and other signs of noncompetitive performance. This evidence included the homogeneity of and inelastic demand for the products, the presence of large quantity buyers in the market, and the existence of long-term contracts containing meet or release clauses. These market factors dictated price uniformity because, under such conditions, no firm could sell its product at a price higher than that of its competitors. The meet or release clauses, in particular, discouraged discounting by giving buyers an incentive to report any offers to sell at a lower price back to their suppliers, who then had an opportunity to match the competitor's price.

The court conceded that the government might have been correct in contending that "gatherings and discussions allowed [the firms] to predict the reactions and responses of their competitors to any prospective price increase." However, the court concluded, "[T]his merely proves that possible competitor reaction was another economic reality which each producer had to consider in addition to

^{108.} Id.

^{109.} Id. at 577-78.

^{110. 306} F. Supp. 1106 (E.D. Pa. 1969).

^{111.} Id. at 1108-09. Whether Higginbotham was influenced by the existence of the consent agreements that the Justice Department had obtained from the other producers is unclear. While, of course, legally they should have had no effect, psychologically they might have compelled Higginbotham to find at least some liability. I find it surprising, in fact, that he did not find liability on the price-fixing count.

^{112.} For example, the government noted that all producers announced price increases at approximately the same time. *Id.* at 1139.

costs and profit margins, in determining the feasibility of a price increase."113

In sharp contrast to the Tenth Circuit's decision in Morton Salt, Higginbotham permitted FMC to offer market structure as a justification for the industry's poor performance. While the Tenth Circuit had been leery of any practice that might encourage noncompetitive performance precisely because the industry structure was conducive to collusion, Higginbotham apparently viewed the meet or release clauses, in particular, as a structural factor 114 rather than as an enjoinable facilitating practice. 115 Had he viewed use of the clauses as a voluntary decision by the firms, rather than as a preordained fixture of the industry structure, however, he might well have found the firm's parallel practice sufficient to support a finding of liability on the price-fixing count. On the basis of similar reasoning about market conditions, Higginbotham also condoned the meetings among FMC and its competitors, even though he apparently conceded that the meetings were enjoinable conduct that enhanced the firms' ability to coordinate that pricing.

Although Higginbotham found no agreement to raise prices, he did find an agreement to *stabilize* the price of caustic soda—thereby preventing its decline from the level it had reached as a result of market forces—by exchanging information. Higginbotham brushed aside suggestions that the defendants were merely gathering market intelligence, pointing out that the "meetings and exchange of information . . . occurred only when necessary to impart information concerning departures from the established list price of caustic soda or disparities in quoting freight rates which portended industry-wide repercussions if not controlled in their impact." The inference of conspiracy was further strengthened by the firms' efforts to maintain uniform freight arrangements. These efforts included exchanging information, agreeing not to recognize Linden, New Jersey, as an

^{113.} Id. at 1143; cf. Turner, supra note 25, at 665.

^{114.} He discussed the clauses under the heading of "The Products and the Basic Characteristics of the Chlor-Alkali Industry." 306 F. Supp. at 1110-12. A "meet or release" clause promises that the seller will match an offer of a lower price or release the buyer from the contract. See Clark, supra note 6, at 934.

^{115.} The Federal Trade Commission viewed the "most favorable nations" clauses as an enjoinable facilitating practice in *Ethyl Corp.*

^{116. 306} F. Supp. 1146; see also Greenhaw v. Lubbock County Beverage Ass'n, 721 F.2d 1019, 1030-31 (5th Cir. 1983), reh'g denied, 726 F.2d 752 (5th Cir. 1984) (evidence supported jury finding that "defendants actively engaged in exchanging price information and negotiating the prices to be charged by liquor retailers").

equalization (basing) point, and agreeing on a common definition of quantities of caustic soda qualifying for shipment by barge.

The court's unwillingness to sustain the price-fixing charge in this case illustrates a fundamental problem in attempting to use economic evidence alone to prove collusion, as Posner suggests. If a court finds the economic evidence ambiguous, it will generally exonerate the defendants—yet the evidence is almost always ambiguous.

Perhaps the most direct application of the Posner approach occurred in connection with a suit in which the State of Oklahoma was awarded \$4.6 million in damages from local asphalt producers that had allegedly fixed prices on state contracts. 117 The State's economist relied on the presence of an industry structure conducive to collusion to conclude that a price-fixing and market division conspiracy existed. 118 In particular, bids to the Oklahoma Highway Department were identical at over 10 cents per gallon, while bids to other states averaged only 6 cents per gallon and were far more dispersed. Although the State proved that the defendants met together through a trade association just before each contract award and began submitting identical bids just after forming the association, it apparently did not prove that prices were discussed. The true significance of the case, however, is that it focused on evidence of noncompetitive performance rather than on enjoinable conduct, although proof of trade association meetings was available to rebut the defendants' claim that they were only pricing interdependently.

As these cases illustrate, courts will sometimes infer an agreement to fix prices when concerted action has an effect on price. An ironclad causal link between the objectionable conduct and poor performance, showing that but for that conduct there would be competitive performance, does not appear to be necessary; rather, the *unexplained* coincidence of concerted conduct and poor performance seems to suffice. Poor performance indicates, at a minimum, an industry structure lacking in price competition and prices that are

^{117.} The case, Oklahoma v. Allied Materials Corp., which was tried in the federal district court for the Western District of Oklahoma in 1965, was not reported but is discussed in Funderburk, *Price Fixing in the Liquid-Asphalt Industry: Economic Analysis Versus the "Hot Document"*, 7 Antitrust L. & Econ. Rev. 61 (1974).

^{118.} The industry exhibited many of the structural factors identified by Kuhlman and Erickson as facilitating collusion: The industry was concentrated, with a strong trade association and high entry barriers; asphalt is a homogeneous product with an inelastic demand; and sales were made on the basis of sealed bids to public bodies. Kuhlman, Nature and Significance of Price Fixing Rings, 2 Antitrust L. & Econ. Rev. 69 (1969); Erickson, Economics of Price Fixing, 2 Antitrust L. & Econ. Rev. 82 (1969).

supracompetitive. The courts generally have not attempted to define a hypothetical competitive price and compare it to the market price to show that the market price is collusive. Instead, they have looked to factors such as industry overcapacity, as in FMC, which suggest that prices should be lower than they are. In each case, a significant factor seems to have been the lack of a credible innocent explanation for the pattern of conduct and performance. Indeed, the defendants' ability to present a credible nonconspiratorial explanation for the industry's poor performance is an important determinant of the overall strength of a case. It is possible that liability would be imposed when alternative explanations are lacking, even without direct proof of enjoinable conduct. Like proof of enjoinable conduct, lack of an innocent explanation is demonstrative of the mens rea apparently necessary for the courts to find price fixing on the basis of economic evidence. Nevertheless, FMC serves as a reminder that economic evidence must be unambiguous. Courts will not impose severe sanctions absent compelling proof of guilt. By requiring such certainty, however, the courts may demand more of economic analysis than it can deliver.

C. Implicit Agreements to Restrain Competition

This section analyzes cases involving implicit agreements. Courts have occasionally been willing to find that agreement is implied by the conduct of parties. The inferred agreements discussed above are premised on a finding that some direct, albeit unknown, communication among defendants must have existed because the industry's pattern of structure, conduct, or performance would not otherwise have occurred. By contrast, the implicit agreements discussed here assume that the court knows about all of the firms' conduct and finds that this conduct standing alone constitutes an agreement. Although this theory has been tested only a few times, courts and commentators have found commitment to be the essential element of a Sherman Act agreement. To define the type of concerted action prohibited by the Sherman Act, the Supreme Court recently adopted the language used by the Third Circuit in Edward J. Sweeney & Sons v. Texaco, Inc., 119 that such conduct involves a "conscious commitment to a common scheme designed to achieve an unlawful objective."120

^{119. 637} F.2d 105, 111 (3d Cir. 1980), cert. denied, 451 U.S. 911 (1981).

^{120.} Id. at 111; see also Monsanto Co. v. Spray-Rite Serv. Corp., 465 U.S. 752, 764 (1984). Monsanto was a vertical case, but other courts have articulated very similar formulations in horizontal cases. E.g., United States v. Standard Oil Co., 316 F.2d 884, 890

Similarly, commentator Michael Blechman defines "agreement" to include "a sense of commitment in the minds of the agreeing parties" and "some assurance as to what the other agreeing parties are going to be doing in the future." Under this definition, "agreement" appears to be a legal conclusion that the firms involved *intended* anticompetitive behavior although intent is proved circumstantially. The Second Circuit apparently had a similar notion in vacating the Commission's *Ethyl Corp.* decision:

[B]efore business conduct in an oligopolistic industry may be labeled "unfair" within the meaning of § 5 a minimum standard demands that, absent a tacit agreement, at least some indicia of oppressiveness must exist such as (1) evidence of anticompetitive intent or purpose on the part of the producer charged, or (2) the absence of an independent legitimate business reason . . . for its conduct. 123

While the Second Circuit's description is dicta because the court held that the facts failed to show an agreement, it appears to establish a standard similar to Blechman's.

These definitions seem to suggest, again, that when faced with an ambiguous pattern of parallel behavior a court should look for something showing a mens rea, or anticompetitive intent, on the part of the firms. While such intent is not a formal requirement for establishing liability, courts and commentators seem to use it to

⁽⁷th Cir. 1963) (conspiracy finding requires a "consciousness of commitment to a common scheme"); United States v. General Motors Corp., 1974-2 Trade Cas. (CCH) ¶75,253, at 97,670 (E.D. Mich. 1974) ("[U]nless a defendant understands from something said or done that it is committed to the other defendants to raise prices, it cannot be a conspirator.").

^{121.} Blechman, supra note 29, at 895, 896 (footnote omitted). With regard to commitment, a refusal to discount "indicates the sort of restricted freedom of action and sense of obligation that one generally associates with agreement." Id. at 899. Assurance, on the other hand, may be shown by subjective evidence that the defendant enjoyed the "knowledge and confidence concerning its competitor's actions which an agreement would suggest" or by evidence showing communication of assurance among competitors, such as use of price protection clauses that impose penalties for discounting. Id. at 900. Pure conscious parallelism does not involve commitment or assurance:

[[]A] business . . . may take some action based on what it calculates, expects or fears will be the reactions of its competitors; but it is not likely to feel committed or obligated to act in a given way. Similarly, such a firm may expect or hope that its competitors will behave in a particular manner; but it is not likely to have any assurance that they will do so.

Id. at 897.

^{122.} Id. at 902.

^{123.} E.I. Du Pont de Nemours & Co. v. FTC, 729 F.2d 128, 139 (2d Cir. 1984).

^{124.} As discussed above, the courts appear to be searching for similar evidence in the trade association and inferred agreement cases.

show that the defendant has not been innocently captured in a web of circumstantial evidence. 125

Cases illustrating the type of commitment necessary to establish an implicit agreement include three key Supreme Court decisions. In *Interstate Circuit, Inc. v. United States*, ¹²⁶ the Court found that the defendants' conduct—even absent direct communication regarding price or other business decisions—established enough commitment to find an agreement. The manager of Interstate Circuit, a major Texas film exhibitor, had written to each of the local managers of the eight distributor defendants, listing each as an addressee, and requesting that they not permit their first run films to be exhibited for less than a 40 cents admission or as part of a double feature. ¹²⁷ Following meetings between the Interstate manager and each distributor individually, all distributors substantially complied with Interstate's demands. After affirming an injunction prohibiting movie exhibitors and distributors from restraining trade, the Court stated, in dictum, that the district court finding of agreement

This dictum is puzzling because the facts that the Court said could have supported a conclusion of conspiracy without a finding of agreement—knowing, interdependent, and parallel conduct that restrained commerce—are essentially the same facts that supported the district court's finding of agreement. The Court unfortunately did not explain the difference between agreement and unlawful concerted activity short of agreement. Its language seems to suggest that the type of concerted action prohibited by the Sherman Act can

^{125.} The Second Circuit suggested in *Ethyl Corp.* that "conduct contrary to [a firm's] independent self interest" would have shown the necessary illegal intent. *Id.* at 140. While Blechman concludes that the "plus factors" are only useful for determining whether the two elements (commitment and assurance) of an agreement are present, and are not directly probative of an agreement, he probably would agree that the against self-interest plus factor is strong evidence of agreement. Blechman, *supra* note 29, at 898-901.

^{126. 306} U.S. 208 (1939).

^{127.} Id. at 217.

^{128.} Id. at 226.

be found either by inferring the existence of a secret agreement or by finding it implicit in known conduct that falls short of express agreement.

Three years later, in 1942, the Court invoked the dictum of *Interstate Circuit* in *United States v. Masonite Corp.*, when it pointed out that "[t]he fixing of prices by one member of a group pursuant to express delegation, acquiescence, or understanding is just as illegal as the fixing of prices by direct, joint action." 129 Masonite Corp. and *Interstate Circuit* thus stand for the proposition that avoidable, interdependent conduct that has an anticompetitive effect may be the basis for finding an implied agreement. 130 They resemble the trade association cases 131 in that the conduct was visible and the problem was in deciding whether the conduct added up to a horizontal agreement to restrain commerce. Unlike the trade association cases, however, in *Interstate Circuit* and *Masonite* the Court had to decide both that the conduct was concerted and that it had an anticompetitive effect.

The third major Supreme Court decision in this category, United States v. Container Corp. of America, ¹³² provides an interesting contrast to the FMC Corp. case. ¹³³ Both involved fairly concentrated

^{129. 316} U.S. 265, 275-76 (1942) (reversing the district court's dismissal of the complaint). In *Masonite Corp.*, the government challenged a series of identical agreements between Masonite, a manufacturer of hardboard and holder of patents covering the production of hardboard, and other manufacturers and sellers of hardboard. The agreements allowed Masonite to set minimum prices and other terms of sale and contained other restrictions, e.g., on classes of customers served. Masonite sent each of the companies copies of all of the other agreements. Although its language is ambiguous, the Court did not appear to base its decision on the individual agreements between Masonite and each of its competitors but rather on the *pattern* of contracts.

^{130.} The two cases apparently encouraged the decision in Milgram v. Loew's, Inc., 192 F.2d 579 (3d Cir. 1951), cert. denied, 343 U.S. 929 (1952), a case in which a group of movie distributors refused to deal with a drive-in movie theatre. The Third Circuit upheld a district court finding that the distributors had acted in concert in refusing to rent their pictures to the drive-in until 28 days after their first run despite the testimony of the distributors "that each proceeded in ignorance of the others," — testimony that "was termed by the district judge incredible." 192 F.2d at 582-83. The court based its finding on the defendant's consciously parallel refusal to rent "in apparent contradiction to its own self interest" since the distributors refused higher rentals from the drive-in. Id. at 583. It also found the distributors' business justifications unconvincing, being "based on mere conjecture, for none had ever experimented in licensing features on first run to drive-in." Id. at 585.

^{131.} See supra notes 91-102 and accompanying text.

^{132. 393} U.S. 333 (1968).

^{133.} For a discussion of FMC Corp., see supra notes 110-16 and accompanying text.

industries producing homogeneous products for which there was inelastic demand. Price was the key competitive factor. As Judge Higginbotham pointed out when comparing the two cases in FMC Corp., the nature of the information exchanges among defendants was somewhat different: "While there were not the frequent recurring communications between competitors in this [FMC] case as characterized the Container case, the difference can be attributed to the difference in marketing. However in both cases the information was exchanged 'when necessary' and with a purpose and effect to stabilize the market." A more significant distinction is the lack of any evidence in Container Corp. of communication among the firms regarding a plan to exchange price information; the price disclosures apparently developed spontaneously. The Supreme Court nevertheless found an agreement:

Each defendant on receiving that request [for price information] usually furnished the data with the expectation that it would be furnished reciprocal information when it wanted it. Such concerted action is of course sufficient to establish conspiracy, the initial ingredient of a violation of § 1 of the Sherman Act.¹³⁵

In addition, the Court found that "[t]he exchange of price information seemed to have the effect of keeping prices within a fairly narrow ambit" and "stabilize[d] prices though at a downward level." Justice Marshall agreed that the firms' conduct demonstrated an agreement to exchange price information, but dissented from the Court's holding because he felt the evidence of anticompetitive effect was too weak. Marshall pointed out that demand was increasing, entry was easy, and there was substantial fringe and active price competition. Comparison of the two interpretations highlights, once again, the ambiguity and complexity of most economic evidence.

Despite precedent confirming that agreement can be implicit in

^{134. 306} F. Supp. at 1147.

^{135. 393} U.S. at 335.

^{136.} Id. at 336; cf. Greenhaw v. Lubbock County Beverage Ass'n, 721 F.2d 1019, 1031 (5th Cir. 1983), reh'g denied, 726 F.2d 752 (5th Cir. 1984) (price exchange supports jury finding of conspiracy); Vermont Int'l Petroleum Co. v. Amerada Hess Corp., 492 F. Supp. 429 (N.D.N.Y. 1980) (evidence of extensive interfirm communication established conspiracy).

^{137. 393} U.S. at 340-47 (Marshall, J., dissenting). Marshall was joined by Justices Harlan and Stewart. *See also* Continental Cablevision v. American Elec. Power Co., 715 F.2d 1115, 1119 (6th Cir. 1983) (exchange of price information legal absent anticompetitive purpose of result).

conduct that shows the requisite degree of commitment, there is an ongoing judicial reluctance to find an agreement absent some direct evidence of interfirm communication. The Supreme Court's dictum in *Theatre Enterprises* stating that conscious parallelism had not read conspiracy out of the Sherman Act exemplified this reluctance in 1954.¹³⁸ Plaintiffs today must still address the judicial need for clear proof of anticompetitive intent. In *Wilcox Development Co. v. First Interstate Bank*, for example, a district court recently granted a judgment n.o.v. to the defendant bank despite a jury finding that it had conspired to fix the level of interest rates.¹³⁹ The plaintiffs argued that the bank's "count to four" method of setting its prime rate—the rate changed when four of seven specified western banks changed theirs—was analogous to the exchange of price information in *Container Corp*. and was suspect because it did not relate the rate to the bank's cost of funds. The plaintiffs also argued that trade association meetings were a "plus factor" indicating a conspiracy.

The court correctly rejected these arguments, distinguishing Container Corp. because it involved information unavailable from public sources. Moreover, the court noted "[t]here was ample testimony from all expert witnesses at trial that defendants' 'prime rate' is a national prime rate imposed by national economic conditions."140 The court found that the bank had instituted the "count to four" method unilaterally and that the method merely reflected the adjustment of interest rates nationally. 141 Because the bank was forced to respond to "national economic conditions," as reflected in rate changes by other banks, the court discounted the trade association meetings as a plus factor: "One wonders why a discussion, agreement or conspiracy would be necessary. . . . Given the competitive realities which apply, it would be of no real point to agree to that which they had been doing and felt compelled to continue to do."142 In short, the court found that the bank's conduct showed a joint commitment merely to respond to market conditions. This case demonstrates, again, that because of the inherent ambiguity of economic evidence and the existence of alternative explanations for coordinated behavior, the same practice can be interpreted as either a voluntary decision or an externally imposed market fixture.

^{138.} See supra text accompanying note 61.

^{139. 605} F. Supp. 592 (D. Or. 1985).

^{140.} Id. at 595.

^{141.} Id. at 596. The smaller Western banks followed the lead of the large Western banks who in turn followed the lead of the large Eastern banks.

^{142.} *Id*.

The recent case of Ambook Enterprises v. Time, Inc. did not involve an oligopoly market, but merits discussion here because it demonstrates a willingness to consider the possibility of implied agreement even absent direct evidence of improper communication. An advertiser accused advertising agencies of maintaining a dual rate structure under which the media charged advertisers using an advertising agency fifteen percent less on their advertising purchases and gave the fifteen percent discount to the agency as a commission. All other advertisers paid the full rate. Although a trade association existed and the industry had settled an earlier government allegation of collusion, implicit agreement, not proof of communication among the defendants, was the thrust of the suit.

The Second Circuit held that the district court improperly granted summary judgment to the defendants, citing *Interstate Circuit* as controlling. Its decision was based on the lack of explanation by the defendants for the dual rate structure, the motive of the agencies for maintaining that structure, and evidence that the agencies had coerced the media into setting the dual rates. Moreover, the court rejected the suggestion that the uniformity of this practice could be explained by the structure of the market: "The very number of competitors, among both the media and the agencies, argues against the claim that any price movement, however limited, would be immediately followed by everyone, so that its originator would derive no benefits." Thus, "a jury could have concluded . . . that the conscious parallelism of the dual rate system was not the result of hundreds of unanimous individual decisions but rather was an agreement. . . ."147

The opinion does not clearly distinguish whether the court believed that a jury could have inferred that the agencies had created a secret agreement, or whether a jury could have found an agreement implicit in the observable conduct. That the case involved so many firms, however, suggests that the court was holding that the evidence could support a finding of implicit agreement.

General Electric (GE) and Westinghouse engaged in similar,

^{143. 612} F.2d 604, 616 (2d Cir. 1979), cert. dismissed, 448 U.S. 914 (1980). This case is weak precedent for implicit agreement cases because of its procedural posture: the Second Circuit merely held that the case could go to trial. *Id.* at 620.

^{144.} A few large advertisers (those with "sufficient muscle") also received the discount on the theory that they had in-house advertising agencies. *Id.* at 611.

^{145.} Id. at 613-14.

^{146.} Id. at 615.

^{147.} Id. at 618.

but far more clearly egregious conduct with regard to turbine generator pricing. After the government caught them fixing prices, the companies agreed in 1962, that they would not "[e]xchange information regarding prices, pricing methods or other terms and conditions of sale "148 In 1963, however, GE announced a simplified pricing system based on use of a price book and a published multiplier that applied to the book prices. Moreover, GE's sales contracts contained a price protection clause which provided that if GE lowered prices to one customer, every buyer within the preceding sixmonth period would receive the same price. The clause in effect discouraged discounting. Westinghouse instituted essentially the same system. 149

To forestall a Justice Department suit alleging that "these practices allowed GE and Westinghouse to avoid price competition without the need for formal collusion," 150 the companies agreed to modifications of the earlier consent orders. 151 Despite the absence of evidence indicating direct communication between the two firms, the Department believed that the companies "public exchange of assurances . . . did constitute an agreement to stabilize prices which warranted the filing of a civil action . . . alleging a violation of the Sherman Act. . . "152 In deciding to impose modifications of the original consent order, the Department rejected the companies' argument that their identical price levels had resulted from either mere conscious parallelism or price leadership by GE. 153 Rather, the Department concluded:

The complexity of the product and the secretive and uncertain nature of the bidding process made it necessary for GE to go beyond the simple announcement of an intention to discontinue discounting if Westinghouse were to

^{148.} United States v. General Elec. Co., 1962 Trade Cas. (CCH) ¶70,503, at 77,044 (E.D.Pa. 1962) (consent decree); see also United States v. General Elec. Co., 1962 Trade Cas. (CCH) ¶ 70,488 (E.D. Pa.1962) (similar consent decree covering other types of electric equipment).

^{149.} Hay, *supra* note 3, at 473; Department of Justice Notice regarding United States v. General Elec. Co. & Westinghouse Elec. Co., 42 Fed. Reg. 17004-10 (1977) [hereinafter cited as DOJ Notice].

^{150.} Hay, supra note 3, at 474. By "formal collusion," Hay seems to mean an express agreement.

^{151.} The modified orders required each firm to develop a new pricing system and to keep it confidential, and contained other provisions designed to introduce uncertainty into pricing. United States v. General Elec. Co., 1977-2 Trade Cas. (CCH) ¶¶61,659-661, 72,721 (E.D. Pa. 1977); see also ¶¶ 61,659-660.

^{152.} DOJ Notice, supra note 148, 42 Fed. Reg. at 17,006; see Hay, supra note 3, at 474.

^{153.} DOJ Notice, supra note 148, 42 Fed. Reg. at 17007.

have information concerning and confidence in GE's intentions to follow

Westinghouse's activities went beyond mere passive following of GE's lead. 154

Hence, to the Justice Department, at least, the companies' avoidable conduct demonstrated the commitment necessary to justify finding an implicit agreement.

An implied agreement was also found in Wall Products Co. v. National Gypsum Co.¹⁵⁵ The pivitol factor in that case was the announcement by each firm, within days of its competitors, that it was withdrawing discounts from all customers.¹⁵⁶ The firms stopped competing with single plant (fringe) firms and exchanged extensive price information among themselves as well. ¹⁵⁷ Moreover, each firm centralized its pricing authority in its chief executive. ¹⁵⁸ Further evidence of collusion included infrequent price changes (due to the refusal to discount); a decline in the sales of the leading firms during the first year of the alleged cartel, despite their excess capacity; and a decline in their market shares during the period in which the alleged conspiracy occurred. ¹⁵⁹

While the firms regularly verified prices, direct interfirm communication was not a significant factor in finding an illegal agreement. Addressing circumstantial evidence of advance communication about pricing policy changes, the court declared that

failure to establish such advance notice is not fatal to plaintiffs' claim that defendants were actively participating in an agreement or conspiracy to fix or stabilize prices. In an industry composed of few sellers of a homogeneous product,

^{154.} Id.

^{155. 326} F. Supp. 295 (N.D. Cal. 1971).

^{156.} The structure of the industry was conducive to collusion. For example, seller concentration was high, the product was standard, and demand was inelastic. *Id.* at 300-05. The court subsequently awarded treble damages of approximately \$3 million. 357 F. Supp. 832 (N.D. Cal. 1973).

^{157.} The court specifically found this practice legal as necessary to avoid Robinson-Patman Act violations. 326 F. Supp. at 312-15. *But cf.* United States v. United States Gypsum Co., 438 U.S. 422, 422 (1978).

^{158.} Cf. Morton Salt, 235 F.2d at 578 (requirement that sales manager of firm clear bids with general manager because of sales manager's past proclivity to cut prices held probative of firm's involvement in conspiracy).

^{159.} The court also compared profit levels against a benchmark (profit levels on all manufacturing companies) and found them to be less than the benchmark. 326 F. Supp. at 303-04. The benchmark used was too broad for a valid comparison, and the court accordingly drew no conclusions regarding the implication of profitability level.

The court further reasoned that

a review of the course of conduct of the defendants reflects such "interdependent conscious parallelism" in their policies and practices (announced and unannounced) as to compel the conclusion that the defendants were engaged in a tacit understanding by "acquiescence coupled with assistance" to fix and stablize the prices of gypsum wallboard. 161

In United States v. General Motors Corp., 162 however, the simultaneous withdrawal of discounts did not support a finding of implied agreement. In that case, the Justice Department brought parallel criminal and civil actions alleging that General Motors (GM) and Ford Motor Co. had fixed prices in the automotive fleet market (purchases by governments and rental car and taxicab companies) through the use of two devices. First, the companies allegedly "used third parties as 'conduits' for the purpose of exchanging mutual assurances that each would eliminate or substantially reduce fleet price concessions if the other did." Second, they allegedly signalled their intentions through public statements by their executives.

The district court found for the companies in the civil case, ¹⁶⁴ holding that the evidence was insufficient to show that the companies had agreed to eliminate the discounts or that they had acted contrary to rational business behavior. In fact, the court rejected the contention that the companies' conduct was parallel. ¹⁶⁵ In particular, the court found that the deteriorating economy had caused the companies to seek ways of increasing profits independently and that withdrawal of discounts was one method of doing so. Although

^{160.} Id. at 316 (emphasis in original).

^{161.} *Id*.

^{162. 1974-2} Trade Cas. (CCH) ¶ 75,253 (E.D. Mich. 1974).

^{163.} Id.

^{164.} A jury had earlier returned a verdict of not guilty in the criminal trial. *Id.* at 97,657.

^{165.} Id. at 97,671.

the companies' mutual withdrawal of discounts may have been interdependent, the court did not believe that the companies had sufficiently committed themselves to this conduct to have reached an agreement. The result suggests judicial uneasiness with the notion of implied agreement.

The cases in which implicit agreements have been found share several characteristics. First, although they all involved some direct evidence of interfirm communication, there was either no direct evidence that the communication involved prices or, when there was direct evidence of price communication, it apparently did not significantly influence the court's holding. Rather, judicial analysis in these cases focused on economic evidence. Wall Products, in particular, appears to be precisely the type of decision that Posner envisions. Nevertheless, this author is aware of no case in which an implied agreement has been found without some evidence of direct communication. While the GE case might have been an exception had it gone to trial, it seems likely that a case involving no evidence of direct communication would be very difficult for a plaintiff to win.

Second, the cases all involved enjoinable conduct, such as the price book and price protection clauses in *GE* and the price announcements in *Wall Products*. This pattern suggests that enjoinable conduct may be necessary to support a finding of agreement. ¹⁶⁸ As discussed above, courts seem to rely on the existence of such conduct to distinguish collusive behavior from that which is merely interdependent. Evidence of enjoinable conduct serves as a kind of *mens rea* on which to predicate liability and ensures that effective remedies can be imposed. In *Wall Products*, for example, the notion of illegal intent was buttressed by internal memoranda showing the companies' concern about declining prices and their determination to reverse that trend.

Third, in each implied agreement case, any noncollusive explanation for the behavior of the industry seemed incredible. Again,

^{166.} Administrative Law Judge Needleman's Initial Decision in *Boise Cascade Corp.* is also of interest here because he appears to find an implicit agreement to use a delivered pricing system. 91 F.T.C. 1, 76-78 (1978). The Federal Trade Commission relied exclusively on § 5 of the FTC Act. *Id.* at 102. A finding of agreement might well have been sustained by the Ninth Circuit, however, even though it reversed the § 5 finding. Boise Cascade Corp. v. FTC, 637 F.2d 573, 577 (9th Cir. 1980). The Fifth Circuit affirmed a finding of conspiracy in a parallel private action. *In Re Plywood Antitrust Litigation*, 655 F.2d 627 (5th Cir. 1981), *cert. dismissed*, 462 U.S. 1125 (1983).

^{167.} R. Posner, supra note 8, at 73-74.

^{168.} Apparently only minimal evidence of enjoinable conduct was offered in *Ambook*, but because it involved a ruling on a pretrial motion the record probably was not well developed.

lack of a credible legitimate motive appears to satisfy the courts' search for a mens rea element. If innocent explanations can be offered, then doubts are resolved in favor of the defendants. ¹⁶⁹ Posner agrees that a convincing justification for business behavior that at first glance seems suspicious ought to negate any inference of illegal collusion. ¹⁷⁰

Finally, the cases have required a very subjective weighing of the evidence. For example, plaintiffs in both GM and Wall Products introduced evidence of the defendant's concern about declining prices. The GM court, however, concluded that this demonstrated rational and independent reactions to economic conditions, while the court in Wall Products reasoned that such evidence suggested a heightened motive for collusion. Similarly, while the Justice Department prosecutors thought that GM and Ford had improper parallel pricing policies, the court viewed those policies as a rational response to market conditions. Thus, the likelihood that opposite inferences could be drawn from similar behavior will make it quite difficult to predict whether a court will find an implicit agreement in any particular context.

For these reasons, a case founded on an implicit agreement theory is likely to be weak absent striking evidence that the firms involved are behaving abnormally, and thus pursuant to an implied commitment to restrain the market. Moreover, such evidence must convincingly rebut arguments that the firms' conduct is merely interdependent.

IV. CONCLUSION

In summary, caselaw indicates that Posner's conspiracy approach offers at best a limited solution to the oligopoly problem. Posner himself acknowledges only one problem with his approach: "the difficulty of proving collusive pricing by economic evidence, given the complex, technical, and often inconclusive character of such evidence." He responds, however, that the ambiguity of the evidence is exaggerated and suggests that the problem could be alleviated by increasing the burden of proof and eliminating criminal penalties in cases relying on economic evidence. 172

^{169.} See, e.g., Du Pont, 729 F.2d at 140-42; General Motors, 1974-2 Trade Cas. (CCH) at 97,670-71.

^{170.} R. Posner, *supra* note 8, at 72. For example, simultaneous price increases might be explained by "external shocks, such as [an] increase in raw material costs." *Id*.

^{171.} R. Posner, supra note 8, at 75.

^{172.} Id.

I think that Posner is simply wrong about the ambiguity of economic evidence. In many situations, economic analysis cannot reliably distinguish legal interdependent pricing from noncompetitive pricing resulting from an express or implicit agreement. Even in situations in which it can do so to the satisfaction of economists, courts may remain unconvinced. Certainly the cases examined above suggest a marked judicial reluctance to impose antitrust sanctions absent clear, unequivocal evidence. Courts have never found evidence of poor performance in an oligopolistic industry adequate by itself to support a finding of agreement. Rather, they have always required evidence of some enjoinable conduct. In effect, enjoinable conduct establishes a sort of mens rea for a finding of collusion by demonstrating that the defendants have taken avoidable steps to reduce competition.

Concerted enjoinable conduct that has the purpose or effect of restraining competition is illegal. Courts have not required proof of the actual terms of an agreement, however. For example, they have condemned agreements to use facilitating practices that have an anticompetitive effect. The courts have also condemned less visible agreements under two theories. First, they have inferred secret express agreements from evidence of structure, conduct, and performance that appears inconsistent with independent, noncollusive behavior. Second, they have found implicit agreements solely on the basis of known conduct when such conduct demonstrates a commitment to restrain competition.

The likelihood of establishing an agreement under either theory is difficult, if not impossible, to predict. Two factors, however, appear to be determinative. First, evidence of direct communication among firms strengthens a case considerably. Although the courts have never explicitly required this type of evidence, in only a few cases has agreement been inferred or found implicit with minimal evidence of such communication. Moreover, I am aware of no case in which a price-fixing agreement has been found without any direct evidence of direct communication among the firms involved. Second, the courts seem to look for evidence demonstrating a kind of mens rea sufficient to assure that the defendant firms have not innocently blundered into noncompetitive behavior. A plaintiff can establish such a mens rea by showing either that the firms' behavior makes little or no sense absent an agreement, or that they have deliberately engaged in parallel conduct.

Only a few decisions have been successful in attacking oligo-polistic misbehavior. Consequently, Posner's suggestion that we

raise the standard of proof for plaintiffs seems counterproductive. 173 He overestimates the potential of economic analysis and underestimates the willingness of his fellow judges to attach the heinous label "price fixer" to a defendant absent clear evidence. Under these circumstances, raising the standard of proof when relying on economic evidence alone might well exacerbate rather than relieve the oligopoly problem.

The real danger is that much oligopolistic misbehavior will continue because plaintiffs cannot build strong enough cases. A case based on either the inferred or implied agreement theory is likely to be both costly and very risky, with the court bending over backwards to give defendants the benefit of any doubt. Even so, Posner's conspiracy approach remains viable—in the sense that a judgment for the plaintiff is possible—which is more than can be said for the shared monopoly and FTC Act facilitating practice theories.

^{173.} While I agree that a felony conviction is unjustified if the evidence is ambiguous, the requirement that the evidence be "beyond a reasonable doubt" precludes a criminal conviction based on such evidence.