Regulating Oligopoly Conduct under the Antitrust Laws

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Thomas A. Piraino, Jr.†

I. INTRODUCTION: RESOLVING THE "OLIGOPOLY PROBLEM"

For more than 100 years, the courts and antitrust enforcement agencies have struggled unsuccessfully to regulate the anticompetitive conduct of oligopolists. In an oligopoly, a small number of sellers controls most of the sales in the relevant market. The structure of oligopoly markets facilitates

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2. See ROGER D. BLAIR & DAVID L. KASERMAN, ANTITRUST ECONOMICS 192 (1985) ("When we have a small number of firms producing a homogeneous output, the market structure is called an oligopoly."). There is no precise definition as to what market concentration levels create oligopoly power. See ANTITRUST POLICY IN TRANSITION: THE CONVERGENCE OF LAW AND ECONOMICS 51 (Eleanor M. Fox & James T. Halverson eds., 1984) ("[T]here is considerable doubt as to what degree of concentration is sufficiently great to permit... tacit coordination."). Economists generally agree that a market should be deemed oligopolistic when "the few largest sellers in the market have a share of the market sufficient to make it likely that they will recognize the interaction of their own behavior and their rivals' responses." CARL KAYSEN & DONALD F. TURNER, ANTITRUST POLICY 27 (1959). Most economists also agree on the outer limits of oligopoly power; that is, that oligopoly power likely exists in markets with three or four major firms, but not in markets with fifteen to twenty firms. Id. There is a "modest consensus" among economists that oligopoly power occurs when there are ten or fewer firms in the relevant market. Id. Professor Phillip E. Areeda has noted that “[a]ll one can say with assurance is that... interdependence and price coordination are implausible when there are... more than a dozen... [rivals] but more likely as the number of firms decreases.” 6 PHILLIP E. AREEDA, ANTITRUST LAW
anticompetitive conduct, diverting wealth from consumers to producers. With so few sellers, oligopolists find it easier to coordinate their behavior to maintain prices above the normal competitive level. Such coordination often occurs tacitly, without any express agreement among the firms in the relevant market. Oligopolists can anticipate with greater certainty how their rivals are likely to react to a price increase. Simply by observing other firms' conduct, oligopolists can maintain prices at high levels just as effectively as a monopolist or a group of firms engaging in an express price-fixing conspiracy. As Professor Phillip Areeda has explained:

The simplest way to visualize the oligopoly possibility is an informal cartel that comes about by implicit "bargaining" through market signals that result in a rough and unspoken coordination of prices. . . .

The result can thus approximate the consequence of traditional price-fixing in a smoke-filled room, even though each firm does nothing but make its own independent decision by observing what the other firms do in the marketplace or say in the newspapers.  

The courts have had no difficulty regulating express price-fixing agreements among competitors. Indeed, courts have uniformly condemned such "cartels" on their face without any inquiry into their actual economic effect. If formal collusion were not so clearly illegal, it would undoubtedly be the preferred means for domestic oligopolists to achieve supracompetitive prices. Since express collusion is illegal on its face, however,
there is a strong incentive for rivals to avoid such conduct. Instead, oligopolists can engage in informal means of communicating and enforcing a consensus price, such as by signaling planned price increases in press releases or on the Internet.⁷

The high levels of concentration in many U.S. markets today guarantee that tacit collusion will be a continuing problem. The public accounting industry includes only four national firms;⁸ four automobile companies produce approximately 75% of the cars in the United States;⁹ seven national carriers control most domestic airline traffic;¹⁰ Visa and MasterCard together account for most of the transactions in the credit card market;¹¹ four tobacco companies manufacture 97% of the cigarettes sold in the United States;¹² and five pharmaceutical companies produce most of the nation's prescription drugs.¹³

Since the enactment of the Sherman Act in 1890, a debate has raged over whether the antitrust laws can be construed to preclude tacit collusion among oligopolists. The battle lines are evident in the contrasting views of two of the most influential antitrust intellectuals of the last century, Professor Donald Turner and Judge Richard Posner. Professor Turner believes


⁷ See infra notes 189–217 and accompanying text (discussing disclosure techniques among oligopolists).


⁹ John Porretto, GM Chairman Pulled Automaker From the Murk, THE CLEVELAND PLAIN DEALER Apr. 20, 2003, at G5. The market shares for the top four automobile firms are as follows: General Motors: 28%, Ford Motor Co.: 21%, Daimler Chrysler: 15%, Toyota Motor Sales: 10%. Id.

¹⁰ U.S. Industry Traffic Market Shares, 348 AVIATION DAILY 7 (May 20, 2002). The market shares of these carriers are as follows: American: 19%, United: 17%, Delta: 15%, Northwest: 11%, Continental: 9%, Southwest: 7%, US Airways: 7%. Id.


¹² See Williamson Oil Co. v. Philip Morris USA, 346 F.3d 1287, 1291 (11th Cir. 2003) (“The modern American tobacco industry is a classic oligopoly.”).

that oligopolists' coordinated conduct should not be illegal, while Judge Posner argues that coordinated pricing by oligopolists should be prohibited.

The split among antitrust commentators is reflected in the federal courts, which have delivered a series of confused and conflicting decisions on oligopoly conduct. The courts' difficulty stems from the fact that the antitrust laws are not well-designed to deal with oligopolists' tacit collusion. Section 2 of the Sherman Act prohibits monopolists from engaging in unilateral conduct that harms competition. Oligopoly conduct, however, is covered by section 1 of the Sherman Act. Section 1 only precludes competitors from entering into a "contract, combination . . . or conspiracy, in restraint of trade." Thus, in order to be illegal, oligopolists' conduct must be based on an agreement among the firms in the relevant market. This requirement has led the courts on an often fruitless search for a formal "meeting of the minds" in oligopoly cases. While courts have routinely condemned explicit price-fixing agreements on their face, they have balked at finding an illegal agreement under section 1 when oligopolists have been able to achieve a consensus price simply by reacting to each other's conduct in the marketplace.

Economically, there is no distinction between a meeting to fix prices and "a situation in which two firms are sitting at their computer terminals rapidly changing prices in response to the others' actions." Indeed, tacit coordinated conduct among

14. See Donald F. Turner, The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusals To Deal, 75 HARV. L. REV. 655, 671 (1962) ("I conclude, then, that oligopolists who take into account the probable reactions of competitors in setting their basic prices, without more in the way of 'agreement' than is found in 'conscious parallelism,' should not be held unlawful conspirators under the Sherman Act . . . .").


16. See supra notes 69-83 and accompanying text.

17. See BLAIR & KASERMAN, supra note 2, at 221 ("[T]he antitrust laws are not well equipped to deal with oligopoly.").


20. See infra notes 69-83 and accompanying text.

21. Carlton et al., supra note 5, at 437.
oligopolists may be more harmful to consumers than an overt price-fixing cartel. Cartels are often undermined by cheating. In those few cases where they do persist, cartels can be detected easily and punished by antitrust regulators. By contrast, tacit coordination among a group of oligopolists is difficult to discover, and such conduct is likely to be sustained for a longer period. Yet, according to many courts and commentators, the Sherman Act would preclude the cartel and let the oligopolists proceed with their tacit coordination. As a result, "some critics maintain that the antitrust authorities are most successful against those conspiracies that are least likely to succeed." Commentators have referred to this gap in the antitrust laws as the "oligopoly problem."

Ironically, the federal courts' dilemma in oligopoly cases has been compounded by their increased use of economic analysis in recent years. This trend coincided with the appointment of several influential Chicago School economists, including

22. See infra notes 97–100 and accompanying text.

23. BLAIR & KASERMAN, supra note 2, at 201. It could be argued that merger enforcement under section 7 of the Clayton Act adequately deals with the oligopoly problem. Section 7 proscribes mergers or acquisitions which may "substantially . . . lessen competition, or . . . tend to create a monopoly." 15 U.S.C. § 18 (2000). Section 7 was intended to prevent mergers or acquisitions that would create concentrated markets in which it is easier for firms to coordinate anticompetitive conduct. See U.S. DEPT OF JUSTICE & FED. TRADE COMM'N MERGER GUIDELINES § 2.1 (1992), reprinted in 4 Tr. Reg. Rep. (CCH) ¶ 13,104 [hereinafter MERGER GUIDELINES] ("A merger may diminish competition by enabling firms . . . to engage in coordinated interaction that harms consumers."); see also Joseph Kattan & William R. Vigdor, Game Theory and the Analysis of Collusion in Conspiracy and Merger Cases, 5 GEO. MASON L. REV. 441, 442 (1997) ("[A]nalysis [under section 7 of the Clayton Act] often focuses on whether post-merger market conditions are likely to enable firms to coordinate their pricing and output decisions without engaging in any explicit behavior that can be subjected to the sanctions of Section 1 of the Sherman Act."). Section 7, however, can "contribute only marginally to solving the oligopoly problem." John E. Lopatka, Solving the Oligopoly Problem: Turner's Try, 41 ANTITRUST BULL. 843, 905 (1996). It has no effect on existing oligopolies nor on those obtained by means other than acquisition, such as by internal expansion or the exit of firms from the relevant market. Thus, if they want to confront the problems of incumbent oligopolies, the courts will have to look to section 1 and to its requirement for a conspiracy in restraint of trade.

24. See, e.g., BLAIR & KASERMAN, supra note 2, at 193 ("[N]oncompetitive price-quantity solutions may emerge without any overt conspiracy. For antitrust purposes, this is the oligopoly problem."); see also Lopatka, supra note 23, at 848 (identifying the "most troublesome case" as "oligopoly pricing," or the consciously parallel decisions of a few dominant sellers in an industry to maintain the same high noncompetitive price) (quoting Turner, supra note 14, at 656).
Robert Bork, Frank Easterbrook, and Richard Posner, to the federal bench in the 1970s. During the last three decades, most federal courts have concluded that economic efficiency should be the sole goal of antitrust enforcement and that antitrust regulators should refrain from intervening in markets unless it is clear that firms have exercised their market power to raise prices, restrict output, limit innovation, or otherwise harm consumers.

While the Chicago School approach has protected many beneficial forms of competition, it has also given oligopolists free rein to engage in tacit price-fixing arrangements harmful to consumers. For example, the lower federal courts have interpreted two recent Supreme Court decisions to preclude fact finders from inferring a price-fixing conspiracy from circumstantial evidence. Since circumstantial evidence is usually the only evidence available when oligopolists engage in tacit price-fixing arrangements, this approach has left such conduct completely unregulated.

This Article proposes a new approach that will preclude oligopolists' tacit collusion while protecting their right to engage in aggressive independent competition. The approach recognizes that the purpose of oligopolists' conduct can be an effective proxy for the effect of such conduct upon consumers. Indeed, prior to the advent of the Chicago School, the Supreme Court had sanctioned a purpose-based approach to oligopolists' conduct.

26. Adherents to the Chicago School argue that antitrust enforcement should be concerned only with protecting consumers from the overcharging that can occur when firms gain an amount of market power that allows them to artificially restrain output. Thus, antitrust policy need not consider social goals unrelated to such abuses of market power, such as the protection of small businesses or the fairness of the competitive process. See Robert H. Bork, The Role of the Courts in Applying Economics, 54 ANTITRUST L.J. 21, 24 (1985); Frank H. Easterbrook, Workable Antitrust Policy, 84 MICH. L. REV. 1696, 1703 (1986); Eleanor M. Fox & Lawrence A. Sullivan, Antitrust—Retrospective and Prospective: Where Are We Coming from? Where Are We Going?, 62 N.Y.U. L. REV. 936, 945 (1987).
27. See, e.g., Eleanor M. Fox, The Battle for the Soul of Antitrust, 75 CAL. L. REV. 917, 917 (1987) (explaining the Chicago School conclusion that the greatest economic good comes from "the natural tendency of firms . . . to be efficient").
28. See infra notes 100–07 and accompanying text.
In oligopoly cases, the courts should concentrate on whether defendants have acted in a manner consistent with their independent self-interest, or whether their conduct only makes sense as a means of furthering a tacit agreement to raise prices. It should not be difficult for courts to identify conduct that is contrary to a firm's independent self-interest. Firms act against such self-interest when they disclose confidential pricing information, sacrifice their individual bargaining power to observe standard industry-wide terms of sale, or forego otherwise attainable profits by following their competitors' price increases during periods of overcapacity or declining demand. Under normal circumstances, oligopolists would not be willing to incur the losses associated with such conduct. Courts can assume that firms are only willing to suffer such losses because the firms have received implicit assurances from their rivals that they will be compensated by the higher long-term profits resulting from a price-fixing arrangement. Such tacit collusion should be illegal on its face, because it harms consumers without any offsetting economic benefit.

Part II of this Article describes the evolution of oligopoly theory during the nineteenth and twentieth centuries and, relying on game theory, explains why oligopolists are more likely to engage in tacit collusion than firms in less concentrated markets. Part III describes the federal courts' failure to establish an effective means of regulating tacit collusion among oligopolists. Part IV sets forth a proposed means of analyzing oligopolists' tacit collusion under section 1 of the Sherman Act. Part V describes how independent parallel conduct would be dealt with under the proposed approach. Part VI reconciles the proposed approach with relevant precedent from the Supreme Court and lower federal courts. Part VII applies the proposed approach to the primary types of tacit collusion, and Part VIII sets forth the remedies against such conduct that would be available under the proposed approach.

II. THE EVOLUTION OF OLIGOPOLY THEORY

A. HOW OLIGOPOLIES HARM CONSUMERS

In the last several decades, a consensus has begun to

29. See infra notes 146–48 and accompanying text.
30. See infra notes 193–238 and accompanying text.
emerge among economists and antitrust commentators on how oligopolists' tacit collusion harms consumers. This consensus could form the foundation for a new approach to the antitrust regulation of such conduct.

In a perfectly competitive market, with many competing firms and easy terms of entry and exit, firms must price at the market level (i.e., at marginal cost) or risk losing sales to competitors. However, in an oligopoly, where there are only a few sellers, it is easier for those sellers to cooperate to raise prices above the normal competitive level. Coordination among oligopolists can allow sellers to price above marginal cost at "supracompetitive" prices. Economists believe that such prices have two significant adverse effects. First, they harm consumers by transferring wealth from purchasers to producers. Second, they may cause purchasers to forego buying a product entirely. As a result, consumers suffer a loss which is not offset by any gain to sellers. Economists describe this phenomenon as a "dead weight loss."

In the past, some commentators argued that oligopolists are just as likely as firms in less concentrated markets to price at a competitive level. In 1883, Joseph Bertrand concluded that, even in a two-firm market, the sellers would achieve equilibrium at the competitive price (i.e., a price equal to marginal costs), because if either firm priced above marginal cost, it would lose the entire market to its rival. Some economic stud-

32. Recently, however, some commentators have argued that the potential for worldwide deflation now constitutes a more significant threat to consumers than inflation and that governments around the world should not devote their resources to prosecute price-fixing. See, e.g., Holman W. Jenkins, Jr., Want More Deflation? Let's Go Hunting Cartels, WALL ST. J., July 2, 2003, at A11 (wondering "if, in a world tilting toward deflation, an all-out hunt for cartels right now is the most productive use of government energy").
33. As Judge Posner has explained,
When market price rises above the competitive level, consumers who continue to purchase the seller's product at the new, higher price suffer a loss . . . exactly offset by the additional revenue that the sellers obtain at the higher price. Those who stop buying the product suffer a loss . . . not offset by any gain to the sellers. [The latter] is the "dead-weight loss" from supracompetitive pricing and in traditional analysis its only social cost, [the former] being regarded merely as a transfer from consumers to producers.

34. ANTITRUST LAW AND ECONOMICS 239 (Oliver E. Williamson ed., 1980).
35. See J. Bertrand, Théorie des Richesses, 67 J. DES SAVANTS 499, 503
ies conducted in the mid-twentieth century showed no correlation between increased levels of concentration and higher prices. In reviewing these studies, Yale Brozen "was surprised to find no persistence over time in the correlation between concentration and profitability." Similarly, Robert Bork concluded that "the available evidence strongly suggests that oligopolies do not generally result in substantial or significant restrictions of output."

The weight of economic theory, however, now supports the conclusion that oligopolies do facilitate supracompetitive pricing. In 1838, Augustin Cournot published one of the first theses on oligopolistic behavior. In his model, two theoretical oligopolists calculate their output so that, together, they will be able to achieve a profit-maximizing price approaching the monopoly level. Many twentieth century economists have come to a similar conclusion. Edward Chamberlin argued in 1960 that sellers in a concentrated market will independently price at the monopoly level. Chamberlin concluded, "since the result of a cut by any one is inevitably to decrease his own profits, no one will cut, and, although the sellers are entirely independent, the equilibrium result is the same as though there were a monopolistic agreement between them." Several economic studies in the late twentieth century concluded that higher market concentration levels are associated with enhanced profits and increased prices. By the end of the century, a consensus had

(1883) (reviewing Augustin Cournot, Recherches sur les Principes Mathématiques de la Théorie des Richesses (Paris, 1838)).

37. Bork, supra note 1, at 180.
39. See Lopatka, supra note 23, at 862.
41. Id. at 48.
42. See Bork, supra note 1, at 180 (citing White House Task Force on Antitrust Policy Report, reprinted in 2 Antitrust L. & Econ. Rev. 11 (1966)) [hereinafter White House Report], which found "a close association between high levels of concentration and persistently high rates of return on capital, particularly in those industries in which the largest four firms account for more than 60% of sales"; Antitrust Law and Economics, supra note 34, at 241-42 (referring to forty-six studies showing a positive "relationship between concentration and profits or price-cost margins"); id. at 245 (describing
evolved that firms in highly concentrated markets are less likely to engage in aggressive price competition.43

B. GAME THEORY EXPLANATIONS FOR TACIT COLLUSION

Recent models of game theory explain why oligopolists are able to maintain a price equilibrium at a level above that which would prevail in a perfectly competitive market (i.e., above marginal cost).44 Game theory has been described as "a rich, comprehensive and organized representation of economic interactions that emphasizes the timing of actors' decisions and the information they have when they act."45 In 1950, Nobel prize-winning mathematician John Nash posited what later became known as the "Nash equilibrium," based on an analysis of social and economic behavior as a multiparty game involving a mix of cooperation and competition. Nash emphasized that "interdependence is the distinguishing feature of games of strategy,"46 in that "[t]he outcome of a game for one player depends on what all the other players choose to do and vice versa."47 Players pick their response to another player's moves based on what they perceive as the best choice for them when all others are using their best strategies. In certain cases, players will choose to cooperate rather than to compete, because they will conclude that they have more to gain from committing themselves to a collective strategy with their rivals.48

Game theory explains how oligopolists can maintain supracompetitive prices without entering into express price-fixing agreements. In an oligopoly, where there are so few firms in the relevant market, it is easier for firms to make pricing decisions

43. "American industries that ride with the economic cycle often go through waves of consolidation during times of bust, sometimes whittling down to a handful of big competitors. That gives the survivors power to raise prices and reap greater profits." Edward Wong, Bigger Portions of Pie in the Sky, N.Y. TIMES, Dec. 22, 2002, at WK6. For example, the U.S. airline industry, with six dominant national carriers, was not motivated to provide lower fares until low-cost airlines such as Southwest Airlines, JetBlue Airways, and AirTTran Airways entered the market. Id.

44. For a summary of game theory concepts, see generally Jonathan B. Baker, Two Sherman Act Section 1 Dilemmas: Parallel Pricing, the Oligopoly Problem and Contemporary Economic Theory, 38 ANTITRUST BULL. 143 (1993).

45. Lopatka, supra note 23, at 890.


47. Id.

48. Id. at 96.
“in reference to the likely reaction of competitors.” Each firm recognizes its interdependence with other firms in the market and understands that “its optimal price is a function of the price charged by its rivals.” An oligopolist is aware that “its rivals are as strongly armed as it is with weapons of price reductions, aggressive advertising, and product improvement.” Thus each firm will want to avoid prompting aggressive competitive responses from its rivals. If one firm cuts prices in an effort to boost sales, rivals may be compelled to match the price cut, not only rendering the initial effort to secure additional volume unsuccessful, but making all firms worse off than before. Would-be price cutters, therefore, will resist the temptation to lower their prices and will adhere to the consensus price. Achieving such a consensus is facilitated by the information legitimately available in the marketplace. When only a few sellers must act on the information, it is easier for them to anticipate each other’s reactions.

Consider a small town with two gasoline stations located directly across the street from each other. Since each station posts its prices, its rival will become immediately aware of any price change. Neither station will have an incentive to cut its price below the consensus level. Each station owner will realize that it cannot steal customers from its rival with a lower price before its rival can respond by reducing its own prices. As a result, each station should anticipate an immediate matching of its lower price, and neither station will have an incentive to initiate a price decrease. “Cooperative pricing is thus a logical outcome of the ‘game’ without any secret meetings or additional communication.”

Game theory also explains how oligopolists can increase prices in a coordinated manner without entering into an explicit price-fixing arrangement. Oligopolists have nothing to lose, and much to gain, by signaling to each other their desire

50. BLAIR & KASERMAN, supra note 2, at 200; see also Bailey v. Allgas, Inc., 284 F.3d 1237, 1251 (11th Cir. 2003) (“The distinctive characteristic of oligopoly is recognized interdependence among the leading firms: the profit-maximizing choice of price and output for one depends on the choices made by others.”).
51. BORK, supra note 1, at 188.
52. Hay, supra note 6, at 444.
53. Carlton et al., supra note 5, at 428.
for a price increase. If one firm believes that prices in the relevant market are not at the maximum possible level, it will announce a price increase scheduled to become effective at a future date. If other firms do not follow, the leader can simply retract the price increase before its effective date. On the other hand, if other competitors in the market follow the leader and announce similar price increases, all the firms can be confident that they will participate in a share of the higher profits that will result from the price increase.

C. PROSECUTORIAL THEORIES OF COORDINATED INTERACTION

Recent theories adopted by government regulators illustrate how oligopolists are able to police adherence to the terms of a tacit price-fixing arrangement. Government regulators have used a model called "coordinated interaction" to assess the likelihood for tacit collusion in oligopoly markets. Coordinated interaction describes the means by which firms in concentrated markets are able to increase prices without having to enter into an express agreement. In a landmark 1964 article, George Stigler, a Nobel prize-winning economist who has been called the "father of modern oligopoly theory," identified three elements of successful coordinated interaction: (1) reaching agreement on the terms of coordination, (2) detecting deviations from the agreed terms, and (3) punishing firms that deviate from the agreed terms. All of these conditions are easier to achieve in oligopoly markets, because there are fewer rivals that must sign on to a common approach. The United States Department of Justice (DOJ) and the Federal Trade Commission (FTC) have used Stigler's theories as a tool to determine whether to prosecute particular mergers. The current Merger Guidelines of the DOJ and FTC provide that mergers which substantially increase concentration levels in the relevant market should be precluded because they create market condi-

56. ANTITRUST LAW AND ECONOMICS, supra note 34, at 240 ("[C]oncentration will facilitate collusion, whether tacit or explicit."); BLAIR & KASERMAN, supra note 2, at 192 ("Small numbers of firms are much more conducive to collusion than large numbers.").
tions which facilitate coordinated interaction.\textsuperscript{57}

Both Stigler and the Merger Guidelines recognize that cheating on a price-fixing arrangement is attractive to individual firms, because it can bring an immediate windfall of new business to the cheater. Thus, if a tacit price-fixing arrangement is to be successful, it must include some provision for policing and enforcing adherence to the consensus price.\textsuperscript{58} Oligopolists can informally agree to implement practices that reduce any uncertainty as to whether all firms in the market will adhere to the terms of a tacit price-fixing agreement. Firms will be more likely to adhere to a consensus price when they know that any price decreases can be easily detected. For example, by reporting otherwise confidential pricing information to each other, oligopolists can deter their rivals from deviating from the consensus price. As Judge Posner explained in his recent decision in \textit{In re High Fructose Corn Syrup} (hereinafter \textit{HFCS}), “if one seller broke ranks, the others would quickly discover the fact, and so the seller would have gained little from cheating on his coconspirators; the threat of such discovery tends to shore up a cartel.”\textsuperscript{59}

D. THE CURRENT CONSENSUS ON THE EQUIVALENCE OF EXPRESS AND TACIT COLLUSION

George Hay has explained that “[t]he prototype . . . [of an explicit cartel] is the smoke-filled room in which all the rivals engage in face-to-face communication.”\textsuperscript{60} In a cartel, competitors expressly agree to coordinate their prices without integrating their resources in any manner.\textsuperscript{61} Since the parties have not pooled their resources or contributed any assets to the arrangement, a cartel has neither the objective nor the possibility of generating any procompetitive effects, such as the elimination of redundant costs or synergies from the combination of

\begin{itemize}
  \item \textsuperscript{57} 	extit{MERGER GUIDELINES} § 2.1, \textit{supra} note 23.
  \item \textsuperscript{58} Stigler, \textit{supra} note 55, at 44; \textit{MERGER GUIDELINES} § 2.1, \textit{supra} note 23.
  \item \textsuperscript{59} \textit{In re High Fructose Corn Syrup Antitrust Litig.}, 295 F.3d 651, 656 (7th Cir. 2002).
  \item \textsuperscript{60} Hay, \textit{supra} note 6, at 452.
  \item \textsuperscript{61} See Gregory J. Werden, \textit{Antitrust Analysis of Joint Ventures: An Overview}, 66 \textit{ANTITRUST L.J.} 701, 712 (1998) (“If two competitors formed a venture that did nothing but set their prices, the arrangement would be nothing more than a price-fixing cartel, and it would be treated as such under the antitrust laws.”).
\end{itemize}
complementary resources.\textsuperscript{62} Indeed, the only effects of a cartel are anticompetitive. Explicit agreements allow the participants to bargain openly on a consensus industry price level and to communicate to each other their intention to adhere to the consensus price. Such agreements also allow the participants to establish mechanisms for monitoring and enforcing adherence to the consensus price.\textsuperscript{63} Express cartels constitute brazen attempts to manipulate prices for the participants' benefit, and they cause substantial harm to consumers. Since their adverse effects are not justified by any offsetting efficiency benefits, the courts have condemned explicit price-fixing agreements on their face without any further inquiry into the motives of the defendants or their actual economic effect.\textsuperscript{64}

There is now a consensus among economists that tacit price-fixing arrangements are just as harmful to consumers as explicit price-fixing agreements.\textsuperscript{65} Commentators have concluded that, since "there is no vital difference between formal

\begin{itemize}
  \item Such ventures "offer no significant prospect of consumer benefit." \textit{Id.}; see also Thomas A. Piraino, Jr., \textit{Making Sense of the Rule of Reason: A New Standard for Section 1 of the Sherman Act}, 47 VAND. L. REV. 1753, 1788–89 (1994) (stating that, when competitors simply coordinate their efforts without integrating their resources, the "arrangement is incapable of producing efficiencies" and therefore, "the mere coordination of parallel activity without any corresponding integration amounts to no more than a naked restraint of trade").
  \item See Werden, \textit{supra} note 61, at 712.
  \item Oral agreements by competitors to set prices are no less pernicious than explicit cartels. It should make no difference whether the participants agree in writing to fix prices or whether they simply give their oral assent to such an arrangement. Like explicit agreements, oral arrangements give all the participants confidence that the consensus price will be observed and that cheaters will be detected and punished. A court will have to inquire further to confirm the existence of an oral price-fixing agreement. Fact finders will have to rely on the testimony of witnesses who participated in or observed the negotiation of the relevant agreement. Such testimony, however, will often be disppositive on the conspiracy issue. A witness may, for example, have heard a defendant offer an oral "quid pro quo" for certain conduct. In \textit{In re YKK (U.S.A.) Inc.}, 116 FTC LEXIS 628 (1993), the FTC found a conspiracy when the defendant stated to a competitor that it would refrain from offering free equipment to its customers if the competitor did likewise. \textit{Id.} European antitrust authorities are currently investigating a possible price-fixing agreement between two ocean-shipping firms. Among the potential evidence against the two firms are statements by executives concerning their oral agreement to "carve[] up the world." James Bandler, \textit{How Seagoing Chemical Haulers May Have Tried To Divide Market}, WALL ST. J., Feb. 20, 2003, at A1.
  \item See, \textit{e.g.}, BLAIR & KASERMAN, \textit{supra} note 2, at 205–06 ("Section 1 attacks collusion because it is a joint effort to reap monopoly profits, and tacit collusion has a very similar impact.").
\end{itemize}
cartels and tacit collusive arrangements... the tacit colluder should be punished like the express colluder. Firms engaged in tacit collusion can duplicate the conditions that occur under an explicit cartel. Like an express agreement, a tacit arrangement involves the reaching of a consensus on an above-market price and the adoption of a means of enforcing adherence to that consensus. With greater assurance of their rivals' acquiescence, oligopolists gain the confidence necessary to persist in pricing levels above the competitive norm.

Tacit collusion, like express price-fixing, should be illegal on its face under section 1 of the Sherman Act. The courts need not inquire into the specific economic effects of such conduct, because it harms consumers without offering the possibility of any efficiency benefits. However, despite economists' recognition of the similar effects of express and tacit price-fixing, the courts continue to treat tacit collusion more leniently than express price-fixing. In fact, in its most recent cases, the Supreme Court has adopted an approach that would let oligopolists engage in tacit collusion with impunity.

66. Id.; see also DeSanti & Nagata, supra note 5, at 121 ("Under the facilitating practices theory, the communication or exchange of information... might lead... to the same results the parties sought to achieve through their proposed formal agreement."). As Professor Areeda has argued, "One may reluctantly tolerate interdependent pricing behavior as such and still condemn [those agreements involving] practices which unjustifiably facilitate interdependent pricing and which can be readily identified and enjoined." PHILLIP AREEDA, ANTITRUST ANALYSIS ¶ 325, at 381 (3d ed. 1981); see also DeSanti & Nagata, supra note 5, at 95 ("There appears to be no inherent reason why... [tacit collusion] should not be sanctioned if it is likely to lead to competitive harm.").

67. See Hay, supra note 6, at 446-47 (stating that firms engaged in tacit coordination can gain a mutual understanding of the consensus industry price and a mutual sense of confidence that all firms will adhere to that price).

68. John Lopatka has argued that "supracompetitive pricing by oligopolists cannot persist absent impediments to entry and exit" and that, consequently, such market factors should be considered before oligopoly pricing is deemed illegal. See Lopatka, supra note 23, at 903. However, although new entrants can ultimately cause oligopolists to reduce their prices, the per se illegality of oligopoly conduct is justified by the deterrent effect of such an approach and by the fact that consumers can be harmed substantially before a new entrant can have an impact in the relevant market. Indeed, for such reasons, the courts have never accepted the argument that ease of entry and other similar market factors can be used to justify naked price-fixing agreements. See, e.g., NCAA v. Bd. of Regents, 468 U.S. 85, 110 (1984) ("We have never required proof of market power in such a case.").
III. THE COURTS' INABILITY TO REGULATE OLIGOPOLISTS' TACIT COLLUSION

Despite more than a century of litigation under the Sherman Act and the ability to draw on almost two centuries of economic theory, the federal courts have been unable to develop an effective means of regulating oligopolists' tacit collusion. Their dilemma stems from an undue concentration on the section 1 conspiracy requirement. This obsession with the conspiracy issue has diverted the courts' attention from the effect of oligopolies on consumers. Instead of considering whether oligopolists have successfully coordinated their behavior to raise prices above the normal competitive level, the courts have engaged in an extended search for various "plus factors" necessary to prove the existence of a formal agreement among the defendants. Yet the courts' search for a "meeting of the minds" in oligopoly pricing cases is destined to be fruitless. Stigler has pointed out that there is no connection between the legal concept of conspiracy and "the workings of real markets." Indeed, Stigler concluded that "[t]here is no established economic content to words such as 'collusion', 'conspiracy', or 'concerted action'." Similarly, Herbert Hovenkamp has opined that "economists typically don't care whether firms have 'agreed' in the legal sense of the term." Nevertheless, in many section 1 cases, the courts have made the conspiracy inquiry their highest priority. As a result, the courts have rendered a conflicting series of opinions that have only served to confuse business executives as to the dividing line between permissible and illegal oligopoly conduct.

A. THE FRUITLESS SEARCH FOR PLUS FACTORS

Courts and commentators have been nearly unanimous in their conclusion that oligopolists should not be liable under the antitrust laws for engaging in "conscious parallelism": i.e., for independently determining their own prices with a full understanding that their rivals are likely to follow suit. When an

70. Id.
72. See Williamson Oil Co. v. Philip Morris USA, 346 F.3d 1287, 1299 (11th Cir. 2003) ("When they are a product of a rational, independent calculus
oligopolist simply takes its rivals’ likely reactions into account, it is merely recognizing its interdependence with other firms, and not even the most expanded definitions of “agreement” have been deemed to encompass such conduct.73 A 1962 *Harvard Law Review* article by Professor Donald Turner helped to establish the principle that consciously parallel conduct does not violate section 1.74 Professor Turner argued that “identical but unrelated responses by a group of similarly situated competitors to the same set of economic facts . . . is not ‘agreement’ by any stretch of the imagination.”75 Professor Turner’s analy-
sis became a "bedrock principle, launching in subsequent cases innumerable searches for something more than simple parallelism, for 'plus factors' that would transform the defendants' conduct into an actionable conspiracy."\(^7\)

Unfortunately, the courts have found it difficult to define the plus factors that distinguish legitimate independent action from unlawful concerted conduct.\(^7\) One commentator has pointed out that "[t]hese efforts have been largely unsuccessful, producing a confused series of opinions that provide little guidance on when antitrust liability will be found."\(^7\) Moreover, the courts have been too demanding in their analysis of plus factors, placing burdens on plaintiffs that preclude a finding of conspiracy in cases where the presence of tacit collusion should have been clear. For example, in *In re Ethyl Corp.*, the FTC properly found the requisite factors in a number of practices that facilitated coordinated pricing among four manufacturers of lead-based antiknock compounds.\(^7\) The Second Circuit, however, reversed the FTC's decision, finding that the manufacturers had independently adopted the facilitating practices.\(^8\) *United States v. Charles Pfizer & Co.* also illustrates the courts' reluctance to infer the requisite plus factors for a finding of conspiracy.\(^8\) The Government alleged that five pharmaceutical companies conspired to fix prices and exclude competitors from the antibiotic market. There was considerable evidence that the defendants effected their conspiracy through a series of patent licenses which prevented other firms from entering the market. There was also evidence that the defendants had maintained

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76. Lopatka, *supra* note 23, at 845; *see also* Williamson Oil Co. v. Philip Morris USA, 346 F.3d 1287, 1301 (11th Cir. 2003) ("We have fashioned a test under which price-fixing plaintiffs must demonstrate the existence of 'plus factors' that remove their evidence from the realm of equipoise and render that evidence more probative of conspiracy than of conscious parallelism.").

77. John Lopatka has posed the oligopoly dilemma as follows: "Section 1 could not be used to punish . . . [oligopolists] simply for pricing interdependently, but . . . they usually will have done more and could then be attacked under section 1. The devil is in deciding whether they did enough more." Lopatka, *supra* note 23, at 907.

78. Hay, *supra* note 6, at 465; *see also* Lopatka, *supra* note 23, at 898 ("Given the unsettled state of theory, courts not surprisingly struggle when deciding what conduct is enough 'more' to warrant liability.").


substantially similar prices for antibiotics. Nevertheless, the court concluded that the defendants had engaged in nothing more than permissible conscious parallelism.

B. THE SUPREME COURT'S FAILURE TO DEVELOP AN EFFECTIVE CONSPIRACY STANDARD

In the 1980s, the Supreme Court recognized the need to clarify the standards for inferring the existence of an illegal section 1 conspiracy, and it granted certiorari in two cases in which defendants' liability depended upon whether a conspiracy could be inferred from circumstantial evidence. Unfortunately, the Court's approach in those cases only served to confuse the conspiracy issue further.

The Supreme Court's 1984 decision in *Monsanto Co. v. Spray-Rite Service Corp.* erected a high hurdle for section 1 plaintiffs. The plaintiff, a former Monsanto distributor, alleged that Monsanto had conspired with other distributors to effect its termination to enforce a resale price-fixing conspiracy. Monsanto had terminated the distributor after receiving complaints from other distributors about its price-cutting practices. The Court decided that it could not infer a conspiracy merely from the fact that Monsanto had received such complaints. Permitting such an inference could preclude manufacturers from exercising their right to terminate distributors for legitimate independent reasons. The Court concluded:

Thus, something more than evidence of complaints is needed. There must be evidence that tends to exclude the possibility that the manufacturer and nonterminated distributors were acting independently. . . . [T]he antitrust plaintiff should present . . . evidence that reasonably tends to prove that the manufacturer and others "had a conscious commitment to a common scheme designed to achieve an unlawful objective."85

Despite this high burden of proof, the Court confused the issue when it proceeded to hold that the terminated distributor had, in fact, presented sufficient evidence of a resale price-fixing conspiracy to survive summary judgment. The Court relied on testimony (1) that Monsanto had threatened other price-cutting distributors that it would reduce their supplies of Mon-

82. *Id.*
83. *Id.* at 101.
85. *Id.* at 764 (quoting Edward J. Sweeney & Sons, Inc. v. Texaco, Inc., 637 F.2d 105, 111 (3d Cir. 1980)).
santo’s new corn herbicide, and (2) that the distributors had informed Monsanto that they would charge its suggested resale price.\(^{86}\)

In 1986, in *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*,\(^{87}\) the Supreme Court elaborated upon its rationale for creating a substantial burden of proof for section 1 plaintiffs. The plaintiff in *Matsushita* alleged that Japanese television manufacturers had conspired to drive American firms from the U.S. market by fixing artificially high prices for their television sets in Japan and artificially low prices for such sets in America. The Court pointed out that the Japanese companies had no rational business motive for entering into such a conspiracy, because the low prices in the U.S. market would “generate losses... with no corresponding gains.”\(^{88}\) The Court stated that since the plaintiffs’ claim made “no economic sense,” they would have to “come forward with more persuasive evidence to support their claim than would otherwise be necessary.”\(^{89}\) Quoting *Monsanto*, the Court concluded that the plaintiffs had not presented “sufficiently unambiguous evidence... that tends to exclude the possibility” that the defendants were acting lawfully.\(^{90}\)

The Supreme Court’s *Monsanto/Matsushita* standard has proven unworkable for lower federal courts attempting to identify price-fixing conspiracies. There are no clear guidelines by which fact finders can determine how to exclude the possibility that a defendant had a legitimate independent purpose for its conduct. Lower federal courts have decided simply to grant summary judgment to defendants when the evidence of conspiracy is evenly balanced, or is ambiguous.\(^{91}\) For example, in *Blomkest Fertilizer, Inc. v. Potash Corp.*, the court affirmed a summary judgment in the defendants’ favor, despite evidence of communications among the defendants that were “ambiguous on the question of whether the producers schemed to set

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86. *Id.* at 765.
87. 475 U.S. 574 (1986).
88. *Id.* at 595.
89. *Id.* at 587.
90. *Id.* at 588 (quoting *Monsanto*, 465 U.S. at 764).
91. See, e.g., Serfecz v. Jewel Food Stores, 67 F.3d 591, 599 (7th Cir. 1995) (concluding that plaintiff must prove evidence beyond that which is merely “compatible with the legitimate business activities of the defendant”); Re/Max Int’l v. Realty One, Inc., 173 F.3d 995, 1009 (6th Cir. 1999) (“[C]ircumstantial evidence alone cannot support a finding of conspiracy when the evidence is equally consistent with independent conduct.”).
prices." Thus, under the prevailing interpretation of the Monsanto/Matsushita standard, a plaintiff will not be able to get to a jury in a section 1 case unless it can introduce direct and uncontradicted evidence of an agreement among the defendants.

The lower federal courts' interpretation of Monsanto and Matsushita flies in the face of the Supreme Court's historical willingness to infer the existence of a horizontal price-fixing conspiracy from circumstantial evidence. In Eastern States Retail Lumber Dealers Association v. United States, the Court inferred an illegal conspiracy from lumber retailers' circulation of reports naming wholesalers that sold directly to the retailers' customers. The Court noted that "[i]t is elementary . . . that conspiracies are seldom capable of proof by direct testimony and may be inferred from the things actually done . . . ." Similarly, in its 1969 decision in United States v. Container Corp., the Court inferred an illegal agreement from the mere exchange of pricing information among competing sellers of corrugated containers.

C. APPLYING THE MONSANTO/MATSUSHITA STANDARD TO OLIGOPOLY CONDUCT

The Monsanto/Matsushita approach places oligopoly regulation on its head. It applies the strictest standard to agreements which are least harmful to consumers and reserves the most lenient treatment for the most harmful types of arrangements. The courts have made it clear that cartels and other ex-

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92. 203 F.3d 1028, 1035, 1051 (8th Cir. 2000); see also In re Citric Acid Litig., 191 F.3d 1090, 1103–04 (9th Cir. 1999) (affirming summary judgment despite several ambiguous statements, including a "smoking gun" document that could also be "construed in a benign light"); In re Baby Food Antitrust Litig., 166 F.3d 112, 127 (3d Cir. 1999) (allowing summary judgment despite internal documents describing a "truce" among industry participants).

93. A "horizontal" price-fixing conspiracy occurs among firms operating at the same competitive level, while a "vertical" conspiracy occurs among firms at different competitive levels, such as a supplier and its customers. See Bus. Elec. Corp. v. Sharp Elec. Corp., 485 U.S. 717, 730 (1988); United States v. Topco Assoc., Inc., 405 U.S. 596, 608 (1972); ES Dev., Inc. v. RWM Enters., Inc., 939 F.2d 547, 556 (8th Cir. 1991).

94. 234 U.S. 600, 612 (1914).

95. Id.

96. 393 U.S. 333, 336–38 (1969). Prior to Monsanto and Matsushita, the lower federal courts were also willing to infer section 1 conspiracies from circumstantial evidence. See, e.g., United States v. Chas. Pfizer & Co., 367 F. Supp. 91, 100 (S.D.N.Y. 1973) ("[C]ircumstantial evidence need not preclude every reasonable hypothesis of innocence in order to support a conviction . . . .")
Explicit price-fixing agreements should be per se illegal.97 Explicit price-fixing agreements, however, are usually not durable: "Changing market conditions and the temptation to 'cheat' frequently result in outbreaks of price competition that either destroy the cartel or must be repaired by further meetings and agreements."98 Thus, if a cartel does not fall of its own accord, it usually must be sustained by overt conduct that is easy to detect and to punish.

By contrast, oligopolists' tacit collusion is both more durable and more difficult to discover than an explicit price-fixing cartel. Because tacit price-fixing arrangements spring from the very nature of oligopolistic markets, they are likely to persist for long periods of time. Game theory suggests that oligopolists will naturally gravitate toward an implicit consensus price.99 Since the price achieved under a tacit understanding is the result not of explicit bargaining (in which there is give and take and not all firms agree completely with the final price), but of each firm's own decision about the price that is best for it, firms will be less inclined to cheat on a tacit price-fixing arrangement. In a concentrated market, firms are more likely to continue to adhere to a consensus price because it is easier for them to gain confidence in their rivals' willingness to support such a price.

Not only is tacit collusion more durable than express collusion, it is also more difficult to detect and to prosecute. In most oligopoly markets, tacit collusion occurs without meetings, telephone calls, or any other direct contact or communications among the participants.100 No witnesses will be able to testify that they observed competitors negotiating an industry-wide price. Oligopolists' implicit price-fixing arrangements can be enforced by subtle signals communicated indirectly in press releases, on Web sites, or in individual firms' responses to their rivals' competitive conduct. Thus, in nearly every case of tacit price-fixing, the only evidence of conspiracy will be indirect and ambiguous. However, when courts follow the strict interpreta-

97. See, e.g., United States v. Socony-Vacuum Oil Co., 310 U.S. 150, 150-51 (1940) (holding price-fixing agreements to be unlawful per se without specific evidence of anticompetitive effects).

98. BORK, supra note 1, at 183.

99. See supra notes 44–53 and accompanying text.

100. See RICHARD A. POSNER, ANTITRUST LAW: AN ECONOMIC PERSPECTIVE 71 (1996) (pointing out that oligopolists are more likely to collude without any express communication).
tion of *Monsanto* and *Matsushita* that has prevailed in most federal cases, no plaintiff will be able to reach a jury on the basis of such circumstantial evidence. This approach would leave consumers without any remedy against tacit collusion, the most harmful of all oligopoly conduct. As Judge Posner has explained, the Supreme Court's adoption of the "'tends to exclude' phrase— which he regards as 'unfortunate dictum'— has 'produce[d] the paradox that the more conducive the market's structure is to collusion without express communication, the weaker the plaintiff's case . . . ."\(^{101}\)

Judge Posner had an opportunity to define a better approach to oligopoly pricing in *HFCS*.\(^{102}\) The plaintiffs alleged that the defendants conspired to fix corn syrup prices above the normal competitive level. Existence of the conspiracy was allegedly evident from an array of circumstantial evidence, including price announcements, communications among the defendants at trade association meetings, and the defendants' stable market shares over time.\(^{103}\) Judge Posner criticized the district court for disregarding such circumstantial evidence. He explained that "most cases are constructed out of a tissue of such [ambiguous] statements and other circumstantial evidence, since an outright confession will ordinarily obviate the need for a trial."\(^{104}\) Judge Posner argued that plaintiffs should only be required to offer additional evidence of conspiracy under *Matsushita* when "the charge of collusive conduct" was "less plausible."\(^{105}\) In *Matsushita*, the conspiracy was implausible because "it would mean that losses would be incurred in the near term in exchange for the speculative possibility of more than making them up in the uncertain and perhaps remote future . . . ."\(^{106}\) In *HFCS*, however, the "charge . . . involve[d] no implausibility." Indeed, it was a "garden-variety price-fixing conspiracy."\(^{107}\) Thus the plaintiffs should have been allowed to reach the jury on the basis of their circumstantial evidence of a

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\(^{102}\) *In re High Fructose Corn Syrup Antitrust Litig.*, 295 F.3d 651, 655–57 (7th Cir. 2002).

\(^{103}\) *In re High Fructose Corn Syrup Antitrust Litig.*, 156 F. Supp. 2d 1017, 1023 (C.D. Ill. 2001), rev'd, 295 F.3d 651 (7th Cir. 2002).

\(^{104}\) *In re High Fructose Corn Syrup*, 295 F.3d at 662.

\(^{105}\) *Id.* at 661.

\(^{106}\) *Id.*

\(^{107}\) *Id.*
price-fixing arrangement.

The HFCS approach has not yet been adopted by other federal courts, which continue to apply the Monsanto/Matsushita standard in oligopoly pricing cases.\(^{108}\) Few courts have been willing to concede that plaintiffs have had sufficient evidence of a tacit agreement to surmount the Monsanto/Matsushita summary judgment hurdle. As a result, there is little case law defining the types of conduct that oligopolists should avoid. This lack of authority has limited the courts' ability to deter anticompetitive behavior in concentrated markets and may, in fact, have encouraged oligopolists to engage in tacit collusion. The major U.S. airlines, for example, have allegedly engaged in implicit bargaining on fares through their computer reservation systems.\(^{109}\) If the courts mean to deter such behavior, they must adopt a new approach to oligopoly conduct that gives firms clear notice of the type of conduct that will not be tolerated. The next Part describes a proposed approach that would prevent the anticompetitive behavior of oligopolists without interfering with their legitimate independent conduct.

IV. A PROPOSED MEANS OF REGULATING OLIGOPOLY CONDUCT

A. UNIFYING THE ANALYSIS OF MONOPOLY AND OLIGOPOLY CONDUCT

The federal courts' current approach to Sherman Act violations has created a distinction between the regulation of monopoly and oligopoly conduct that has no basis in economics. Because of differences in the language of sections 1 and 2 of the Sherman Act, the courts have tolerated a situation in which oligopolists can collectively exercise the same market power as a monopolist and still escape antitrust liability.\(^{110}\) Yet there is a synthesis that would integrate section 1 and section 2 analysis and allow the courts to preclude oligopolists, as well as monopolists, from engaging in conduct harmful to consumers. In all cases, the distinction between legitimate and illegal conduct should depend upon the defendants' purpose.

108. See supra notes 91–92 and accompanying text.
110. See supra notes 72–90 and accompanying text.
1. A Purpose-Based Approach to Monopolies

Neither monopolists nor oligopolists should be punished simply for obtaining market power. Firms which obtain the greatest share of a particular market usually have provided consumers with the best products at the lowest possible prices. Consider the reasons for Microsoft's domination of the market for operating systems for personal computers. Microsoft currently controls over 90% of that market.\(^{111}\) Many observers argue that Microsoft gained its monopoly power because its Windows operating system was the most efficient, cost-effective product in the market.\(^{112}\) As one commentator recently explained, "no company anywhere has done more to put high-quality software into more people's hands."\(^{113}\) Some commentators, in fact, argue that Windows constitutes a "natural monopoly," due to the fact that consumers prefer the ease of using a single standard for all applications programs.\(^{114}\)

Although firms should be permitted to obtain monopoly or oligopoly power through superior efficiency, their conduct

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I think what we're doing is right, lawful, moral, proper, and competitive. I might even say it's the American way. We're innovating, adding value, driving down prices, competing, serving our customers, and we're doing it well. A lot of other companies in the United States are benefiting because they're building on top of our platform and thriving . . . . I might start playing the "Star-Spangled Banner" if I went on too long.

\(^{113}\) Id.

\(^{114}\) See David Balto & Robert Pitofsky, Antitrust and High-Tech Industries: The New Challenge, 43 ANTITRUST BULL. 583, 604 (1998) ("In industries characterized by networks, even monopoly is seen by some observers as inevitable and merely an accommodation to consumer demand for a compatible technical standard."). However, some commentators, and a few courts, have concluded that Microsoft has misused its monopoly power to unduly perpetuate its operating system monopoly and to extend that monopoly into other markets, such as Internet browsers. See United States v. Microsoft Corp., 253 F.3d 34, 58–64 (D.C. Cir. 2001) (per curiam), affg in part, revg in part, 87 F. Supp. 2d 30 (D.D.C. 2000) (finding that Microsoft violated section 2 by engaging in anticompetitive conduct); Maureen O'Rourke, Drawing the Boundary Between Copyright and Contract: Copyright Preemption of Software License Terms, 45 DUKE L.J. 479, 547 (1995) (indicating that Microsoft's operating system interface is an "essential facility" to which competitors are denied open access).
should be more closely regulated after they have achieved such power. Because of their market power, oligopolists and monopo-
lists have an enhanced ability to affect consumers, either for
good or for ill. As the Supreme Court emphasized in 1932 in
United States v. Swift & Co., "size carries with it an opportu-
nity for abuse that is not to be ignored . . . ."115 Thus monopo-
lists and oligopolists have a special responsibility to avoid abu-
sive competitive practices. The courts have had no difficulty in
identifying the potential for monopolists to abuse their market
power.116 In fact, they have held that certain conduct, perfectly
permissible for a firm with a small market share, can be illegal
when undertaken by a monopolist. The courts have, for exam-
ple, precluded monopolists from engaging in tying arrange-
ments or from denying their competitors access to certain "es-
ternal resources" controlled by the monopolists.117

Although the courts have held monopolists to a higher
standard of behavior, they have been unable to establish a con-
sistent dividing line between monopolists' permissible and ille-
gal conduct.118 For example, even though tying and exclusive
dealing arrangements have similar competitive effects, the

116. Firms have been deemed to hold monopoly power when they control
70% or more of the relevant market. See United States v. E. I. Du Pont de
Nemours & Co., 351 U.S. 377, 379, 391 (1956) (inferring monopoly power from
75% market share); Heattransfer Corp. v. Volkswagenwerk, A. G., 553 F.2d
964, 981 (5th Cir. 1977) (noting that 71% to 76% market share supports infer-
ence); United States v. Aluminum Co., 148 F.2d 416, 424 (2d Cir. 1945) (stat-
ing that 90% market share supports inference); Illinois ex rel. Hartigan v.
that for market shares between 70% and 80%, "courts have simply inferred the
existence of monopoly power without specifically examining . . . control over
prices on [sic] competition").
117. See, e.g., Eastman Kodak Co. v. Image Technical Servs., Inc., 504 U.S.
451, 480–86 (1992) (finding genuine issues of material fact where plaintiffs' 
monopolization claim alleged that Kodak had abused its monopoly power in
the parts and services markets for Kodak photocopi
er and micrographic 
equipment); Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585,
601–11 (1985) (affirming jury verdict in favor of plaintiffs who alleged monop-
oly power and exclusionary conduct by the owner of three of the four downhill
skiing facilities in Aspen, Colorado); Microsoft Corp., 253 F.3d at 58–81 (af-
firming trial court's findings that Microsoft possessed monopoly power in the
operating system market and engaged in exclusionary conduct). See generally
Thomas A. Piraino, Jr., Identifying Monopolists' Illegal Conduct Under the
nopolization cases).
118. See Piraino, supra note 117, at 827–44.
courts have treated tying arrangements more severely.\textsuperscript{119} The courts' inconsistent approach to monopoly conduct has confused practitioners and business executives as to the applicable standards of conduct.\textsuperscript{120} This author has proposed that the courts adopt a new approach that uses a monopolist's purpose for engaging in particular conduct as the touchstone of illegality. Under the proposed approach, the courts would preclude monopolists from engaging in conduct that is contrary to their legitimate self-interest in enhancing their efficiency and has no rational purpose other than to perpetuate or extend their monopoly power.\textsuperscript{121} Consumers are harmed in such cases, because, instead of competing aggressively on the merits, the monopolist is refraining from competition in order to obtain the long-term benefits of maintaining its market power.

Consider a monopolist that controls a facility or other resource to which competitors must have access in order to compete in the relevant market. Such monopolists often try to exclude their competitors from the market by making it difficult for them to access the essential resource.\textsuperscript{122} These exclusionary actions are contrary to a monopolist's legitimate self-interest because they deprive the monopolist of revenue it otherwise would have received from the firms denied access to the essential facility. Thus it is reasonable for the courts to assume in such cases that monopolists' real motive for the denial of access is to perpetuate or extend their monopoly power.\textsuperscript{123}

\begin{itemize}
  \item \textsuperscript{119} Id. at 836.
  \item \textsuperscript{120} See id. at 833–44.
  \item \textsuperscript{121} Id. at 809–92.
  \item \textsuperscript{122} Such resources are often referred to as “essential facilities.” See O'Rourke, supra note 114, at 546–47 (describing the principle of “essential facility”); Piraino, supra note 117, at 833–35; Thomas A. Piraino, Jr., \textit{The Antitrust Analysis of Network Joint Ventures}, 47 HASTINGS L.J. 5, 10–14 (1995) (discussing illustrative “essential facility” cases).
  \item \textsuperscript{123} In \textit{United States v. Terminal Railroad Ass'n}, 224 U.S. 383, 392, 398 (1912), a group of fourteen railroads jointly owned an association that controlled the only means of access across the Mississippi River to St. Louis (two bridges and a car ferry). No railroad could access St. Louis, then a major railroad hub, from the east without using the association's facilities. Id. at 410. The Supreme Court concluded that the railroads illegally attempted to monopolize the local railroad transportation market when they imposed arbitrarily high charges on competitors for using the association's facilities. Id. at 410. It would have been in the defendants' rational self-interest to maximize the number of firms using the bridge and ferry. The railroads would have increased their revenue if they had charged a standard fee that would have allowed all their competitors to use such facilities on equal terms. Since the railroads acted against their self-interest and charged their competitors an
Microsoft, for example, has refused to disclose information on the interfaces to its Windows operating system, which are necessary for competing programmers to create applications that are compatible with Windows.\(^\text{124}\) It has been argued that Microsoft maintained the secrecy of such information to give its applications programmers a head start over those developing competing applications, as well as to preclude competing applications from evolving into an operating platform that ultimately could challenge the dominance of the Windows operating system.\(^\text{125}\) In declining to disclose such information to outside programmers, Microsoft was acting against its legitimate self-interest. It would be in Microsoft's best interest to maximize the number of applications that utilize its operating system. Such a strategy would make Windows even more useful to consumers and maximize Microsoft's immediate revenue. When Microsoft acts against its self-interest and makes it more difficult for competing applications to run on its system, it is reasonable to conclude that Microsoft's real purpose was to perpetuate its operating system monopoly.\(^\text{126}\) Such conduct harms consumers by denying them the choice of alternative applications. Furthermore, by protecting Microsoft's monopoly in operating systems, the conduct reduces Microsoft's incentive to limit price increases and to continue to innovate in operating system products and services. Thus, under the approach proposed by this author, Microsoft's refusal to disclose information on the Windows interfaces would be illegal on its face.\(^\text{127}\)

unreasonable fee, that effectively denied competitors access to the association's facilities, it was reasonable for the Court to conclude that their only purpose was to preserve their monopoly power. Accordingly, the Court ordered the association to allow all railroads to use its facilities "upon such just and reasonable terms as shall place such applying company upon a plane of equality in respect of benefits and burdens" with the current owners of the association. \textit{Id.} at 411.

\(^\text{124}\) See Piraino, \textit{supra} note 117, at 852–53.

\(^\text{125}\) See \textit{id.} at 849, 852–53; see also United States \textit{v.} Microsoft Corp., 159 F.R.D. 318, 334 (D.D.C.), \textit{rev'd}, 56 F.3d 1448 (D.C. Cir. 1995) (stating that allegations against Microsoft include charges that Microsoft "manipulates its operating systems so competitors' applications software are inoperable or more difficult for the consumers to utilize effectively"); Amy C. Page, Note, \textit{Microsoft: A Case Study in International Competitiveness, High Technology, and the Future of Antitrust Law}, 47 \textit{FED. COMM. L.J.} 99, 104 (1994) (describing allegations that Microsoft gives its own applications developers a more complete version of operating system information before making such information available to other applications developers).

\(^\text{126}\) See Piraino, \textit{supra} note 117, at 853.

\(^\text{127}\) See \textit{supra}, Introduction.
2. A Purpose-Based Approach to Oligopolies

A similar purpose-based approach is appropriate in oligopoly pricing cases brought under section 1 of the Sherman Act. Like monopolists, oligopolists have a greater ability and incentive to engage in anticompetitive conduct than firms in less concentrated markets. The courts should recognize that when oligopolists act in concert to maintain prices at a particular level, they are collectively exercising the same type of market power as a monopolist. The approach proposed by this author for monopolization cases would be no less effective in identifying the type of price-fixing arrangements among oligopolists that are harmful to consumers. The courts should infer an illegal arrangement of tacit price collusion whenever all of the firms in an oligopolistic market engage in identical practices contrary to their independent self-interest.

Oligopolists obtain confidence in their rivals’ commitment to a consensus price when their rivals engage in actions that are against their immediate self-interest and make no economic sense other than as an invitation to join in a price-fixing arrangement. Indeed, actions by rivals against their own self-interest can communicate their consent to a higher price level just as clearly as a cartel’s express commitment to a price-fixing arrangement. When a firm risks an immediate loss of volume, profits, or customer goodwill in announcing a higher price, it sends a strong signal to its rivals that it is safe for them to observe the same price. Such rivals will then be more likely to take the risk of acting against their own interests and falling in line with the higher price.

Consider a market, such as steel, in which overcapacity and declining demand would ordinarily cause prices to decline. It would be against one firm’s independent interest to raise prices and risk losing volume in such a market. When a price leader risks such action, it is telegraphing to its competitors a desire for a higher consensus price; if all of the com-


129. In certain cases, however, a price leader may have a legitimate reason to preannounce a price increase, apart from a desire to facilitate tacit coordination. In certain industries, for example, it is customary for firms to make such preannouncements to give their customers an opportunity to plan their
petitors fall in line with the proposed price, their collective action contrary to their independent interests only makes sense when viewed in the context of a unanimous tacit agreement to a new consensus price.

The cartel-enhancing effects of actions against oligopolists' self-interest are also evident in the retail gasoline market. Automobile drivers need not know price changes in advance, because they have no way of storing excess gasoline (or changing their driving habits) in anticipation of a price increase. Thus, gasoline service stations have no legitimate independent reason for preannouncing price changes. Indeed, preannouncements of price increases are contrary to a station's independent interests, because they may cause consumers to immediately begin patronizing other stations. If one gasoline station does preannounce a price increase, the announcement will signal to other stations the original station's intention to propose a higher consensus price. The other stations will have more confidence in the original station's intentions because of the risk it is taking of alienating its customers. Such a bold initiative by the original station eliminates uncertainty as to its willingness to participate in a tacit arrangement of price coordination. If other stations respond by preannouncing similar price increases, they send reinforcing signals back to the original station (and to all the other stations in the area) that the original station had, indeed, correctly judged its rivals' willingness to observe the consensus price. The responding stations' preannouncements add credibility because these stations also are risking their customers' goodwill in announcing higher prices. Such signals mutually reinforce a cartel's objectives, and are no different, from an economic standpoint, than the explicit assurances which each member of a price-fixing cartel receives from its fellow conspirators.

Thus, the courts should infer an illegal price-fixing conspiracy when one or more firms in an oligopoly market signal their intention to initiate a price increase in a manner contrary to their individual self-interest and all firms in the market subsequently accept the increase by acting in a manner no less contrary to their own interests. Under such circumstances, the initiating firm's action should be construed as an offer to participate in a price-fixing arrangement, and the other firms' con-

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purchases. In such cases, a price preannouncement should not be grounds for inferring a tacit price-fixing arrangement. See infra notes 189–191 and accompanying text.
duct in response should be deemed an acceptance of that offer. This approach precisely identifies the "plus factors" necessary to prove the existence of a formal conspiracy. Since the courts could infer an illegal arrangement of tacit collusion from the parties' course of conduct, they would be able to concentrate on the substantive economic effect of the oligopolists' pricing behavior.

Although the courts could infer tacit collusion from circumstantial evidence, the proposed approach would still give oligopolists sufficient leeway to pursue their legitimate competitive interests. Indeed, oligopolists' conduct would only be illegal under certain narrow circumstances. For example, in certain industries, such as the airline industry, it is customary for firms to advise customers ahead of price changes, so that they can plan their purchases in advance.\(^\text{130}\) Firms in such markets would not be liable for preannouncing planned price increases. If it was customary for firms to notify customers of price changes in advance, the firms would not be acting against their self-interest in disclosing a planned price increase, and such actions could not justify the inference of an arrangement of tacit collusion.\(^\text{131}\)

B. PLAYING TO THE COURTS' ANALYTICAL STRENGTHS

A purpose-based approach to oligopoly conduct will play to the federal courts' analytical strengths, by concentrating their analysis on factors, such as the purpose and motivation for defendants' conduct, that they are well equipped to resolve. Most often, defendants deny participating in an illegal conspiracy and offer their own exculpatory interpretation of ambiguous documents.\(^\text{132}\) Since judges and juries are accustomed to determining the relative credibility of witnesses and interpreting documents,\(^\text{133}\) they should be able to confirm when oligopolists' true purpose is to coordinate their conduct to maintain a supra-competitive price.

Such an approach to oligopoly conduct, however, will re-

\(^\text{130}\). See infra notes 189–91 and accompanying text.
\(^\text{131}\). Under the proposed approach, defendants could defeat a claim of tacit collusion by demonstrating that they had legitimate reasons for disclosing price information. In order to prevail, however, defendants would have to prove that consumers benefited from the disclosure. See infra notes 185–192 and accompanying text.
\(^\text{132}\). Milne & Pace, supra note 49, at 40.
\(^\text{133}\). Id.
quire the courts to modify the single-minded focus on economic theory that has dominated antitrust jurisprudence for the last twenty-five years. The Chicago School has convinced many federal judges that economic analysis should take precedence over the traditional antitrust approach, which inquired into the motives for firms' competitive conduct. While this emphasis on economics has improved antitrust theory, it has seriously undermined the efficiency of judicial decision making. Under the Chicago School approach, antitrust cases have become more complicated and less predictable. Proving economic issues requires extensive documentary evidence and endless testimony from economists and other experts. Most judges, and nearly all juries, lack the training necessary to make economic determinations. Although fact finders are adept at determining "who did what, when, and why," they lack the experience necessary to determine the significance of specific economic conditions. Economists themselves cannot agree on the eco-

134. See supra notes 25–27 and accompanying text.

135. Under the per se rule, courts had traditionally deemed certain pernicious anticompetitive conduct illegal without any consideration of the conduct's specific economic effects. The per se rule reached its peak during the activist antitrust era of the 1960s and 1970s, at which time a conclusive presumption of illegality applied not only to horizontal territorial or customer allocations (see United States v. Topco Assocs., 405 U.S. 596 (1972); United States v. Sealy, Inc., 388 U.S. 350 (1967)), but also to vertical price fixing (see Cont'l T.V., Inc. v. GTE Sylvania, Inc., 433 U.S. 36, 51 n.18 (1977) (reaffirming per se illegality of vertical price fixing despite finding that rule of reason should apply to vertical nonprice restraints)), tying arrangements (see N. Pac. Ry. v. United States, 356 U.S. 1 (1958)), and even vertical nonprice restrictions imposed by suppliers on their distributors (see United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967), overruled by Cont'l T.V., Inc., 483 U.S. at 58). Recently, however, the courts have turned increasingly to a "rule of reason" approach, under which they will consider all of the pertinent economic circumstances, such as the scope of the relevant market, concentration levels, and entry conditions, before ruling on the legality of a particular restraint. See Thomas A. Piraino, Jr., Reconciling the Per Se and Rule of Reason Approaches to Antitrust Analysis, 64 S. CAL. L. REV. 685, 693–700 (1991) (describing increased use of the rule of reason since the 1980s and the extent to which this approach has made antitrust cases more complicated and less predictable).


138. See Arizona v. Maricopa County Med. Soc'y, 457 U.S. 332, 343 (1982) ("Judges often lack the expert understanding of industrial market structures and behavior to determine with any confidence a practice's effect on competition."); see also Topco, 405 U.S. at 609 ("Courts are of limited utility in examining difficult economic problems . . . . [C]ourts are ill-equipped and ill-situated
nomic impact of many types of business conduct. If economists cannot effectively evaluate the market effects of particular competitive practices, certainly judges and juries cannot be expected to do so.\textsuperscript{139} Thus the federal courts have not been adequate to the task bequeathed to them by Chicago School economists. In their attempt to make economic judgments that are beyond their competence, the courts have rendered a series of confusing and inconsistent antitrust decisions.\textsuperscript{140} As a result, antitrust enforcement has declined as firms have found it more difficult to plan their competitive conduct.

The limitations of the Chicago School approach are evident in Judge Posner's decision in *HFCS*. Although Judge Posner recognized that plaintiffs should be able to prove the existence of an oligopoly pricing conspiracy by circumstantial evidence,\textsuperscript{141} he stumbled in identifying the factors that should comprise the plaintiffs' case. Judge Posner concluded that plaintiffs should have to demonstrate the existence of certain economic conditions conducive to collusion, including concentration levels, entry characteristics, number of customers, the nature of the relevant products, the extent of price competition, the ratio of fixed to variable costs, and the strength of demand.\textsuperscript{142} John Lopatka has described Judge Posner's factors as "a welter of confusing, inconsistent, and ambiguous pieces of economic evidence."\textsuperscript{143} Whether fact finders can even understand the effects of such factors depends on their economic sophistication, which

\textsuperscript{139} See Frank H. Easterbrook, *Vertical Arrangements and the Rule of Reason*, 53 ANTITRUST L.J. 135, 153 (1984) ("If you assembled 12 economists and gave them all available data about a business practice, plus an unlimited computer budget, you would not soon (or ever) get unanimous agreement about whether the practice promoted consumers' welfare or economic efficiency more broadly defined."). As Professor Lawrence Sullivan has concluded, "economics does not comprehend enough and law, without extreme transformations in its own structure, cannot adequately deal with all that economics does comprehend." LAWRENCE ANTHONY SULLIVAN, HANDBOOK OF THE LAW OF ANTITRUST § 2, at 10 (1977).

\textsuperscript{140} See supra notes 77–96 and accompanying text.

\textsuperscript{141} In re High Fructose Corn Syrup Antitrust Litig., 295 F.3d 651, 662 (7th Cir. 2002) ("[M]ost [price-fixing] cases are constructed out of ... circumstantial evidence, since an outright confession will ordinarily obviate the need for a trial.").

\textsuperscript{142} Lopatka, supra note 23, at 877 (describing an approach advocated by Judge Posner).

\textsuperscript{143} Id. at 902.
varies widely from court to court.\textsuperscript{144}

Instead of considering factors with which they have little expertise, the courts should concentrate on an issue with which they deal every day: the purpose for defendants' behavior. Rather than complex economic factors such as concentration levels and entry characteristics, fact finders should be discerning a defendant's motives for its actions by determining the credibility of its witnesses, its explanation for its conduct, and the relevance and significance of memoranda, minutes, handwritten notes, e-mails and other documents that it has produced. Judges and juries are called upon daily to use such means to determine the purpose of defendants' behavior in contract, tort, employment, and criminal disputes.\textsuperscript{145} The federal courts should recognize that a similar approach can be effective in antitrust cases. Indeed, prior to the Chicago School's takeover of antitrust jurisprudence, the Supreme Court had concluded that a defendant's motives may reveal the economic effects of its conduct. In 1962, in \textit{Poller v. Columbia Broadcasting System}, the Court pointed out that "motive and intent play leading roles" in antitrust litigation.\textsuperscript{146} In 1979, the Court concluded, in \textit{Broadcast Music, Inc. v. CBS}, that a defendant's purpose for particular competitive behavior "tends to show [its] effect."\textsuperscript{147} Most recently, in the 1988 case, \textit{Business Electronics Corp. v. Sharp Electronics Corp.}, Justice Stevens, citing this author's own conclusions, pointed out in a dissenting opinion that "in antitrust, as in many other areas of the law, motivation matters and fact finders are able to distinguish bad from good intent."\textsuperscript{148}

\textsuperscript{144} \textit{Id.}
\textsuperscript{145} Indeed, the Supreme Court recently reaffirmed that the federal courts must consider all evidence of a defendant's motive, whether it be direct or circumstantial, in employment discrimination cases. The Court held in \textit{Desert Palace, Inc. v. Costa}, 539 U.S. 90 (2003), that a plaintiff alleging employment discrimination should be allowed to reach a jury when he or she presents circumstantial evidence that the defendant was motivated by a discriminatory purpose.\textsuperscript{146} 368 U.S. 464, 473 (1962).\textsuperscript{147} 441 U.S. 1, 19 (1979).\textsuperscript{148} 485 U.S. 717, 754 (1988) (Stevens, J., dissenting) (citing Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585, 610–11 (1985); McLain v. Real Estate Bd. of New Orleans, Inc., 444 U.S. 232, 243 (1980); United States v. Socony-Vacuum Oil Co., 310 U.S. 150, 224–26 n.59 (1940); Chicago Bd. of Trade v. United States, 246 U.S. 231, 238 (1918); Thomas A. Piraino, Jr., \textit{The Case for Presuming the Legality of Quality Motivated Restrictions on Distribution}, 63 \textit{Notre Dame L. Rev.} 1, 4, 16–19 (1988)).
A purpose-based approach to oligopoly pricing will not require the federal courts to abandon their economic orientation in antitrust cases; on the contrary, it will ensure that the courts base their decisions in oligopoly cases on substantive economic effect. Actions by oligopolists contrary to their legitimate independent interests serve as an effective proxy for conduct harmful to consumers. Consumers benefit when oligopolists act in their own self-interest, without any implicit assurance of their rivals' assent to a consensus price. Firms will be more likely to compete on the merits when they are uncertain about their competitors' potential behavior. Even in oligopolistic markets, firms remain subject to substantial uncertainty as to how their rivals will behave. In the absence of pricing assurances from their rivals, oligopolists will continue to lower their prices either to retain their current sales volume or to acquire additional volume at the expense of their rivals. For example, neighboring gas stations may be instantly aware of their rivals' price changes, but they will still have an incentive to engage in occasional "price wars" to increase their share of the local market. Similarly, although Boeing and Airbus are the only firms in the world that manufacture commercial airplanes, they still engage in substantial bidding wars in order to maintain or enhance their market position. Consumers, however, are harmed when an oligopolist abandons its own self-interest in favor of the collective interests of its rivals as a group. When oligopolists are confident that their rivals will adhere to a cartel price, they will have little incentive to maintain lower price levels. Oligopolists will sacrifice their legitimate self-interest in immediate profits if they can be confident that, over the long term, they can collectively maintain prices above the normal competitive level. Instead of reducing their costs, enhancing their productivity, or pursuing product innovations, firms will maintain the competitive status quo, comfortable in the knowledge that their rivals have little reason to compete aggressively.


150. See J. Lynn Lunsford, Boeing, Losing Ground to Airbus, Faces Key Choice, WALL ST. J., Apr. 21, 2003, at A1 ("Today, Boeing and Airbus roughly split the market for large passenger planes . . . .").
V. ANALYZING INDEPENDENT PARALLEL CONDUCT

The proposed approach would not only deter the type of tacit coordination among oligopolists that is harmful to consumers. It would also encourage oligopolists to engage in independent competitive conduct beneficial to consumers. The approach is consistent with antitrust's traditional recognition that, while firms should be punished for engaging in abusive competitive practices, they should not be deterred from competing aggressively to enhance their market power. The courts have made it clear that it is not illegal for firms to obtain monopoly power by superior efficiency.151 Neither should it be illegal for firms to obtain oligopoly power.152 In most cases, oligopolists' high market shares simply reflect their success in responding to consumers' needs.153 Furthermore, noncompetitive behavior does not follow inevitably from high market concentration levels.154 Indeed, effective competition can occur in oligopoly markets with as few as two participants.155

151. See United States v. Aluminum Co. of Am., 148 F.2d 416, 429–40 (2d Cir. 1945); see also Am. Tobacco Co. v. United States, 328 U.S. 781, 811–14 (1946) (endorsing Second Circuit’s position in Aluminum Co.); BORK, supra note 1, at 164 (“The framers of the Sherman Act were ... prepared to allow any market share that was achieved by superior efficiency.”).

152. As Robert Bork has pointed out, “[A]ntitrust should not interfere with any firm size created by internal growth, and this is true whether the result is monopoly or oligopoly.” BORK, supra note 1, at 178. Efforts to expand the antitrust laws to prohibit oligopolies have been unsuccessful. In the 1960s, commentators and government regulators advocated legislation that would have required oligopolistic firms to dissolve to reduce concentration levels. Their proposal, adopted in the “Neal Report” to President Johnson and later introduced as legislation in Congress, required that industries that performed in a noncompetitive fashion for an extended period could be deconcentrated without any proof of culpable conduct. See KAYSEN & TURNER, supra note 2, at 111–18; WHITE HOUSE REPORT, supra note 42. In 1968, the DOJ staff prepared a draft divestiture complaint against the “Big Three” automobile companies, but the suit was never filed. William G. Shepherd, Antitrust Repelled, Inefficiency Endured: Lessons of IBM and General Motors for Future Antitrust Policies, 39 ANTITRUST BULL. 203, 225 (1994). The FTC brought a “shared monopoly” case directed at the dissolution of U.S. cereal manufacturers, but the case was ultimately dismissed in 1981. See In re Kellogg Co., [1981] Tr. Reg. Rep. (CCH) ¶ 63,811, at 78,358 (Jan. 17, 1981).

153. See Yale Brozen, Concentration and Structural and Market Disequilibria, 16 ANTITRUST BULL. 241, 248 (1971) (“Concentrated industries are concentrated because that, apparently, is the efficient way to organize those industries.”); Harold Demsetz, Industry Structure, Market Rivalry, and Public Policy, 16 J.L. & ECON. 1, 7 (1973) (arguing that large firms in concentrated industries “seem better able to produce at lower cost than their competitors”).

154. See POSNER, supra note 100, at 47–77.

155. For example, only two firms, Boeing and Airbus, now compete in the
Since it is not illegal for firms to obtain monopoly or oligopoly power, it should also not be illegal for them to exercise that power independently of their rivals. Professor Turner has pointed out that a monopolist who becomes such or remains such by virtue of valid patents, by force of accident, because the market has room for only one seller (which is another way of describing "economies of scale"), by virtue of "skill, foresight and industry," or other praiseworthy endeavor, is free from censure and free, absent "leverage" problems, to charge a monopoly price . . . . If monopoly and monopoly pricing are not unlawful per se, neither should oligopoly and oligopoly pricing, absent agreement of the usual sort, be unlawful per se.\textsuperscript{156}

Independent parallel pricing is simply a natural consequence of oligopoly power. Precluding such pricing would be tantamount to precluding oligopolies themselves. As Judge Posner has explained, "[O]ligopolistic interdependence . . . is inherent in the structure of certain markets."\textsuperscript{157} Thus the federal courts and antitrust commentators have been unanimous in their conclusion that oligopolists' independent parallel conduct should not be illegal.\textsuperscript{158}

There are good economic and practical reasons for permitting conscious parallelism.\textsuperscript{159} In pricing its products, an oligopo-

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worldwide aircraft manufacturing market, and each has consistently offered its customers significant price reductions in the firms' head-to-head rivalry for new orders. See J. Lynn Lunsford & Daniel Michaels, KLM To Order Planes From Both Boeing, Airbus, WALL ST. J., Mar. 29, 2002, at A2 (describing "an all-out [pricing] war" between the two companies to obtain new airplane orders). "Evidence supplied by antitrust cases reveals that . . . a large price drop occurs when even one firm appears to challenge an established monopolist . . . ." BORK, supra note 1, at 181. For example, "IBM made large price reductions in its equipment when Telex entered its market." Id. at 182.

156. Turner, supra note 14, at 667–68.
157. POSNER, supra note 100, at 44.
158. See supra notes 72–83 and accompanying text.
159. Professor Turner concludes that a "rational oligopolist simply takes one more factor into account—the reactions of his competitors to any price change that he makes . . . ." Turner, supra note 14, at 665. "[Such] interdependent consciously parallel decisions as to basic price . . . should not be held to constitute an 'agreement.'" Turner, supra note 14, at 663; see also BORK, supra note 1, at 175–78. Judge Posner would argue, however, that even purely parallel conduct is technically illegal under section 1. He stated in HFCS that the Sherman Act should encompass a purely tacit agreement to fix prices, that is, an agreement made without any actual communication among the parties to the agreement. If a firm raises price in the expectation that its competitors will do likewise, and they do, the firm's behavior can be conceptualized as the offer of a unilateral contract that the offerees accept by raising their prices. Or as the creation of a contract implied in fact. "Suppose a person walks into a store and takes a newspaper that
list must take into account the likely reactions of its rivals. Because they have few competitors, oligopolists will find it easier to anticipate how other firms will react to a price increase. An oligopolist will, for example, be more likely to match a rival’s price increase, comfortable in the knowledge that it will not lose business because the other competitors in the market are likely to follow the increase. An oligopolist should not be precluded from “playing the game” and making pricing decisions by anticipating whether other firms are likely to raise their prices. Indeed, when firms engage in consciously parallel actions, they are merely reacting in a rational way to the conduct of their rivals. Thus, any injunction against such conduct would be ineffective, because it would require firms to act in a manner contrary to their rational independent interests. Firms can avoid entering into express or tacit price-fixing arrangements. They are perfectly capable of setting their own prices without consulting with or signaling their intentions to their rivals. Thus it is appropriate for the Sherman Act to preclude explicit or tacit price-fixing arrangements. However, courts cannot order firms to stop considering marketplace realities in pricing their products. Courts are not capable of devising injunctions to preclude oligopolists from making rational decisions about their rivals’ likely reactions to price changes. As Roger Blair and David Kaserman have pointed out, “It goes without saying that one cannot dictate myopia to the firm—a rational oligopolist cannot be made to ignore its rivals.” Similarly, Joseph Kat- tan and William Vigdor have concluded:

If the same firms independently charge the same price because each rationally recognizes that it is in its best interest to match the price charged by its rivals, there is no avoidable conduct that the law can punish, even if the price on which all firms settle is higher than what

is for sale there, intending to pay for it. The circumstances would create a contract implied in fact even though there was no communication between the parties.

In re High Fructose Corn Syrup Antitrust Litig., 295 F.3d 651, 654 (7th Cir. 2002) (citation omitted).

160. See supra notes 49–53 and accompanying text (explaining the impact of game theory on oligopolistic markets).

161. Blair & Kaserman, supra note 2, at 204. Robert Bork has pointed out that an injunction against oligopolists’ parallel pricing could have no practical effect, “because the firms cannot behave otherwise in such...[an oligopoly] structure.” Bork, supra note 1, at 174; see also Hay, supra note 6, at 466 (“Major equitable and practical concerns arise when Section 1 liability is attached to behavior that is not plausibly avoidable.”); Turner, supra note 14, at 669 (“If such an injunction, read literally, appears to demand such irrational behavior that full compliance would be virtually impossible.”).
would prevail in a competitive market. The law is incapable of prohibiting such behavior because it would be impossible—as well as quite foolish—to require firms to behave irrationally.\textsuperscript{162}

Despite their consensus as to the legality of oligopolists' parallel pricing, the courts have been unable to agree on a means of distinguishing between illegal tacit collusion and permissible parallel conduct.\textsuperscript{163} The proposed approach would resolve the courts' difficulty in identifying instances of independent parallel pricing. The courts' analysis would be simple: if the relevant conduct was not contrary to the defendants' legitimate self-interest, it would be permitted as a form of independent parallel behavior. When firms initiate price increases that are in their own self-interest, they will not be sending any special signals to their rivals of their consent to maintain a collective supracompetitive price. There are many cases in which firms have legitimate independent reasons to initiate price increases. The firms' marginal costs, based on raw materials, supplies, labor or other inputs, may have increased to the point at which their profit margins become unacceptable, or enhanced demand in the market may simply have increased the competitive price level. In such cases, other firms in the market will retain substantial uncertainty about their competitors' future pricing intentions. The other firms will not be able to predict whether the market conditions that caused the firm to initiate the price increase (i.e., changes in input prices or demand) will persist. Without confidence about their rivals' likely actions, firms should be just as likely to raise as to lower prices in response to changing market conditions. Under such circumstances, all the firms in an oligopoly market would be pursuing independent parallel conduct, and they should be permitted to continue such activity without interference from the courts.

Consider the first example, cited in Part II.B supra, of a town in which two neighboring gasoline stations post only their current prices. Each station is instantly aware of changes in the other's prices, and each immediately increases or reduces its prices in lock-step with the other. Under the proposed approach, the courts could be certain that the gas stations had not engaged in tacit coordination. The courts would not infer tacit

\textsuperscript{162} Kattan & Vigdor, supra note 23, at 443. As Judge Breyer has asked, "How does one order a firm to set its prices without regard to the likely reactions of its competitors?" Clamp-All Corp. v. Cast Iron Soil Pipe Inst., 851 F.2d 478, 484 (1st Cir. 1988).

\textsuperscript{163} See supra notes 69–83 and accompanying text.
coordination among the parties merely because they followed each other’s prices. In posting their prices, the stations would not have acted against their own self-interest, because they would have a legitimate reason to inform customers of their current prices. Thus each station should not conclude that its rival was sending it an implicit signal about its willingness to observe a consensus price. It would not be improper for one station to post a price increase and for the second station to immediately match the higher price. The two stations should be permitted to take each other’s prices into account. The second station’s price increase would simply be a normal reaction to a new market price. The second station’s response should not give the first station any special assurance about its long-term commitment to a higher consensus price. Thus, in the future the first station would be just as likely to lower as to raise its prices. There are, indeed, frequent instances of such gasoline “price wars” between neighboring stations.\textsuperscript{164} The proposed approach would recognize that the gas stations’ conduct amounts to nothing more than legitimate independent oligopoly pricing, which should be perfectly permissible under the Sherman Act.

By contrast, consumers would have been harmed if the gas stations had engaged in the type of tacit coordination that would be precluded under the proposed approach. Assume that, instead of simply posting its current prices, one station had erected a sign stating that it would raise prices by 10% in seven days. Such an announcement would be contrary to the station’s legitimate independent interests. The station would have no reason to notify customers in advance of the planned price increase. Indeed, the advance announcement could harm the station by alienating consumers and encouraging them to patronize other stations, even before the price increase becomes effective. With a preannounced price increase, the gasoline station faces a greater downside than when it initiates an immediate, unannounced price increase. The station is going out on a limb and risking the loss of customers to the other station without knowing if the other station will go along with its price increase. Prior announcement of the price increase could, however, facilitate tacit coordination between the two stations. By announcing a price increase in advance, the station can signal to its rival a desire for a new consensus price. The other station can accept the new consensus price by posting its own an-

\textsuperscript{164} See \textit{supra} note 149 and accompanying text.
nouncement that it, too, will be raising prices to the same level in seven days. Alternatively, the second station can signal its desire for a lower consensus price by announcing that it will only raise prices by 5% within seven days. Either type of response is against the second station's self-interest, because it is foregoing the additional revenue (and customer goodwill) that would result from maintaining its current lower price. The likely effect of such price signaling is an implicit consensus on a new higher price. After completing such bargaining on a new price, each station should have greater confidence that its rival will be willing to maintain the new price level until a new bargaining round occurs. As a result, each station is more likely to avoid any price wars and to maintain a price for gasoline above the normal competitive level.

VI. RECONCILING THE PROPOSED APPROACH WITH PRECEDENT

A. CONSISTENCY WITH THE STATUTORY DEFINITION OF CONSPIRACY

Despite the advantages of focusing on oligopolists' motive for their conduct, few courts have been willing to infer an illegal section 1 conspiracy from such circumstantial evidence.\(^{165}\) There is, however, no statutory reason for making conspiracy so difficult to prove in oligopoly pricing cases. The language of the Sherman Act is broad enough to allow the courts to find illegal conspiracies when oligopolists engage in mutual conduct against their independent self-interest. No less a meeting of the minds exists in such cases than under express cartels.\(^ {166}\) As Professor Turner has explained, "there is no reason to exclude oligopolistic behavior from the scope of the term agreement simply because the circumstances make it possible to communicate without speech. It is not novel conspiracy doctrine to say that agreement can be signified by action as well as by words."\(^ {167}\) The Supreme Court has held that oligopolists' uni-

\(^{165}\) See supra notes 84–92 and accompanying text (concluding that a plaintiff must introduce direct and uncontraverted evidence of an agreement among the defendants in order to get to a jury in a section 1 case).

\(^{166}\) See Hay, supra note 6, at 457 ("No less a meeting of the minds exists when duopolists... select the identical list price and recognize the folly of price cutting, than when twenty manufacturers... 'agree' in a hotel room to charge an identical price.").

\(^{167}\) Turner, supra note 14, at 665.
form conduct can be sufficient to prove an illegal conspiracy under section 1. Indeed, actions by oligopolists against their self-interest are a type of affirmative conduct that can be construed as implicit forms of offer and acceptance by the participating firms.

Under the proposed approach, the courts could not infer a conspiracy unless both the initiating firm and the responding firm had engaged in actions against their own self-interest. For example, in the second gasoline station example in Part V, supra, one station preannounced a proposed price increase several days in advance. That station was inviting its rival's acceptance of a higher consensus price. The initiating firm's announcement was against its self-interest, because it was taking a chance of alienating customers who had no reason to know in advance about a price change. The station's actions were an invitation to its neighbor to join in the higher price. When the neighboring station responded by preannouncing that it would raise its own prices to the suggested level, the courts could infer that it accepted the first station's offer by its course of conduct. The responding station's price increase would be against its own self-interest, because it would be losing the opportunity to divert business from the station initiating the proposed price increase.

B. CONSISTENCY WITH MONSANTO AND MATSUSHITA

The lower federal courts have used the Supreme Court's

168. See Interstate Circuit, Inc. v. United States, 306 U.S. 208, 226 (1939) (finding conspiracy among motion picture distributors who, "knowing that concerted action was contemplated and invited, . . . gave their adherence to the scheme and participated in it").

169. It is rare for firms to engage in purely parallel conduct in oligopoly markets. In most instances, supracompetitive prices result from some communication and coordination among competitors. See POSNER, supra note 100, at 76 (stating that, in most instances, there "will have been some actual communication among the colluding firms"). The defendants will usually have "taken specific avoidable acts that produce a consensus on the price to be charged and mutual confidence that rivals will adhere to that price." Hay, supra note 6, at 468. Several courts have referred to these acts as "facilitating practices." Such facilitating practices help to establish a tacit meeting of the minds among firms in concentrated markets. They reduce "uncertainty about rivals' actions or . . . diminish[ ] their incentives to deviate from a coordinated strategy." De-Santi & Nagata, supra note 5, at 95.

170. See Milne & Pace, supra note 49, at 37 ("This type of signaling can be viewed as an offer and acceptance even in the absence of an overt commitment: the price leader makes an 'offer' to its competitors by raising its price; the competitors accept (or not) depending on whether they follow.").
decisions in *Monsanto* and *Matsushita* as a rationale for refusing to infer section 1 conspiracies from circumstantial evidence.\textsuperscript{171} However, neither case should prevent the courts from finding tacit coordination when oligopolists engage in conduct against their independent self-interest. As Judge Posner explained in *HFCS*, the Court applied a strict evidentiary standard in *Matsushita* because the defendants did not have obvious reasons to enter into a conspiracy.\textsuperscript{172} It was therefore more likely than not that the defendants acted independently, and it was appropriate to require plaintiffs to exclude the possibility of such independent action. The defendants in *Matsushita*, for example, had no apparent reason to conspire to reduce prices in the U.S. television market, when they had virtually no prospect of recouping their losses.\textsuperscript{173} However, when oligopolists are accused of colluding, either expressly or tacitly, to *raise* prices, they have a plausible collective interest in the success of such a scheme, which can insure immediate higher profits for all the participants. Thus, in oligopoly pricing cases, it is more likely that the defendants did engage in a price-fixing conspiracy. In such cases, plaintiffs should not have to exclude the possibility of the defendants' independent action. They should merely have to prove by a preponderance of the evidence that oligopolists engaged in practices contrary to their legitimate self-interest. As the Seventh Circuit has recognized, even under *Monsanto* and *Matsushita*, a plaintiff simply "must demonstrate that... [a defendant] is behaving in a way that is inconsistent with unilateral decision-making.... This means showing that the defendant acted in a way that, but for a hypothesis of joint action, would not be in its own interest."\textsuperscript{174}

Some lower federal courts have been willing to infer illegal oligopoly pricing conspiracies from circumstantial evidence that defendants acted in a manner contrary to their independent self-interest.\textsuperscript{175} For example, in *Milgram v. Loew's, Inc.*,\textsuperscript{176} eight...
major film distributors each refused to license first-run films to a drive-in theater. The refusal appeared suspicious, because the theater had offered to pay a premium for such films. The court concluded, "[e]ach distributor has thus acted in apparent contradiction to its own self-interest. This strengthens considerably the inference of conspiracy, for the conduct of the distributors is . . . inconsistent with decisions independently arrived at."177 More recently, in *Rel/Max International v. Realty One, Inc.*, the Sixth Circuit inferred an illegal section 1 conspiracy when two real estate brokers implemented a commission arrangement that was contrary to their "independent economic interest."178 Instead of splitting commissions between buying and selling agents on the customary fifty-fifty basis, the defendants adopted a policy providing for a split of seventy-thirty, in their favor, when one of the plaintiff's agents was on the other side of a transaction. The court pointed out that, without assurance that other real estate brokers would adhere to the one-sided arrangement, no broker would want to continue the policy, because it would lose business to other brokers that treated all agents equally. Continued adherence to the special commission arrangement only made sense if a broker had some assurance that its rivals would impose the same arrangement on their customers.179

It could be argued that, in oligopoly pricing cases, *Monsanto* and *Matsushita* should not prevent the courts from inferring the existence of an illegal conspiracy from circumstantial evidence. Neither *Monsanto* nor *Matsushita* involved agreements among competitors to raise prices above the normal competitive level. It is not certain that the Supreme Court would require consumers harmed by supracompetitive oligopoly pricing to introduce direct evidence of a price-fixing conspiracy. A few lower federal courts have decided that *Monsanto* and

177. Id.
178. 173 F.3d 995, 1009 (6th Cir. 1999).
179. Courts have also refused to infer tacit collusion in the absence of evidence that defendants acted in a manner contrary to their legitimate self-interest. In *E. I. Du Pont de Nemours & Co. v. FTC*, 729 F.2d 128, 128 (2d Cir. 1984), the Second Circuit reversed the FTC's decision that various facilitating practices, including uniform delivered pricing, most-favored-customer contracts, and advance notice of price increases, violated section 5 of the FTC Act. The court based its conclusion, in part, on the fact that there was no evidence of the absence of an independent legitimate business reason for the defendant's conduct. Id. at 140; see also *Bogosian v. Gulf Oil Corp.*, 561 F.2d 434, 446 (3d Cir. 1977) (requiring plaintiffs to show that parallel behavior of oil companies could not be explained by their independent business motivation).
**Matsushita** should not be construed to require direct evidence of a section 1 conspiracy in oligopoly pricing cases. In *In re Petroleum Products Litigation*, the Ninth Circuit concluded that, even after *Monsanto* and *Matsushita*, a plaintiff should be allowed to reach a jury when the evidence is just as consistent with conspiracy as with unilateral conduct:

Nor do we think that *Matsushita* and *Monsanto* can be read as authorizing a court to award summary judgment to antitrust defendants whenever the evidence is plausibly consistent with both inference of conspiracy and inferences of innocent conduct. . . . [S]uch an interpretation of *Matsushita* would seem to be tantamount to requiring direct evidence of conspiracy. This cannot be what the Court meant in *Matsushita*. Since direct evidence will rarely be available, such a reading would seriously undercut the effectiveness of the antitrust laws.180

The Ninth Circuit’s approach, however, is in the minority, as most federal courts have concluded that the defendant should prevail when the evidence for and against a conspiracy is equally divided.181

The *Monsanto/Matsushita* standard is particularly inappropriate for analyzing alleged conspiracies among oligopolists to raise prices. The high standard for inferring conspiracy should only apply when defendants do not have a plausible motive for entering into a price-fixing conspiracy.182 The Court’s decision in *Matsushita* was arguably appropriate for the facts of that case because Matsushita and the other Japanese television manufacturers did not have a plausible motive for reducing prices in the U.S. market with no immediate prospect of recouping their losses.183 By contrast, oligopolists have much to

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180. 906 F.2d 432, 439 (9th Cir. 1990).
181. See supra notes 91–92 and accompanying text.
182. In *Monsanto*, the plausibility of Monsanto’s motive for terminating the price-cutting distributor was unclear. See *Monsanto Co. v. Spray-Rite Serv. Corp.*, 465 U.S. 752, 765–68 (1983). If the complaining distributors had threatened to discontinue their purchases from Monsanto, the company might not have had a rational independent business reason to terminate the price-cutting distributor. The only reason for Monsanto’s action could have been to placate the complaining distributors. In such a case, a court should be willing to infer the existence of a conspiracy between the manufacturer and the complaining distributors on the basis of circumstantial evidence. *Id.* at 768; see also Thomas A. Piraino, Jr., *Distributor Terminations Pursuant to Conspiracies Among a Supplier and Complaining Distributors: A Suggested Antitrust Analysis*, 67 CORNELL L. REV. 297, 322–25 (1982).
183. Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 595 (1986) (“[P]etitioners had no motive to enter into the alleged conspiracy. To the contrary, as presumably rational businesses, petitioners had every incentive not to engage in the conduct with which they are charged, for its likely effect
gain from agreeing to raise prices. Unlike the defendants in Monsanto and Matsushita, oligopolists have a strong incentive to coordinate their conduct to increase price levels in the relevant market. By collectively maintaining prices above the competitive level, oligopolists can share in substantial monopoly profits. It is thus much more reasonable to infer from circumstantial evidence a conspiracy among oligopolists to maintain supracompetitive prices. Since there is no reason to be unduly skeptical of plaintiffs' allegations of collusion in such oligopoly pricing cases, they should not be required to meet the same burden of proof as the plaintiffs in Monsanto and Matsushita.

VII. APPLYING THE PROPOSED APPROACH TO THE PRIMARY TYPES OF TACIT COLLUSION

Oligopolists need not enter into an explicit agreement in order to become comfortable that their rivals will adhere to a consensus price. Oligopolists can adopt various practices against their independent self-interest that provide the same assurances available in an express price-fixing conspiracy—that is, a consensus on price and a commonly understood means of policing and enforcing adherence to that consensus.184 There are three primary practices that cement oligopolists' arrangements of tacit price coordination: (a) the disclosure of otherwise confidential pricing information, (b) the uniform adoption of marketwide standard terms of sale, and (c) adherence by all firms in the market to a standard pricing policy contrary to market conditions. Whenever oligopolists pursue these practices, a court should infer the existence of an illegal price-fixing arrangement.

A. INFORMATION DISCLOSURE

1. Legitimate Disclosure

Competitors have many valid reasons for disclosing information on their prices, costs, or production levels. Indeed, in many cases, the disclosure of such information can have a pro-competitive effect.185 Under the proposed approach, the courts would be to generate losses for petitioners with no corresponding gains.").

184. See Lopatka, supra note 23, at 906 ("What courts can do... is to search out and condemn practices that facilitate interdependent pricing.").

185. Thus the courts have refused to deem all information exchanges among competitors per se illegal. See, e.g., Holiday Wholesale Grocery Co. v.
should easily be able to determine whether oligopolists are disclosing information for legitimate independent reasons or simply to promote tacit collusion. Disclosure of pricing information is acceptable when consumers benefit from such disclosure. Commentators have explained that the disclosure of pricing information allows consumers to comparison shop: "Consumers who can find out about competitor's [sic] prices, product selection, and delivery and service policies, are more likely to make an informed choice . . . This is exactly how competition is supposed to work." 186 Customers also may need advance notice of price changes to plan their purchases. 187 Finally, firms may need to disclose prices to convince their customers that they are not charging discriminatorily high prices. 188

When oligopolists have a legitimate reason to disclose pricing information to customers, they often cannot avoid the simultaneous disclosure of the information to their rivals. Indeed, when consumers are widely dispersed, as in retail markets, suppliers often cannot disclose pricing information other than in a broad public manner. Thus competitors will naturally obtain access to such information, and that fact should not make the information disclosure illegal.

The airline industry is a good example of a market in which firms are justified in publicly preannouncing price changes. The airlines post future fares on the Internet, where they are available to customers and competitors alike. 189 The carriers need to disclose planned price changes, so that consumers can plan their bookings for future travel. It would be

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Philip Morris, Inc., 231 F. Supp. 2d 1253, 1276 (N.D. Ga. 2002) ("[A]ntitrust law permits . . . discussions [among competitors] even when they relate to pricing, because the 'dissemination of price information is not itself a per se violation of the Sherman Act.'") (quoting United States v. Citizens & So. Nat'l Bank, 422 U.S. 86, 113 (1975)); see also Tag Mfrs. Inst. v. FTC, 174 F.2d 452, 464 (1st Cir. 1949) ("[T]he public interest is served by the gathering and dissemination, in the widest possible manner, of information . . . [on] production . . . cost and prices . . . .")

186. Carlton et al., supra note 5, at 433.

187. See, e.g., Reserve Supply Corp. v. Owens-Corning Fiberglass Corp., 971 F.2d 37, 54 (7th Cir. 1992) (finding that price "announcements served an important purpose in the industry . . . [because customers needed] advance notice of price increases").

188. In the Petroleum Products case, prices were supposedly posted to assure customers that they were not being overcharged. In re Petroleum Products, 906 F.2d 432, 449 (9th Cir. 1990).

impossible to keep such information from rival carriers. As a result, the airlines will have more information on their competitors’ pricing plans, and they will take each other’s future prices into account in planning their own pricing policies. However, no carrier should be liable when its rivals “independently and as a matter of business expediency” decide to follow its price increase.\(^{190}\) In such a case, the airlines are simply making their own independent evaluation of their self-interest, based on the best information available to them. As Professor Turner has explained, prohibiting oligopolists such as the airlines from taking their competitors’ conduct into account “would ‘demand such irrational behavior that full compliance would be virtually impossible.’”\(^{191}\)

The airlines’ preannouncement of future price changes can be distinguished from the impermissible price signaling described in the second gasoline station example in Part V, supra. In that example, two neighboring gasoline stations each erected signs announcing future price increases. The stations had no legitimate reason to pre-announce their price increases, because their customers could not purchase gasoline in advance. The amount of gasoline which any consumer can purchase is limited, of course, by the size of his or her gasoline tank. The airlines’ customers, however, plan their travel in advance, so they benefit from prior notice of price changes. The airlines are not acting against their self-interest in disclosing advance pricing information to consumers, but are simply pursuing rational independent business practices. Without the added assurance provided by rivals’ actions against their self-interest, individual airlines are not likely to obtain the confidence necessary to observe a higher consensus price for an extended period. Indeed, proposed increases in airline fares are unsuccessful when they are not supported by market conditions. Consider the communications that occurred among the major airlines over a weekend in early 2002. On Friday, February 14, 2002, Continental Airlines announced higher prices for leisure and business travel. Seven other carriers raised prices in step with Continental Airlines, but Northwest Airlines refused to change its prices. By Sunday, February 16, 2002, all the airlines had

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190. Blair & Kaserman, supra note 2, at 221. See also Kattan & Vigdor, supra note 23, at 452 (“[E]ach firm rationally made its own independent evaluation of its self-interest and followed it knowing, of course, that its own actions would be taken into account by rivals in making their own decisions.”).

191. Turner, supra note 14, at 669.
rolled back their prices to match Northwest.\textsuperscript{192}

2. Improper Disclosure

Certain types of information exchanges among oligopolists can facilitate tacit collusion. Advances in technology, such as the Internet, have made it easier for competitors to exchange information.\textsuperscript{193} Thus information exchange in oligopoly markets should now be an even greater concern to antitrust regulators.\textsuperscript{194}

Information exchanges may allow firms to peg the level of a new consensus price. Information about a firm's past prices "can be a pointer toward a new optimal price level for the industry."\textsuperscript{195} Information on future prices can be even more effective in facilitating collusion, for such information allows oligopolists to signal their intention as to a new consensus price, thereby reducing the uncertainty of other firms contemplating their own participation in a tacit pricing arrangement.\textsuperscript{196} George Hay has concluded that the communication of proposed

\textsuperscript{192} Scott McCartney & Susan Carey, Airlines' Move To Raise Fares Falls Apart as Northwest Balks, WALL ST. J., Feb. 18, 2003, at D5. Price signaling in the airline industry is just as likely to result in lower as in higher prices. A good example of this phenomenon occurred in January, 2000. Trans World Airlines (TWA), then the eighth-largest U.S. airline, took the lead by announcing lower prices. TWA's lower prices were quickly matched by the other domestic carriers, resulting in better prices for all the airlines' customers. Major U.S. Airlines Cut Fares to Fill Post-Holiday Vacancies, CHI. TRIB., Jan. 5, 2000, available at 2000 WL 3623411.

\textsuperscript{193} See Carlton et al., supra note 5, at 423 ("Businesses are often able, at low cost, to make information available to consumers and investors and, either advertently or inadvertently, to competitors as well.").

\textsuperscript{194} Courts have inferred price-fixing agreements when competitors have communicated to each other the prices that they will quote in particular bargaining situations, or the methods they will use to determine such prices. Turner, supra note 14, at 670-72.

\textsuperscript{195} Hay, supra note 6, at 454. Some courts have found agreements among competitors to exchange past pricing information to be per se illegal, because of their potential to stabilize prices. See, e.g., United States v. Container Corp. of Am., 393 U.S. 333, 337 (1969) (stating that agreement among sellers is per se illegal under the Sherman Act when the exchange results in a restraint of trade).

\textsuperscript{196} See FTC v. Abbott Labs., 853 F. Supp. 526, 527 (D.D.C. 1994) (describing charges in an FTC complaint against three leading manufacturers of infant formula, for disclosing information that reduced uncertainty as to the consensus price). Professor Turner has defined an unlawful agreement to include "prior communication of . . . the price that will be quoted in a particular uncertain bargaining situation . . . ." Turner, supra note 14, at 672.
future prices "may be nearly as efficient as direct collusion."\textsuperscript{197} Communications as to future prices can be specific ("we plan to raise prices across-the-board by 2% next month"), or general ("we will follow any price increase less than 5% by competitors"), or vague ("we believe that price increases on the order of 3% are appropriate").\textsuperscript{198} The more specific the information, the more it reduces uncertainty for other firms, and the greater should be the inference of tacit collusion.\textsuperscript{199}

Information exchanges may also make price-fixing conspiracies more durable by allowing participants to detect deviations from a consensus price. Disclosure of information on firms' past prices may allow oligopolists to discover whether a rival is undercutting a consensus price.\textsuperscript{200} Data on sales volumes could reveal an unusual increase in a particular firm's sales due to price-cutting. Oligopolists could use such information to monitor their rivals' adherence to a consensus price.\textsuperscript{201}

The proposed approach would allow the courts to distinguish proper from illegitimate disclosures of information. The courts would simply preclude oligopolists from any disclosures that lacked a legitimate competitive rationale. In many markets, consumers do not need to plan their purchases in advance and thus do not need to receive information on possible future price increases. Furthermore, in any market in which firms discriminate in price among their customers, it will not be in their best interest to disclose price changes to all customers. Firms selling industrial products to original equipment manu-

\textsuperscript{197} Hay, supra note 6, at 463.

\textsuperscript{198} Carlton et al., supra note 5, at 435.

\textsuperscript{199} Some courts have used the announcement of future price increases, followed by uniform adherence to a particular price, as evidence of a price-fixing conspiracy. See, e.g., In re Petroleum Prods. Antitrust Litig., 906 F.2d 432, 446 (9th Cir. 1990) ("[T]here was essentially no purpose for publicly announcing ... [future prices] ... other than to facilitate either interdependent or plainly collusive price coordination."). Preannouncements of other types of anticipated future competitive conduct may also facilitate oligopolists' arrangements of tacit collusion. Information on future production plans might facilitate a tacit agreement to reduce output during periods of excess capacity. A steel company might, for example, predict a glut of steel during the next twelve months. Certain commentators have concluded that a court should infer tacit collusion if this prediction were "followed by a number of industry participants taking factory 'downtime'" to reduce the excess capacity. See Carlton et al., supra note 5, at 424.

\textsuperscript{200} Hay, supra note 6, at 451 ("For example, supermarkets can learn reasonably quickly when another supermarket has reduced the price of one of its products.").

\textsuperscript{201} See id. at 454.
facturers (OEMs), for example, may not want their other customers to know about a volume discount granted to a particularly large OEM.\textsuperscript{202} If such firms act against their individual self-interest and adopt a policy of publicizing all price changes, a court could conclude that they were only disclosing the information to signal the proposed terms of a tacit price-fixing arrangement to their rivals.\textsuperscript{203}

The courts may also infer tacit collusion when oligopolists publicly disclose information that has no value to consumers. Fact finders may infer that such disclosure was designed to signal an implicit consensus price. In *Petroleum Products*, for example, the court found an illegal price-fixing conspiracy among oil companies, noting that the defendants announced wholesale prices and dealer discounts in which consumers had no interest. The court concluded that "there was essentially no purpose for publicly announcing [wholesale prices] and dealer discount information other than to facilitate either interdependent or plainly collusive price coordination."\textsuperscript{204}

The major U.S. airlines have a legitimate reason to preannounce planned price changes to the public.\textsuperscript{205} In certain cases, however, the airlines have disclosed other information that had little, if any, utility to customers and only appeared designed to facilitate tacit price coordination. In *United States*...

\textsuperscript{202} Similarly, shipping companies have no reason to publicize the rates charged to their customers. European antitrust authorities are investigating two ocean-shipping companies for possibly colluding to fix prices by disclosing to each other otherwise confidential information on bid prices. See Bandler, supra note 64. Stigler recognized that "collusion will always be more effective" when secret bids are publicly disclosed. Stigler, supra note 55, at 48.

\textsuperscript{203} The FTC has attempted to attack price signaling as an illegal facilitating practice under section 5 of the FTC Act. In three complaints (each of which was later settled), the FTC alleged that certain "invitations-to-collude" constituted unfair methods of competition. In each of those cases, the defendants had solicited their rivals to engage in a price-fixing conspiracy by signaling their intentions to price at a particular level. See YKK (U.S.A.) Inc., [1993–1997 Transfer Binder] Tr. Reg. Rep. (CCH) ¶ 23,355, at 23,030 (July 1, 1993) (consent order) (alleging request that competitor stop offering free equipment to customers); AE Clevite, Inc., [1993–1997 Transfer Binder] Tr. Reg. Rep. (CCH) ¶ 23,354, at 23,029 (June 8, 1993) (consent order) (alleging statement to competitor that its low prices were "ruining the marketplace"); Quality Trailer Prods. Corp., [1993–1997 Transfer Binder] Tr. Reg. Rep. (CCH) ¶ 23,246, at 22,932 (Nov. 5, 1992) (consent order) (alleging statement to competitor that its prices were too low).

\textsuperscript{204} *In re Petroleum Prods.*, 906 F.2d at 446.

\textsuperscript{205} See supra notes 189–91 and accompanying text.
v. Airline Tariff Publishing Co.,\textsuperscript{206} the DOJ accused the airlines of engaging in illegal price negotiations through their jointly owned computer reservation system. The airlines published proposed new fares prior to their effective dates. The effective dates on the reservation system were "constantly changing" and bore little relationship to the actual dates on which new fares were finally implemented.\textsuperscript{207} Thus they could not "be relied upon by consumers in making airline ticket purchasing decisions."\textsuperscript{208} The Government alleged that the proposed effective dates for fare changes were used by the airlines "primarily to signal prices and negotiate with other airlines."\textsuperscript{209} In addition, the airlines used "footnote designators" that conveyed information other than the terms of sale, such as links between the routes on which airlines were planning to change fares.\textsuperscript{210} The Government claimed that the carriers' purpose for these designators was to communicate to each other planned changes in fares.\textsuperscript{211} The Government and the airlines entered into a consent decree that prohibited the carriers from continuing to use the fare information and footnote designators in their computer reservation system.\textsuperscript{212}

If the Government had challenged the airlines' conduct under the proposed approach, a fact finder likely would have concluded that they had engaged in tacit price collusion. Since consumers did not benefit from the information on the reservation system, the airlines had no legitimate purpose for disclosing their proprietary fare information. It was against the airlines' self-interest to list proposed effective dates for fare changes that were so rarely observed in practice. The airlines could expect to lose credibility with their customers by preannouncing conditional dates subject to constant change. Such disclosures, as actions against the airlines' individual self-interest, gave each carrier greater assurance that its rivals would abide by the consensus price. Because all the carriers agreed to participate in identical disclosures contrary to their own interests, a

\begin{itemize}
\item \textsuperscript{206} 836 F. Supp. 9 (D.D.C. 1993).
\item \textsuperscript{207}  Id. at 13.
\item \textsuperscript{208}  Id.
\item \textsuperscript{209}  Id. at 13 n.7.
\item \textsuperscript{210}  "[S]ome of the 'notes' accompanying the fare changes and appearing on the bulletin board were alleged to contain messages of the following sort: 'I, airline X, will lower my fare at your hubs, airline Y, unless you rescind your fare cuts at my hubs.'" Carlton et al., supra note 5, at 437.
\item \textsuperscript{211}  Airline Tariff Pub'g Co., 836 F. Supp. at 12.
\item \textsuperscript{212}  Id. at 9, 12–14.
\end{itemize}
court could reasonably have inferred that the carriers had tacitly agreed to a price-fixing arrangement.

Secret exchanges of pricing information among oligopolists raise the most serious antitrust issues. If the relevant information is not publicly disclosed, a defendant cannot argue consumer welfare as a rationale for the information exchange. With access to the Internet and other electronic means of communication, it is more difficult today for firms to restrict information exchanges to their competitors. When they do so, there should be a strong presumption of an anticompetitive purpose. In most cases, it is not in firms' legitimate self-interest to disclose confidential pricing information directly to their rivals. As Susan DeSanti and Ernest Nagata have explained,

A firm presumably would not release competitively sensitive information to a competitor unless it expected to gain something in return. Thus, unless there is a procompetitive explanation for the communication, in concentrated markets a logical inference is that the communication was intended to facilitate coordinated behavior ...

In a few instances, however, oligopolists may have a legitimate reason to communicate pricing information directly to their rivals. Several commentators have pointed out that "[s]uch sharing can be procompetitive—it can make possible 'benchmarking' or the adoption of 'best practices'... and thereby sharing of information can lower cost and price." Information sharing among competitors often, in fact, promotes the type of innovation in products and services that is beneficial to consumers. For example, because of their proximity in Silicon Valley, employees of computer chip manufacturers are

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213. The FTC has given two reasons why the public disclosure of pricing, cost, and production information is less of an antitrust concern. "First, there are more likely to be efficiency justifications for public statements. Second, the public nature of the communication may cast doubt on any collusive purpose since the communication is likely to draw antitrust scrutiny." DeSanti & Nagata, supra note 5, at 111. In Tag Manufacturers Institute v. FTC, 174 F.2d 452, 462–63 (1st Cir. 1949), the defendants' public posting of prices at a central location helped to negate the inference of an illegal price-fixing conspiracy.

214. See Tag Mfrs., 174 F.2d at 462 (noting that secret communications among competitors suggest "the inference that the agreement is inspired by some unlawful purpose").

215. DeSanti & Nagata, supra note 5, at 96 n.11.

able to engage in a constant exchange of technical information with each other. In most cases, however, firms can accomplish their benchmarking objectives while avoiding the disclosure of information on proposed future price increases. Firms can limit their disclosure of price information to past transactions, thus keeping their future marketing plans confidential. Furthermore, in most cases, firms should be able to aggregate the relevant data before it is distributed, making it difficult to match information with specific competitors. Oligopolists thus usually have no legitimate reason to disclose their specific future prices directly to their competitors. If all the firms in the market make available to each other confidential information on future prices that is not otherwise disclosed to customers, a court could reasonably infer that such consistent actions by all the parties contrary to their legitimate self-interest supports the inference of an illegal price-fixing arrangement.

B. THE ADOPTION OF UNIFORM TERMS OF SALE CONTRARY TO FIRMS’ SELF-INTEREST

It is in oligopolists’ independent self-interest to negotiate their own terms of sale with their customers, using their unique skills, leverage, and relationships to their maximum advantage. When oligopolists abandon such an individual approach and submit to terms of sale that are standard for an entire market, courts may reasonably conclude that their only purpose was to facilitate a tacit price-fixing agreement. A group of producers may, for example, submit identical bids to a customer when their legitimate interest is in negotiating individual transactions that take full advantage of their unique bargaining position. In FTC v. Cement Institute, the Supreme Court inferred a price-fixing agreement when firms bid $3.286854 per barrel on an order of 6000 barrels. In such cases, competitors would normally be expected to submit divergent quotes, and it would strain credulity to conclude that such identical bids were not the result of a tacit agreement.

217. See David J. Teece, Information Sharing, Innovation, and Antitrust, 62 ANTITRUST L.J. 465, 470 (1994) (“Information exchange and cooperative relationships of various kinds lie at the heart of this tremendously innovative assemblage of physical and human assets.”).
218. Carlton et al., supra note 5, at 434.
219. 333 U.S. 683, 713 & n.15 (1948); see also Blair & Kaserman, supra note 2, at 215 (describing conclusion of the case).
220. See Lopatka, supra note 23, at 850. Such an agreement, however,
By adopting marketwide terms of sale that are contrary to individual firms' self-interest, oligopolists can ease the process of reaching an understanding on price and of enforcing adherence to a consensus price. For example, under a "delivered pricing" system, firms charge a standard amount for shipping without regard to a customer's location. A variant of this form of pricing is "basing-point" pricing, in which firms agree to charge customers the same delivered price, regardless of their distance from the factory. Thus all customers pay the same amount for freight, despite the fact that their facilities are geographically dispersed. It is against most suppliers' self-interest to agree to a delivered or basing-point price arrangement, because they sacrifice their cost advantage in dealing with customers located nearer to their plants than to their competitors' facilities.

The first firm that agrees to engage in delivered or basing-point pricing sends a strong signal to its rivals of its desire for an industry-wide consensus price. The firm's commitment to the consensus price will be evident from its agreement to sacrifice its cost advantage in dealing with nearby customers. The initiating firm's rivals should conclude that it was only willing to give up that advantage because it anticipated greater returns from the maintenance of a higher industry-wide price. Furthermore, by entering into a delivered or basing-point pricing arrangement, the initiating firm gives its competitors greater visibility to its total net prices. Under normal circumstances, each customer would pay a different delivered price from a particular supplier. "Thus, even if one firm knows its rival's mill price, it may not be able to match the delivered price to a given customer unless it knows the relevant shipping costs should usually not be inferred when rivals simply charge the same price for a standardized commodity. Such conduct amounts to nothing more than conscious parallelism. See In re Petroleum Prods. Litig., 906 F.2d 432, 445 (9th Cir. 1990) ("[P]ermitting an inference of conspiracy from the parallel pricing evidence alone would result in an anticompetitive dislocation by distorting independent pricing decisions."); Pevely Dairy Co. v. United States, 178 F.2d 363, 369 (8th Cir. 1949) ("We are clear that mere uniformity of prices in the sale of a standardized commodity...is not in itself evidence of a violation of the Sherman Anti-Trust [sic] Act.").

221. See C–O–Two Fire Equip. Co. v. United States, 197 F.2d 489, 496 (9th Cir. 1952) ("Under the pricing system used by defendants, a consumer in Los Angeles paid the same price for a fire extinguisher regardless of whether the purchase is made from a dealer or manufacturer located in New York, New Jersey, or Los Angeles, California.").
from the rival's plant to that customer." A delivered or basing-point pricing system gives each firm notice of the total price paid by all customers, allowing firms to match each other's prices in all cases. Hay has explained that "in this respect, use of a delivered price formula accomplishes what could be accomplished in hotel-room meetings." The ultimate adoption by all firms in an oligopolistic market of delivered or basing-point pricing arrangements thus should be sufficient evidence of an illegal price-fixing conspiracy. The first firm to adopt such an arrangement is inviting its rivals to join in a common means of facilitating adherence to a consensus price. When all firms adopt identical delivered or basing-point pricing systems, such actions contrary to their individual self-interest should be conclusive evidence of their acceptance of the initial firm's invitation to engage in a tacit price-fixing arrangement.

An industry-wide agreement to adopt "most-favored-customer" clauses may also facilitate tacit coordination. Such clauses guarantee that a buyer will receive the lowest price granted by its supplier to any other customer. In certain cases, such a provision may be retroactive, requiring a supplier to provide a rebate to a buyer if another customer is offered a lower price. It is not in individual firms' interests to enter into most-favored-customer clauses, unless such provisions are demanded by their customers. Without receiving some consideration from a customer, a firm should have no legitimate reason to guarantee that the customer will receive the lowest price granted to any other buyer. Most-favored-customer clauses reduce the advantages of price-cutting because a firm must offer

222. Hay, supra note 6, at 462.
223. See generally Triangle Conduit & Cable Co. v. FTC, 168 F.2d 175 (7th Cir. 1948), aff'd, 336 U.S. 959 (1949) (finding that basing-point formula allowed sellers to quote identical delivered prices); Boise Cascade Corp. v. FTC, 637 F.2d 573, 575 (9th Cir. 1980) ("[A]ny delivered pricing system can become a potent tool for assuring that competitors are able to match prices and avoid the rigors of price competition.").
224. Hay, supra note 6, at 462.
225. Historically, some firms have challenged the industry-wide adoption of agreements to use delivered prices. See, e.g., FTC v. Cement Inst., 333 U.S. 683, 714 (1948) (describing how economic conditions during the Depression forced some firms to abandon delivered prices). Such efforts, however, have been unsuccessful and the renegade firms have been faced with the choice of using the prevalent pricing system or going out of business. See id.
226. Hay, supra note 6, at 455.
227. Id.
the lower price to pre-existing customers. For sellers subject to such clauses, the increased volume resulting from a lower price will be offset by the requirement to lower their prices across-the-board.

When an oligopolist obligates itself to a most-favored-customer clause, it can signal its rivals that it favors a particular consensus price. As Hay has pointed out, such an oligopolist may persuade "its rivals that it will not initiate a price cut," thereby "establishing the mutual confidence necessary to launch a period of noncompetitive pricing."

Oligopolists' most-favored-customer contracts are particularly suspect when they do not receive substantial consideration from their customers (such as a commitment to increase purchases) in return for an agreement to provide the customers with the lowest available prices. When one firm initiates such a clause, it encourages its rivals to take a similar risk in order to cement a tacit arrangement of price coordination; if all or most of the firms in the market respond to the initial firm's invitation without receiving some compensating consideration from their customers, the courts need inquire no further before inferring a tacit price-fixing arrangement.

C. UNIFORM ADHERENCE TO PRICING LEVELS CONTRARY TO MARKET CONDITIONS

The courts should infer an illegal arrangement of tacit price coordination whenever all the firms in an oligopolistic market adhere to uniform pricing levels contrary to those that would be expected under prevailing market conditions. The inference of tacit coordination should be particularly strong when a large number of sellers increases prices in tandem despite a decline in demand or increase in capacity in the relevant market. If such sellers were acting in their own self-interest, they would respond to a decline in demand or increase in capacity by keeping their prices low in order to increase their sales. It would be against their interest to pass up an opportunity to enhance their profits by offering discounts during recessionary periods. If, instead, they collectively raise prices, "it is virtually inconceivable" that there was "no prior actual agreement."

228. Id. at 456.
229. Turner, supra note 14, at 660. "Any economist worthy of the name would immediately brand this price behavior as noncompetitive." Id. at 661; see also C-O-Two Fire Equip. Co. v. United States, 197 F.2d 489, 497 (9th Cir. 1952) ("Price increases which occur in times of surplus, or when the natural
such cases, a court could infer that the firms were only willing to maintain a higher price because they had some assurance that their rivals would follow suit.\textsuperscript{230}

Firms have the greatest incentive to engage in tacit coordination to increase prices above the normal competitive level during recessionary periods, when prices are depressed and profits are slim. One firm may invite its rivals to participate in an arrangement of tacit coordination by announcing a substantial price increase, despite the current overcapacity in a particular market. Because price increases during periods of expanding capacity or declining demand are clearly contrary to a firm's rational economic interest, the other firms in the market should gain substantial confidence in the initiating firm's commitment to a higher consensus price. When, despite recessionary economic conditions, all the firms in the market follow suit and increase their prices to the new level, a court should infer an illegal arrangement of tacit coordination.\textsuperscript{231}

Consider the conduct of the U.S. automobile manufacturers in past recessions. Before imports became a substantial factor, the "Big Three" automobile companies (General Motors, Ford, and Chrysler) controlled most U.S. automobile production.\textsuperscript{232} In this oligopolistic market, it was relatively easy for the Big
Three to tacitly coordinate their conduct to maintain higher prices, even when domestic demand declined significantly. As a recent article in the *Wall Street Journal* pointed out, "In past recessions, the Big Three auto companies tended to act in lockstep, offering some generous rebates but for the most part holding prices steady and simply absorbing drops in volume."\(^{233}\) Under the proposed approach, a court could have concluded that the Big Three's pricing was contrary to each of the manufacturer's independent self-interest. If one of the companies had lowered its prices, it could have gained additional volume and market share at its rivals' expense.\(^{234}\) Each of the Big Three may have been willing to sacrifice its immediate self-interest and forego additional volume in order to obtain the long-term benefits of a higher market price. Indeed, there is no plausible scenario, in the face of declining demand, under which the automobile companies would have been willing to disregard their individual interests and maintain higher prices, unless they had confidence that all firms in the market would have been willing to observe a similar price. In such a case, the Big Three's conduct would have made sense only if they had received assurance that their rivals would act similarly, and on that basis, a court could have concluded that the automobile manufacturers had engaged in an illegal price-fixing conspiracy.

Oligopolists' simultaneous adoption of *lower* prices poses a more difficult problem. The Supreme Court observed in *Matsushita* that fact finders must be careful not to infer unlawful conduct merely from consistent price-cutting among rivals, because the courts might "chill the very conduct the antitrust laws are designed to protect."\(^{235}\) The Supreme Court concluded more recently in *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.* that "discouraging a price cut and forcing firms to maintain supracompetitive prices, thus depriving consumers of the benefits of lower prices in the interim, does not constitute

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\(^{234}\) In fact, during the most recent recession, in 2002–2003, General Motors was more willing to pursue its own self-interest, by "relentlessly... court[ing] consumers... with generous rebates and cheap financing, in a brash effort to grab [market] share from Ford Motor Co. and DaimlerChrysler AG." *Id.* at A6.

sound antitrust policy." However, coordinated price-cutting by most of the firms in the relevant market can be a means of disciplining price-cutters and ultimately forcing them to observe a higher consensus price. Thus, in certain cases, rivals' practice of lowering prices in tandem should be sufficient to infer tacit collusion. To avoid deterring procompetitive conduct, the courts should make such an inference only when oligopolists have clearly acted against their self-interest in implementing price reductions. An inference of illegality is appropriate when a reduction of prices among all the firms in the relevant market occurs under one of the following circumstances: (1) rising demand in the market that would otherwise support a price increase, (2) capacity reductions that would typically lead to higher prices, or (3) a drastic departure from past pricing practices unexplained by a decline in demand or increase in capacity.

VIII. REMEDIES TO PREVENT TACIT COLLUSION

The proposed approach would encourage the courts to develop effective remedies against tacit collusion. The courts have had little difficulty in devising remedies to preclude explicit price-fixing agreements. Treble damages and injunctions have proved to be a powerful deterrent against such conduct. The courts have not, however, been effective in identifying and precluding oligopolists' tacit coordination. The proposed approach

237. See Hay, supra note 6, at 454 ("[T]he leader has the ability and willingness to discipline price cutters by substantially lowering prices for a period.").
238. See FTC v. Cement Inst., 333 U.S. 683, 710 (1948) (basing inference of agreement on circumstantial evidence of "collective methods" used to assure compliance with pricing formula, including boycotts and retaliatory price-cutting against recalcitrants).
239. Tacit collusion may be evident when all or most of the sellers in the relevant market engage in substantially identical conduct that constitutes a marked departure from prior practices. Assuming that most defendants' prior practices were legitimate, courts may rightfully inquire into defendants' motives for implementing a sudden and coordinated change in such practices. In Interstate Circuit, Inc. v. United States, for example, the Supreme Court noted that all the film distributors simultaneously adopted a new practice of refusing to license first-run films to a suburban Baltimore theater. 306 U.S. 200, 223 (1939). The Court concluded that such a dramatic shift in conduct could not have been the result of independent competitive behavior. Id.
would improve the courts' performance in oligopoly pricing cases by focusing their attention on specific facilitating practices contrary to defendants' self-interest. It should be relatively easy for the courts to fashion injunctions prohibiting such practices. The courts could, for example, prohibit oligopolists from observing certain industry-wide standard terms of sale or from predisclosing proposed price changes when customers have no need for such information. In many cases, the courts will be able to infer tacit price collusion when firms collectively increase prices during periods of excess capacity or declining demand. Under such circumstances, the courts can prevent further collusion by a simple injunction prohibiting future price-fixing agreements. Knowing that they could face harsh antitrust penalties for noncompliance, including the possibility of treble damages, oligopolists are more likely to charge competitive prices after the entry of injunctions and to avoid following a price leader in lockstep when economic circumstances dictate a different pricing approach.

The proposed approach would save the courts from becoming unduly involved in economic remedies that are beyond their competence. No court would be able to infer an illegal conspiracy when oligopolists pursue independent pricing policies that are in their legitimate self-interest. Since parallel pricing would be perfectly acceptable, the courts would have no reason to require defendants to act irrationally and price their products without considering their rivals' likely reactions. Neither would they have to require defendants to observe particular price levels. Federal courts are particularly ill-suited to engage in price regulation, and the proposed approach would insure that the courts confined themselves to precluding particular

241. For example, an injunction against an industry-wide delivered pricing system could "simply forbid sellers from quoting delivered prices only, and compel them to give buyers as an alternative a bona fide f.o.b. price." Turner, supra note 14, at 676. Similarly, the courts could enjoin defendants from entering into most-favored-customer contracts, unless they received some compensating consideration from buyers.

242. See supra notes 229-34 and accompanying text.

243. See Lopatka, supra note 23, at 885 ("[A] simple injunction can be entered prohibiting future price fixing, which would serve as the predicate for the imposition of severe penalties in the event of subsequent collusion.").

244. See supra notes 136-39 and accompanying text. See also Lopatka, supra note 23, at 906 (pointing out that, if courts prohibited parallel pricing, "section 1 remedies, even if they would not compel defendants to act irrationally, would nevertheless require the unacceptable — that courts act like rate regulators").
conduct that they had already determined was contrary to defendants' independent self-interest.

Injunctions against specific facilitating practices should terminate a substantial number of price-fixing conspiracies that otherwise might have continued for a substantial period of time. Such injunctions should also deter oligopolists from attempting new arrangements of tacit collusion that might have gone undetected. With clearer guidance on prohibited conduct, firms are more likely to report to the authorities their rivals' attempts to solicit their participation in an arrangement of tacit collusion, thus reducing the cost of antitrust enforcement. At the same time, by making clear oligopolists' right to engage in parallel pricing practices, the proposed approach would encourage firms in concentrated markets to continue to engage in efficient means of competition beneficial to consumers.

IX. CONCLUSION

After more than 100 years, the courts have yet to devise an effective means of determining when oligopolists enter into illegal arrangements of tacit collusion under section 1 of the Sherman Act. The lower federal courts' interpretation of recent Supreme Court decisions has only made it more difficult for them to regulate oligopolists' tacit collusion. The new approach proposed in this Article would clarify the dividing line between illegal and permissible oligopoly conduct without violating Supreme Court precedent. The approach requires the courts to determine the purpose and motivation for defendants' conduct, a task they are well qualified to perform. Judges and juries are required every day to determine the reasons for defendants' behavior in contract, tort, employment, and criminal cases. There is no reason why they cannot do so in antitrust cases as well. Indeed, a purpose-based inquiry is particularly appropriate in oligopoly pricing cases. Game theory teaches that oligopolists can harm consumers when they cooperate to pursue their collective rather than their individual competitive interests. By concentrating on whether oligopolists have acted in a manner contrary to their legitimate independent interests, the courts can determine when firms have engaged in the type of tacit coordination harmful to consumers. This approach would conserve judicial resources, clarify the applicable legal standards, and encourage firms in concentrated markets to compete on the merits rather than through their collective market power.