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## *Matsushita* and the Role of Economists with Regard to Proof of Conspiracy

*Daniel R. Shulman*\*

Now that *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*<sup>1</sup> has had twenty years to mature, it is apparent that economists have an important role to play in providing testimony on issues relating to the presence or absence of concerted action. That role, however, is not without significant limitations, which must be carefully observed if the economic testimony is to have value, relevance, and admissibility as “having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence.”<sup>2</sup>

*Monsanto Co. v. Spray-Rite Service Corp.*<sup>3</sup> teaches that to make a submissible case, “the antitrust plaintiff should present direct or circumstantial evidence that reasonably tends to prove that the . . . [defendants] ‘had a conscious commitment to a common scheme designed to achieve an unlawful objective.’” In addition, “[t]here must be evidence that tends to exclude the possibility that the . . . [defendants] were acting independently.”<sup>4</sup> *Matsushita* proceeds from these premises to add two further principles. First, “conduct as consistent with permissible competition as with illegal conspiracy does not, standing alone, support an inference of antitrust conspiracy.”<sup>5</sup> In other words, in antitrust, the tie goes to the fielder, not the runner. Second, “if the factual context renders respondents’ claim implausible—if the claim is one that simply makes no economic sense—respondents must come forward with more persuasive evidence to support their claim than would otherwise be necessary.”<sup>6</sup>

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\* Daniel R. Shulman is a member of Gray, Plant, Mooty, Mooty & Bennett, P.A.’s antitrust, trial practice, and complex litigation groups, in Minneapolis, Minnesota.

1. 475 U.S. 574 (1986).
2. FED. R. EVID. 401.
3. 465 U.S. 752, 764 (1984).
4. *Id.*
5. *Matsushita*, 475 U.S. at 588.
6. *Id.* at 587.

Under these principles, testimony by economists on issues of concerted action has played a leading role in antitrust litigation, sometimes for the better (e.g., *In re High Fructose Corn Syrup*<sup>7</sup>) and sometimes for the worse (e.g., *Williamson Oil Co. v. Philip-Morris U.S.A.*<sup>8</sup>). The role of economic evidence on issues of concerted action has also figured prominently in current antitrust scholarship.<sup>9</sup> The Sedona Conference has established a working group, which produced a report, *The Role of Economics in Antitrust*,<sup>10</sup> suggesting practice principles for the use of economic evidence in antitrust litigation. This report contains supporting analysis and commentary, including guidelines for economics and proof of concerted action.<sup>11</sup>

#### THE OLIGOPOLY PROBLEM

As the foregoing cases and articles demonstrate, economics has a role in deciding issues of concerted action primarily because of what has come to be known as “the oligopoly problem.” In relatively highly concentrated industries, which dominate much of the domestic and world economy, the phenomenon of conscious parallelism results in firms’ coordinating their behavior based on their knowledge of what other firms are doing and their anticipation of what other firms will do. The question is whether and under what circumstances a finder of fact should be able to infer agreement from such parallel conduct. Although this is ultimately a legal question, it rests heavily on economic theory.

The most commonly accepted economic doctrine is that in an oligopoly setting agreement is unnecessary to produce consciously parallel conduct and that it would be irrational to infer agreement from parallel conduct alone.<sup>12</sup> In 1969, however, Professor Richard A. Posner, now Judge Posner, presented a differing view. Posner argued that interdependence alone was inadequate to explain parallel conduct, which, he posited, could well involve some element of agreement.<sup>13</sup>

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7. 295 F.3d 651 (7th Cir. 2002).

8. 346 F.3d 1287 (11th Cir. 2003).

9. Gregory J. Werden, *Economic Evidence on the Existence of Collusion: Reconciling Antitrust Law with Oligopoly Theory*, 71 ANTITRUST L.J. 719 (2004).

10. THE SEDONA CONFERENCE, WORKING GROUP ON THE ROLE OF ECONOMICS IN ANTITRUST, THE SEDONA CONFERENCE COMMENTARY ON THE ROLE OF ECONOMICS IN ANTITRUST LAW (Feb. 2006), available at <http://www.thesedonaconference.org>.

11. Much of the discussion in this commentary is based on this chapter in THE SEDONA CONFERENCE WORKING GROUP REPORT, of which this commentator was the principal author.

12. The seminal formulation of this view appears in Donald F. Turner, *The Definition of Agreement under the Sherman Act: Conscious Parallelism and Refusals to Deal*, 75 HARV. L. REV. 655 (1962).

13. Richard A. Posner, *Oligopoly and the Antitrust Laws: A Suggested Approach*, 21 STAN. L.

Posner has amplified and refined his thesis in subsequent scholarship and judicial opinions.<sup>14</sup>

Under the present state of the law, conscious parallelism alone is insufficient to create a genuine issue of material fact that the defendants acted pursuant to an agreement.<sup>15</sup> In addition, there must be one or more “plus factors,” evidence that tends to exclude the possibility of independent action by the alleged conspirators.<sup>16</sup> Unfortunately, there appears to be a great deal of uncertainty and variability in the case law as to what evidence is sufficient to constitute a plus factor enabling evidence of consciously parallel conduct to go to the jury.<sup>17</sup>

#### EVIDENCE OF MARKET STRUCTURE AND BEHAVIOR

In cases involving consciously parallel conduct, parties on both sides have increasingly offered expert economic testimony, principally of two kinds. First, there is evidence of market structure, which analyzes the features of an industry that render it more or less conducive to agreement or cartel-like behavior, such as concentration, barriers to entry, nature of the product, availability of pricing information, ease of policing an agreement, capacity utilization, and other factors that may make agreement desirable or practicable, or undesirable or impracticable. Second, there is evidence of market performance, defined as the behavior of competitors in the industry and whether it is indicative of competition or collusion. Such evidence may include: “fixed relative market shares,” “market-wide price discrimination,” “exchanges of price information,” “regional price variations,” “identical bids,” past express price-fixing, and “exclusionary practices.”<sup>18</sup>

The question is whether and under what circumstances expert economic testimony on these subjects can be helpful in deciding the question of whether there is sufficient evidence of unlawful agreement

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REV. 1562 (1969).

14. *In re High Fructose Corn Syrup*, 295 F.3d 651, 654 (7th Cir. 2002). RICHARD A. POSNER, *ANTITRUST LAW: AN ECONOMIC PERSPECTIVE* ch. 4 (1976) [hereinafter POSNER, 1976]; RICHARD A. POSNER, *ANTITRUST LAW* ch. 3 (2d ed. 2001) [hereinafter POSNER, 2001].

15. *Theatre Enters., Inc. v. Paramount Film Distrib. Corp.*, 346 U.S. 537, 541 (1954).

16. *Interstate Circuit v. United States*, 306 U.S. 208, 222–27 (1939); *C-O-Two Fire Equip. Co. v. United States*, 197 F.2d 489, 493 (9th Cir. 1952); *Esco Corp. v. United States*, 340 F.2d 1000, 1007–08 (9th Cir. 1965); *Apex Oil Co. v. DiMauro*, 822 F.2d 246, 253–54 (2d Cir. 1987); *In re Plywood Antitrust Litig.*, 655 F.2d 627, 634 (5th Cir. 1981).

17. *Compare DiMauro*, 822 F.2d at 253–54, *C-O-Two Fire Equip. Co.*, 197 F.2d at 493, and *Minpeco, S.A. v. Conticommodity Servs., Inc.*, 673 F. Supp. 684, 688 (S.D.N.Y. 1987), with *In re Flat Glass Antitrust Litig.*, 385 F.3d 350, 360 (3d Cir. 2004), *Williamson Oil v. Philip Morris, Inc.*, 346 F.3d 1287 (11th Cir. 2003), and *United States v. Taubman*, 297 F.3d 161 (2d Cir. 2002).

18. POSNER, 2001, *supra* note 14, at 79–93.

to go to a jury. The answer is that, properly limited, economic evidence of both market structure and behavior is relevant and should be admissible on the issue of agreement *vel non*.

With regard to market structure, expert economic testimony generally has something to offer on whether the plaintiff's theory of conspiracy is plausible or implausible, a factor that may have an effect on the quantum of proof required to raise a triable jury issue.<sup>19</sup> Conspiracy is more plausible in markets characterized by high concentration, entry barriers, fungible products, excess capacity, high fixed costs, ready access to pricing information, and many small customers or suppliers.<sup>20</sup>

Conversely, concerted action is less plausible in industries marked by lack of concentration, low entry barriers, differentiated products, low fixed costs, high capacity utilization, large customers or suppliers, and difficulty of ascertaining pricing information. In such markets, incentives to cheat on a conspiracy are great, and detection and policing of cheaters difficult. Economists should be permitted to present evidence on these structural features where they may be relevant to gauging the plausibility or implausibility of the theories of the case. Nonetheless, courts must examine such evidence carefully to ascertain whether it truly explains and is logically connected with the conduct that is at issue in the case, and the economist must explain why and how structural evidence relates to behavior of firms in the industry and provides a basis for inferring that actions are consistent or inconsistent with agreement. Finally, such structural evidence can never be sufficient or conclusive in itself to prove or disprove the presence or absence of agreement. Its value is only in its tendency to add force to, or detract from, other evidence of agreement or its absence.

Expert economic evidence of market behavior should also be admissible when properly limited, explained, and tied to the facts of the case. Unlike evidence of market structure, however, some evidence of market behavior may be sufficient to take a case to the jury on the issue of agreement. In his antitrust treatise, Posner lists fourteen types of evidence of market performance that are probative in his view of the existence of agreement,<sup>21</sup> and he discusses others in *Fructose*.<sup>22</sup> Some of these are relatively uncontroversial (such as identical bids; constant market shares in a period of rising demand; higher prices during the

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19. *In re High Fructose Corn Syrup*, 295 F.3d at 661; *In re Flat Glass*, 385 F.3d at 357–58.

20. *In re High Fructose Corn Syrup*, 295 F.3d at 656–58; *In re Flat Glass*, 385 F.3d at 358–59.

21. POSNER, 2001, *supra* note 14, at 79–83.

22. 295 F.3d at 658–61.

period of the alleged conspiracy than before or after). Others are subject to debate in the economic literature (such as profit levels; price discrimination; past antitrust violations; exchanges of pricing information). An economist testifying on market performance should clearly articulate the theory supporting the claim that an aspect of market performance tends to prove or disprove the existence of independent conduct, and then must apply the theory to the specific facts of the case before the court.

#### THE PRISONERS' DILEMMA

There is, moreover, one particular area of market behavior where economists can add real value. This is the question of when parties have been acting in a manner that would be contrary to their independent economic self-interest in the absence of an agreement—a circumstance that is often listed as an important plus factor. Here, modern oligopoly theory is able to apply the teachings of game theory and the Prisoners' Dilemma.<sup>23</sup>

In the Prisoners' Dilemma, prisoners A and B, accused of the same crime, are held in isolation, unable to communicate with each other. Each is told that if he implicates the other, who remains silent, he will go free, while the other will receive a substantial penalty, say a ten-year sentence. Each is also told that if each accuses the other of the crime, then both will receive an intermediate penalty, say a five-year sentence. Finally, each is told that if both remain silent, both will receive a much lighter penalty, say a three-year sentence. The insight of game theory is that in the absence of prior agreement, express or tacit, each prisoner's informing on the other will become a dominant strategy, because of the potential cost of not doing so.<sup>24</sup>

The Prisoners' Dilemma provides a starting point and conceptual framework for analyzing competitive behavior in an oligopoly setting. Although few competitive scenarios may actually present a Prisoners' Dilemma, economic theory has something important to say about all those scenarios that do not. In the Prisoners' Dilemma, informing is a dominant strategy, in the sense that if one prisoner went first and the other prisoner were able to observe the action of the first prisoner, the second prisoner would inform no matter what the first prisoner did. Hardly any competitive scenarios have such dominant strategies, because most competitive situations are not one-shot interactions, like the Prisoners' Dilemma, but involve repeated and continuing

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23. Werden, *supra* note 9, at 720–34.

24. *Id.* at 727–29.

interactions among firms over time. Thus, an expert economist can often persuasively rebut a claim that conduct has been contrary to independent self-interest by showing that the paradigm of the Prisoners' Dilemma does not apply to the facts of the case, and therefore the conduct cannot be assumed to be the result of agreement in the legal sense.

Conversely, there may be instances where an economist may be able to say that conduct does fit the Prisoners' Dilemma and is therefore consistent with agreement. For example, if firms in an oligopoly have increased prices simultaneously, where there is an irreversible penalty from an unsuccessful attempt to lead or follow a price increase (e.g., the permanent loss of important customers if other firms do not match), then an economist may be able to testify that no rational firm would have initiated or matched the price increase in the absence of agreement that all firms would match. Hence, undertaking such conduct independently would be contrary to economic self-interest, but rational if the firms had reached agreement.

Modern oligopoly theory can thus provide a sound economic basis for finding the presence or absence of this plus factor, action contrary to self-interest in the absence of agreement. This is indeed potentially a valuable contribution, which may help bring order and clarity to an area of law much confused at present. Such testimony therefore ought to be admissible when the underlying theory is clearly explained and accurately applied to the facts of the case.

Nor should courts be scared off from such testimony because of its complex and esoteric nature, or the difficulty of making it intelligible to a jury. This is the responsibility of counsel and the expert economist. If they cannot make the evidence clear and comprehensible, then they should suffer the consequence of its exclusion, but only because of their failure of presentation, not because of the testimony's unreliability.

#### THE DEFINITION OF AGREEMENT

An important principle underlying every aspect of the expert economist's testimony is that the testimony must adhere to the definition of agreement being followed and applied in the case in which the economist is testifying. As self-evident as this may seem, expert economists have run aground because of their failure to comply with it.<sup>25</sup> Perhaps the most common reason for this failure of proof is the economist's and counsel's failure to recognize that the definition of

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25. *Williamson Oil Co. v. Philip Morris*, 346 F.3d 1287, 1317, 1322–23 (11th Cir. 2003).

agreement is a legal and not an economic matter. In the first and last instance, the court defines what constitutes an agreement, regardless of what the economist might think and economic theory might say. This means that the economist must be sensitive to what has been said by the particular court in which the economist is testifying.

Unfortunately, the state of the law on what constitutes agreement is nowhere near as clear as it could be. The “conscious commitment to a common scheme,” which constitutes agreement, purports to be a restatement of existing law, and not a new formulation or definition of agreement under the antitrust laws. Under pre-*Monsanto* Supreme Court precedent, “It is not necessary to find an express agreement in order to find a conspiracy. It is enough that a concert of action is contemplated and that the defendants conformed to the arrangement.”<sup>26</sup> In *Interstate Circuit, Inc. v. United States*, the Supreme Court held, “Acceptance by competitors, without previous agreement, of an invitation to participate in a plan, the necessary consequence of which, if carried out, is restraint of interstate commerce, is sufficient to establish an unlawful conspiracy under the Sherman Act.”<sup>27</sup>

Up to the time of *Monsanto*, lower courts construed these precedents as allowing for wide latitude in finding unlawful agreement based on conduct, which might or might not include verbal communication.<sup>28</sup> Indeed, even after *Monsanto* these rules have retained a measure of vitality.<sup>29</sup>

Commentators and at least one court have asked whether section 1 is broad enough “to encompass a purely tacit agreement to fix prices, that is, an agreement made without any communication among the parties,”<sup>30</sup> and, if not, the nature and extent of the communication that must exist for an unlawful agreement under the Sherman Act.<sup>31</sup>

Since *Monsanto* and *Matsushita*, however, courts appear to have become significantly more rigorous in what they will require in order to

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26. *United States v. Paramount Pictures, Inc.*, 334 U.S. 131, 142 (1948); *Lawlor v. Loewe*, 209 F. 721, 725 (2d Cir. 1913), *aff'd*, 235 U.S. 522 (1915).

27. 306 U.S. 208, 227 (1939).

28. *Esco Corp. v. United States*, 340 F.2d 1000, 1008 (9th Cir. 1965) (“Written assurances . . . are unnecessary. So are oral assurances, if a course of conduct, or a price schedule, once suggested or outlined by a competitor in the presence of other competitors, is followed by all—generally and customarily—and continuously for all practical purposes, even though there be slight variations.”); *C-O-Two Fire Equip. Co. v. United States*, 197 F.2d 489, 494 (9th Cir. 1952) (“Proof of a formal agreement is unnecessary, and were the law otherwise such conspiracies would flourish; profit rather than punishment, would be the reward.”).

29. *Toys R Us, Inc. v. FTC*, 221 F.3d 928, 935 (7th Cir. 2000).

30. *In re High Fructose Corn Syrup*, 295 F.3d 651, 654 (7th Cir. 2002).

31. *See* Werden, *supra* note 9, at 734–59.

find a submissible issue on the question of agreement. Applying the principles that the evidence must tend to exclude the possibility of independent conduct, and that evidence equally consistent with independent conduct cannot prove agreement, courts increasingly regard evidence of opportunity and motive to conspire as nonprobative of agreement.<sup>32</sup>

Regrettable as the lack of clarity in the law may be, the expert economist is nonetheless charged with knowing the legal definition applicable to the matter in which the economist is testifying. The price of ignorance may well be exclusion of the testimony, as indeed it should be.

#### EVIDENCE OF PAST ANTITRUST VIOLATIONS

Finally, one type of evidence that has not received its due consideration, in the view of this commentator, is past violations by the defendants involving the same kinds of unlawful agreements charged in the case currently before the court. For example, the instant case may involve a charge of price-fixing by firms in an oligopolistic industry, and there may be evidence that these same firms have been found to have agreed to fix prices on one or more occasions in the past.

In his treatise, Posner identifies such past price fixing as a factor showing that a market is susceptible of supporting an illegal pricing conspiracy.<sup>33</sup> There is a valid argument that this is powerful evidence tending to exclude the possibility of independent action, not only for the reason cited by Posner. Theorists have proposed that conscious parallelism alone can produce supracompetitive pricing in a concentrated market.<sup>34</sup> Evidence of past price fixing by express or implied agreement, however, shows that firms cannot achieve noncompetitive pricing solely through conscious parallelism. As rational actors, they would not enter into an illegal price-fixing agreement if they could achieve the same result legally solely through conscious parallelism. Hence, evidence of past price fixing strongly excludes the possibility that present price uniformity results merely

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32. *Williamson Oil Co. v. Philip Morris, Inc.*, 346 F.3d 1287, 1319 (11th Cir. 2003) (“Indeed, the opportunity to fix prices without any showing that appellees *actually* conspired does not tend to exclude the possibility that they did not avail themselves of such opportunity or, conversely, that they actually did conspire.”) (emphasis in original); *United States v. Taubman*, 297 F.3d 161, 165–66 (2d Cir. 2002).

33. POSNER, 2001, *supra* note 14, at 79 (“In a market in which collusion is attractive we can expect a history of attempts at express collusion, some of which may have been detected by the antitrust enforcers.”).

34. Jonathan B. Baker, *Two Sherman Act Section 1 Dilemmas: Parallel Pricing, the Oligopoly Problem, and Contemporary Economic Theory* 38 ANTITRUST BULL. 143, 147 (Spring 1993).



from conscious parallelism. At the very least, it significantly enhances the plausibility of the plaintiffs' theory, argues against any augmentation of the plaintiffs' burden of proof in surviving summary judgment, and fortifies plus factors suggesting agreement.

In some of its landmark antitrust cases, the United States Supreme Court has reviewed a past history of antitrust violations and concluded with its oft-repeated admonition, "Size carries with it an opportunity for abuse that is not to be ignored when the opportunity is proved to have been utilized in the past."<sup>35</sup>

Obviously such evidence of past violations may be so inflammatory as to evoke a challenge under Federal Rule of Evidence 403. This should not, however, cause the court to ignore the probative value of the evidence on the crucial economic issue of whether the structure of the market involved is sufficiently oligopolistic so that conscious parallelism alone can be expected to produce supracompetitive identical pricing by the defendants. If defendants in the past felt the need to resort to agreement to fix prices, this should be powerful and admissible evidence that they recognized that conscious parallelism and the structure of the market alone would not yield the same prices, and that they would need to achieve such prices by illegal agreement. This evidence of past violations truly does tend to exclude the possibility that defendants acted independently, and does so consistently with sound economic theory.

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35. *Am. Tobacco Co. v. United States*, 328 U.S. 781, 796 (1946) (quoting *United States v. Swift & Co.*, 286 U.S. 106, 116 (1932)); *see also* *United States v. Griffith*, 334 U.S. 100, 107 n.10 (1948); *United States v. Paramount Pictures, Inc.*, 334 U.S. 131, 174 (1948).