The Sedona Conference Journal

Volume 7 2006

The Sedona Conference Commentary on the Role of Economics in Antitrust Law

The Sedona Conference

Recommended Citation: The Sedona Conference, *Commentary on the Role of Economics in Antitrust Law*, 7 SEDONA CONF. J. 69 (2006).

THE SEDONA CONFERENCE COMMENTARY ON THE ROLE OF ECONOMICS IN ANTITRUST LAW

The Sedona Conference Working Group on The Role of Economics in Antitrust Law
Sedona, AZ
Editor: Daniel R. Shulman, Esq.

Editor's Note: The 2005 public comment draft of this document was included in Vol, 6 of this journal. This is the 2006 post-public comment version. This is the work product of the working group as a whole, and does not necessarily represent the views of any of the individual participants, members or observers or their employers, clients, or any other organizations to which any belong, nor does it necessarily represent official positions of The Sedona Conference.®

TABLE OF CONTENTS

INTRODUCTION

A. The Working Group on the Role of Economics in Antitrust

The Working Group on the Role of Economics in Antitrust (WG3) was created by The Sedona Conference®, a nonprofit research and education institute dedicated to the advanced study of law and policy in the areas of antitrust, complex litigation, and intellectual property. This Working Group is one of several working groups that have operated under the auspices of The Sedona Conference®. Other Working Groups have been (or are) concerned with electronic document retention and production; protective orders, confidentiality and public access; the intersection of the patent and antitrust laws; and claim construction in patent litigation. The purpose of the this Working Group is to define those areas of antitrust where economic analysis and economic evidence can make important contributions and to specify the nature and types of economic analysis and evidence that will be most helpful to courts in reaching decisions that will further the reasoned development of the law. The Working Group is also concerned with those areas of antitrust where economics may assume an inappropriate role that could be counterproductive in furthering the objectives of either the antitrust laws or of the Federal Rules of Civil Procedure.

In the mid-twentieth century, economic efficiency began to emerge as one of the principal goals of antitrust law. Some believe that efficiency should be the only goal, while others believe that antitrust law does (and should) embody other goals, such as protecting consumers, and perhaps that it should embrace noneconomic goals as well. In any event, the use of economic evidence and argument in antitrust cases has increased dramatically during the last several decades. As the brief history below of the use of economics in antitrust law suggests, economic issues gradually have overtaken noneconomic concerns so that, in the twenty-first century, economics has come to pervade virtually all aspects of antitrust cases, finding its way into every procedural step and numerous substantive issues.

In the spring of 2004, The Sedona Conference® Working Group on the Role of Economics in Antitrust was formed. The Working Group is composed of judges, attorneys, and academics experienced in antitrust issues. Initially, these participants focused their attention on a range of issues: best practices under Federal Rule of Civil Procedure 26 and Federal Rule of Evidence 702; best practices under Federal Rule of Civil Procedure 56; best practices for the use of economic evidence and testimony at trial; inappropriate use of economic evidence and testimony; the appropriate use of economic evidence and testimony in proof of concerted action; competitive harm and the appropriate means of proving it; and the use of economic evidence and testimony in analyzing and classifying commercial arrangements. Subgroups were formed to report on all of these matters.

The entire Working Group met for two days in mid-May 2004 to discuss the reports of the subgroups and to narrow the issues on which the Working Group would ultimately make recommendations. During that meeting, participants reviewed and discussed the subgroup reports as well as grappling generally with the appropriate approaches to the use of economics in antitrust, noting that the topic raises not only issues of procedure and timing, but also issues regarding the appropriate form of economic analysis; sufficiency, weight, and admissibility of economic evidence at trial; and the incorporation of substantive law in economic analysis. Working Group participants discussed numerous variations among circuits and district courts in the application of antitrust principles that run the gamut from inconsistency in defining basic terms for economic analysis to using economic analysis in situations where it is neither needed nor useful. Among the areas of confusion/divergence among the courts that the Group discussed were the following: proof of competitive harm and competitive benefit and their measurements; inconsistencies in the language used to analyze cases (*e.g.*, "business justification" vs. "efficiency"), with courts often using terms differently from both economists and the general business world; whether an economist can be useful to demonstrate evidence of intent; the types and amounts of proof needed to show concerted action in circumstantial cases; the best methods to identify and apply oligopoly principles when they become relevant in litigation; what evidence is necessary to show conduct contrary to economic self interest; the appropriate methods for establishing market power and for market definition; economists' views on those subjects; and conditions other than market share that are indicative of market power.

In addition, participants discussed the increases in costs and complexity of litigation stemming from the increased use of economics (a prime example of which is the ubiquitous battle of the experts that inevitably occurs in antitrust cases, which has been rendered even more complex by the use of court-appointed experts, thus expanding and extending discovery and motion practice); whether economic experts are being asked to perform analyses they deem unproductive (such as using an economist to determine whether market power exists); and whether parties are using economic experts inappropriately at various stages of antitrust cases (such as when an expert opines on the merits of a case at the class certification stage).

Ultimately, the Working Group decided on a format aimed at providing immediate benefit to bench and bar by addressing both the present state of the law (highlighting issues that have not been addressed uniformly by the courts) and suggesting best practices for the use of economics in several important areas. The Working Group then drafted Principles that set forth the Group's recommendations in each of these areas. Each Principle is accompanied by background material that provides its context. It is followed by comments that help to explain and clarify the application of the Principle. Because the use of economics in antitrust turns on evidence produced through experts, these Principles begin with Fed. R. Evid. 702, the rule governing expert testimony in general. In dealing with Rule 702, the Group discusses *Daubert* and its ramifications for antitrust cases. From that starting point, the Principles consider the application of procedural rules to the use of economic evidence, particularly Federal Rules of Civil Procedure 12, 16, and 26 and the use of economics for class certification motions under Rule 23. Turning to substantive issues in antitrust cases, the Principles then address use of economics to prove concerted action, injury to competition, and market definition.

B. The Historical Development of Antitrust and Economics

Antitrust is now well into its second century. It began in 1890 when Congress, reacting to a widespread public apprehension and unease over the growing power of large-scale business consolidations, enacted the Sherman Act. After initially applying the law literally, the Supreme Court read a "rule of reason" into the Sherman Act in 1911. Congress then responded with the Clayton Act in 1914, which targeted specific restraints (price discrimination, tying, interlocking directorates, corporate acquisitions), but only when those restraints were likely to lessen competition or generate a tendency to monopoly. In that same year, Congress also enacted the Federal Trade Commission Act, creating a new independent agency and conferring upon it power to prohibit "unfair methods of competition."

Although the language of the antitrust laws refers to economic concepts (restraint, monopolization, lessening of competition, tendency to monopoly), economic analysis took some time to enter fully into antitrust discourse. First, the literal approach that the Court took to the language of the Sherman Act initially impeded its entry. Then the courts had to deal with the troublesome contentions that the rule of reason applied substantively, so as to justify price-fixing agreements that set "reasonable" prices. Eventually, it became clear that the antitrust laws were concerned with protecting the competitive process. Even so, the meaning of competition in popular discourse has been sufficiently imprecise as to allow a wide variety of noneconomic strains to affect the development of the law.

Non-economic Concerns

Indeed, although the law has been recognized as concerned with "competition" and its preservation, the elasticity of the meaning of competition has allowed a variety of somewhat overlapping noneconomic goals to vie for inclusion in the law's concerns. These noneconomic concerns tend (albeit not exclusively) to be varieties of populist ones. Among these noneconomic concerns have been: (1) concerns with bigness as such, *see United States v. Columbia Steel Co.*, 334 U.S. 495, 535 (1948) (Douglas, J., dissenting); (2) concerns that competitors be treated fairly, Carl Kaysen & Donald F. Turner, *Antitrust Policy: An Economic and Legal Analysis* 16 (1959); Mary L. Aczuenaga, *Network Externalities and Other Internet Antitrust Issues*, PLI, N.Y., June 14-15, 1999, at

1178; (3) concerns with the protection of small businesses[1]; (4) concerns with the dispersion of economic and social power, Robert Pitofsky, *Challenges of the New Economy: Issues at the Intersection of Antitrust and Intellectual Property*, 68 Antitrust L.J. 913, 914 n.2 (2001); Robert Pitofsky, *The Political Content of Antitrust*, 127 Penn. L. Rev. 1051, 1054, 1061-65 (1979); (5) Jeffersonian concerns with local control over business firms, *United States v. Aluminum Co. of America*, 148 F.2d 416, 429 (2d Cir. 1945); (6) the promotion of equal opportunity[2] and (7) the maintenance of inter-firm rivalry. Harry S. Gerla, *Restoring Rivalry as a Central Concept in Antitrust Law*, 75 Neb. L. Rev. 209, 211-23 (1996). Sometimes antitrust rhetoric has suggested that one or more of these noneconomic concerns should trump concerns with efficiency. Sometimes these concerns have skewed the way that the law has attempted to foster competition. Sometimes court decisions have been construed by observers as furthering one or more of these noneconomic concerns.

At mid-century most antitrust observers assumed that non-economic considerations would play a role in the application of antitrust law, although later this assumption would be critically assessed. Writing in 1959, Kaysen and Turner, for example, identified several goals of antitrust policy, besides economic performance. Kaysen & Turner, *id*. at 11. Thomas Kauper, writing in 1968, suggested that the inclusion of noneconomic values in antitrust decision-making while preserving consistency in the law's application would test the Court's skill. Thomas E. Kauper, *The "Warren Court" and the Antitrust Laws: Of Economics, Populism, and Cynicism*, 67 Mich. L. Rev. 325, 331 (1968). By 1978, Robert Bork made his case for the furtherance of economic efficiency as the sole goal of antitrust law, in substantial part on the ground that such a goal was essential to consistent and effective administration of the law. Robert H. Bork, *The Antitrust Paradox: A Policy at War with Itself* 79-89 (1978). A prolonged debate in the literature then followed. Although many observers have assumed that the Bork (or Chicago-school) position that has advocated efficiency as the sole antitrust goal has prevailed, in fact it appears, at least in Section 7 merger cases, that some courts have also adopted a maximizing of consumer surplus standard as a guide to the administration of the law.

Economic Concerns

Even within its core concern with economic competition, courts and observers have expressed a variety of views as to the precise focus of the antitrust laws. And the direction that economic input has taken has varied over the years. Economic input in the form of argument and evidence appeared to rise to substantial levels during the middle decades of the twentieth century, when the Court began using such concepts as cross-elasticity of demand, *United States v. E.I. Du Pont de Nemours & Co.*, 351 U.S. 377, 400 (1956), and entry barriers, *American Crystal Sugar Co. v. Cuban American Sugar Co.*, 259 F.2d 254, 531 n.10 (2d Cir. 1958). It was during the 1950s that the structure-behavior-performance paradigm was developed and began to influence thinking about antitrust law. Joe S. Bain, *Industrial Organization* (1959); Edward Mason, *The Current State of the Monopoly Problem in the United States*, 62 Harv. L. Rev. 1265, 1282-85 (1949). *See also* Leonard W. Weiss, *Structure, Conduct and Performance* (1991); Kaysen & Turner, id. at 60. Thus, during this period, economists, led by Joe Bain, readily connected large market shares with monopoly-like behavior and welfare losses. Joe S. Bain, *Barriers to New Competition* 217-18 (1956). Many of these economists believed that scale economies were exhausted at relatively low levels of output and therefore could not provide a justification for large market shares that were otherwise undesirable. Indeed, scale economies were sometimes deemed to constitute entry barriers.[3] These views began to be incorporated into antitrust law when the courts began to apply the 1950 amendments to the Clayton Act. The first such case reached the Supreme Court in 1962. Thereafter the Court rearticulated in increasingly stringent form the standards barring horizontal mergers that it found in that law.

---

1. During some periods, the case law has evidenced a concern with the protection of small businesses. Judge Learned Hand manifested this concern in his 1945 *Alcoa* opinion. *United States v. Aluminum Co. of America*, 148 F.2d 416, 429 (2d Cir. 1948). The Supreme Court took that approach in its 1962 Brown Shoe decision. *Brown Shoe Co. v. United States*, 370 U.S. 294, 344 (1962). Indeed, in *Brown Shoe*, the Court identified efficiencies resulting from vertical integration as factors counting against the lawfulness of the merger under review, on the ground that those efficiencies would disadvantage rival unintegrated shoe retailers.
2. Stephen F. Ross, Network Effects and the Limits of GTE Sylvania's Efficiency Analysis, 68 Antitrust L.J. 945, 947 (2001). Ross refers to this concern as a "Jacksonian" one, citing President Andrew Jackson's opposition to the Bank of the United States and its rationale.
3. Bain concluded that in many industries a reduction in plant scale would not raise unit costs significantly. Bain, *id*. at 81.

Although the Court employed economic concepts in its decisions throughout the 1960s, it was criticized for employing them inconsistently. Kauper, for example, suggested that the Court was manipulating the relevant-market concept to justify its decisions. Kauper, *id*. at 331. During that same era, the Court took an aggressive stance against vertical restraints. Generally, however, the Court did not attempt to justify its vertical restraints decisions with sophisticated economic reasoning.

In the mid 1970s, the Court reshaped the antitrust laws by incorporating economic reasoning into its formulation of behavioral rules. Generally, the new approach treated behavior as lawful unless it fell under the ban of a rule whose existence was justified by economic reasoning. The Court first hinted at its new approach in 1974, when, in a series of merger cases, *United States v. General Dynamics Corp*., 415 U.S. 486 (1974); *United States v. Marine Bancorporation, Inc*., 418 U.S. 602 (1974); United States v. Connecticut National Bank, 418 U.S. 656 (1974), it applied economic reasoning to reject the government's position. (Previously, and throughout the 1960s the Court had decided consistently for the government). That hint was confirmed in 1977 when the Court in *GTE Sylvania* applied the rule of reason to vertical restraints, justifying its decision on the basis of economic literature.

For the last quarter century, the Court has continued on the path marked out by Sylvania: it has repeatedly declared that *per se* rules ought to be applied only to conduct that "would always or almost always tend to restrict competition and decrease output." *Business Electronics Corp. v. Sharp Electronics Corp*., 485 U.S. 717, 723 (1988); *Northwest Wholesale Stationers, Inc. v. Pacific Stationery & Printing Co*., 472 U.S. 284, 289-90 (1985); *National Collegiate Athletic Ass'n v. Board of Regents of Univ. Of Okl*., 468 U.S. 85, 100 (1984); *Broadcast Music, Inc. v. Columbia Broadcasting System*, 441 U.S. 1, 19-20 (1979). As described further below, it has narrowed (or overturned) all of the per se rules in furtherance of this objective. Many observers have described the Court's approach since the mid 1970s as influenced by the so-called Chicago School,[4] whose focus is exclusively on the furtherance of efficiency. Yet, the Chicago School has not in fact completely prevailed. Robert Lande has been the primary spokesperson for an economic approach that would focus upon wealth transfer from consumers to producers as the primary concern of the antitrust laws. Robert Lande, *Wealth Transfers as the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged*, 34 Hastings L.J. 65 (1982). As discussed below, Lande's focus seems to have prevailed in the merger arena.

During the last two decades, a so-called "post-Chicago" approach to antitrust law has been heralded periodically in the literature. Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power Over Price*, 96 Yale L.J. 209 (1986); Herbert Hovenkamp, *Antitrust Policy After Chicago*, 84 Mich. L. Rev. 213 (1985). Much of this post-Chicago approach seems to depart from the standard Chicago approach by its concentration upon the particular circumstances of individual competitive situations (as opposed to Chicago's preoccupation with rules), exploring the strategic possibilities through game theory. The Court's decision in *Eastman Kodak Co. v. Image Tech. Servs., Inc*., 504 U.S. 451 (1992), was seen by some commentators as the beginning of a post-Chicago era. Michael H. Riordan & Steven C. Salop, *Evaluating Vertical Mergers: A Post-Chicago Approach*, 63 Antitrust L.J. 513 (1995). *See also* Steven C. Salop, *The First Principles Approach to Antitrust, Kodak, and Antitrust at the Millennium*, 68 Antitrust L.J. 187 (2002). That prediction, however, does not appear to have come true.

***Per se* rules as limiting economic issues**

Even when the law has focused upon competition in an economic sense, the role allocated to economic learning or economic evidence has been limited by administrative concerns. As already noted, the Sherman Act was initially construed literally. This literal construction narrowed the issues, allocated the narrowed issues to lawyers, and allowed no significant room for economic evidence. At the same time that the Court reversed its literal approach by reading a reasonableness term into the Sherman Act, it also identified a category of restraints that it considered inherently unreasonable.

4. Commentators regularly refer to the dominance of the Chicago school of antitrust analysis. *See, e.g.*, Stephen Calkins, *The October 1992 Supreme Court Term and Antitrust: More Objectivity Than Ever*, 62 Antitrust L.J. 327, 394 (1994).

Thus the Court at this time created a category of restraints that would be open to a wide-ranging inquiry and thus presumably to economic evidence, and a second category-later to be called one of *per se* illegality-that would be condemned summarily with no opportunity for the introduction of economic evidence.

Expansion and contraction of *per se* rules

During the first three quarters of the twentieth century, the Court was creating and expanding a set of per se rules. At first, the *per se* approach (with its concomitant limitations on economic input) was applied to horizontal price-fixing agreements among competitors. In addition to using the *per se* rule against horizontal price fixing agreements, the *per se* rule was expanded over time as a tool to be used against a number of other restraints. Ultimately, the courts would adopt per se rules not only against horizontal price-fixing agreements, but against vertical price-fixing agreements, concerted refusals to deal, tying arrangements, and horizontal market-division agreements. The approach of the courts towards exclusive-supply contracts resembled, at least for a while, a *per se* approach. For a short period of time, the courts also embraced a *per-se* approach to vertical distribution agreements involving the allocation of territories or customers. Beginning in the mid-1970s, however, this process was reversed. Since that time just about all of the *per se* rules have been narrowed. The effect of this narrowing is to make the behavior no longer covered by the per se rules presumptively lawful. The plaintiff challenging that behavior must demonstrate (through economic evidence) that it adversely affects competition in the general (inter-brand) market.

Horizontal price-fixing agreements

Initially the Court shaped a per se rule against price-fixing agreements by competitors who, in the aggregate, possessed significant market power. That appeared to be the way the per se rule was defined in *United States v. Trenton Potteries Co.*, 273 U.S. 392 (1927). Later, in *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150 (1940), Justice Douglas's opinion for the Court dispensed with a showing of market power, on the rationale that the proof of market power imposed an unnecessary burden upon the plaintiff and the courts. Under the *Trenton Potteries* approach, there would be room for economic evidence on market power. But under the *Socony-Vacuum* approach, economic evidence was made irrelevant.

As the Court's approach to antitrust changed in the late twentieth century, the Court permitted economic argument to limit the application of the per se rule against what at first appeared to be horizontal price fixing in the *BMI* case. *Broadcast Music, Inc. v. Columbia Broadcasting System, Inc.*, 441 U.S. 1 (1979). In that case, copyright licensing carried out by a common agent for thousands of rival copyright holders on musical compositions generated substantial cost savings, and brought to the market a new product, the blanket music license. These savings and the Court's lack of familiarity with the competitive effects of the blanket license persuaded the Court that the arrangement should be assessed under the rule of reason.

Vertical price-fixing agreements

Beginning in 1911, the per se approach was used to condemn vertical price-fixing agreements. Indeed, in *Dr. Miles Medical Co. v. John D. Park & Sons Co.*, 220 U.S. 373 (1911), the first case in which the Court condemned vertical price fixing, the Court at first expressed puzzlement over why a manufacturer would want to control the resale price of its products. It cut short inquiry into that matter, however, by summarily equating vertical price-fixing with horizontal price-fixing. On that rationale, it generated a *per se* approach towards vertical price-fixing agreements, and effectively excluded economic evidence relating to vertical price-fixing, its motivations, and effects.

The economic analysis of vertical price-fixing agreements set forth by Lester Telser in 1960, *Why Should Manufacturers Want Fair Trade*? 3 J.L. & Econ. 86 (1960), argued that the Court's failure to pursue its inquiry into the reason manufacturers wanted to control resale prices was a mistake. Telser concluded that resale price maintenance is generally benign. Other scholars, including Scherer and Comanor, have disputed Telser's position. F.M. Scherer, *The Economics of Vertical Restraints*, 53

Antitrust L.J. 687 (1983); William S. Comanor, *Vertical Price Fixing, Vertical Market Restrictions, and the New Antitrust Policy*, 98 Harvard L. Rev. 983 (1985). Not surprisingly, the Court has been attuned to academic debate over its treatment of vertical price-fixing agreements. In its 1988 decision in *Business Electronics Corp. v. Sharp Electronics Corp.*, 485 U.S. 717 (1988), Justice Scalia (speaking for the Court) provided a rationale for treating those agreements as *per se* illegal: vertical price-fixing agreements facilitate horizontal cartels at the supplier level by making it more difficult for cheaters to dispose of their excess supplies. The limited rationale for the *per se* rule against vertical price-fixing contracts set forth in *Business Electronics* suggests that there may be room for economic arguments that would some day limit the *per se* rule against vertical price-fixing contracts to contexts in which there is a horizontal cartel or an oligopoly.

In *State Oil Co. v. Khan*, 522 U.S. 3 (1987), the Court further limited the *per se* rule in vertical price-fixing cases, by holding that maximum resale price maintenance would henceforth be treated under the rule of reason, leaving only minimum resale price maintenance *per se* illegal.

Concerted refusals to deal

In *Fashion Originators' Guild of America, Inc. v. FTC*, 312 U.S. 457 (1941), the Court began the fashioning of a *per se* rule against concerted refusals to deal. The Court's opinion in that case made reference to the market shares represented by the defendants and thus carried a suggestion that the *per se* rule would be applied only to defendants that in the aggregate possessed substantial market shares. But in *Klor's, Inc. v. Broadway-Hale Stores, Inc.*, 359 U.S. 207 (1959), the Court indicated that neither market share nor market power was an issue in a concerted refusal to deal case. After the *Klor's* decision, the scope of the per se rule against concerted refusals to deal appeared to be both broad and open-ended. The Court cut back on the scope of that rule in *Northwest Wholesale Stationers* in 1985. *Northwest Wholesale Stationers, Inc. v. Pacific Stationery & Printing Co.*, 472 U.S. 284 (1985). It subsequently confirmed its new approach in its *NYNEX* decision. *NYNEX Corp. v. Discon, Inc.*, 525 U.S. 128 (1998).

Tying

A *per se* rule applicable to tying arrangements emerged from the Court's patent misuse decisions. No economic evidence or economic argumentation was allowed in early twentieth-century misuse cases such as *Motion Picture Patents Co. v. Universal Film Manufacturing Co.*, 243 U.S. 502 (1917), and *Carbice Corp. of America v. American Patents Development Corp.*, 283 U.S. 27 (1931), where judgment was rendered as a legal determination about the extent of patent protection. By the mid 1940s, non-patent related tying was being treated as *per se* unlawful. *International Salt Co., v. United States*, 332 U.S. 392 (1947); *Mercoid Corp. v. Mid-continent Inv. Co.*, 320 U.S. 661 (1944); *Mercoid Corp. v. Minneapolis-Honeywell Regulator Co.*, 320 U.S. 680 (1944). Tying ultimately was treated as unlawful under the Clayton Act whenever it involved any substantial amount of commerce, and as *per se* unlawful under the Sherman Act whenever the defendant was deemed to possess significant power in the tying product market and a substantial amount of commerce in the tied-product market was affected. *Times-Picayune Pub. Co. v. United States*, 345 U.S. 594 (1953). By the 1960s these two conditions tended to merge; whenever a substantial amount of commerce in the tied-product market was affected, the courts concluded that the defendant possessed market power in the tying product. *Fortner Enterprises, Inc. v. United States*, 394 U.S. 495 (1969); *Northern Pacific Ry. v. United States*, 356 U.S. 1 (1958). As a result, the *per se* rule under the Sherman Act collapsed into the governing rule under the Clayton Act. Whereas economic evidence was at least potentially relevant in determining the defendant's power over the tying-product market, the increasing stringency of the *per se* rule during this period limited the role of economic evidence.

The *per se* rule governing tying arrangements was narrowed in *Jefferson Parish Hospital District No. 2 v. Hyde*, 466 U.S. 2 (1984), where the Court ruled that a tie of anesthesiological services to hospital services by a hospital with less than a 30% market share could not be subjected to a *per se* rule. In that decision, four members of the Court argued in a concurring opinion that the per se rule against tying should be abolished. More recently, the D.C. Circuit ruled that the *per se* rule against tying arrangements should not apply to tying involving platform software. *United States v.*

Microsoft Corp., 253 F.3d 34 (D.C. Cir. 2001). The court's position was based upon the rationale that otherwise innovation would likely be inhibited, because innovation in platform software has often taken the form of incorporating functionalities into the platform that previously were separately marketed. This decision not only limits the per se rule, but may provide new impetus to the arguments put forth in the *Jefferson Parish* concurring opinion that the *per se* rule against tying should be abandoned.

An interesting question involving tying-perhaps largely of theoretical importance-is whether a monopoly seller would be "monopolizing" if it employed tying practices to imitate the behavior of a perfectly discriminating monopolist by selling to each customer at its reservation price. The old *IBM* case, *International Bus. Mach. Corp. v. United States*, 298 U.S. 131 (1936), involved the use of a tie (punched cards tied to computing machines) to come as close as possible to charging each category of user its reservation price. That issue appears to turn upon whether the antitrust laws are primarily concerned with efficiency or with protecting consumers against wealth transfers to producers.

Horizontal territorial allocation agreements

Agreements between competitors allocating territories have long been treated as *per se* illegal. Indeed, the courts have probably treated horizontal market division agreements as effectively *per se* illegal since the *Addyston Pipe* decision in 1899, *United States v. Addyston Pipe & Steel Co*., 85 Fed. 271 (6th Cir. 1898), *aff'd*, 175 U.S. 211 (1899), a decision predating by twelve years the Supreme Court's adoption of the rule of reason. Horizontal market division agreements were treated as *per se* illegal by the Court in *Timken Co. v. United States*, 341 U.S. 593 (1951), and more recently in *Palmer v. BRG of Georgia, Inc*., 498 U.S. 46 (1990). Probably the most expansive use of the *per se* rule to condemn territorial allocation agreements occurred in *United States v. Sealy, Inc*., 388 U.S. 350 (1967), and *United States v. Topco Associates, Inc*., 405 U.S. 596 (1972). Substantial economic arguments were available in those cases to show that the agreements in fact enhanced competition, by enabling small or medium-size companies to compete better with larger rivals. By treating the arrangements as per se illegal, however, the Court made these potential economic justifications irrelevant.

In 1986, Judge Robert Bork reasoned in *Rothery Storage & Van Co. v. Atlas Van Lines, Inc*., 792 F.2d 210 (D.C. Cir. 1986), that because of subsequent Supreme Court decisions, the per se rule against territorial allocation agreements among competitors set forth in *Sealy* and *Topco* no longer applied to agreements ancillary to a joint venture (such as the contractually integrated moving enterprise that was involved in the case before him or the integrations involved in *Sealy* or *Topco*).

Exclusive supply contracts

In 1949, the Court decided that exclusive supply contracts should be treated as unlawful under section 3 of the Clayton when they foreclosed a "substantial share" of the affected line of commerce. This formulation preserved a role for economic evidence in the determination of relevant market. Both economic evidence and argument would be potentially useful on other issues, such as when the length of the agreements made them unreasonable. By 1974, the courts appeared open to economic arguments that long-term supply arrangements were sometimes necessary to facilitate investment and financing. *United States v. General Dynamics Corp*., 415 U.S. 486, 500-01 (1974). Exclusive supply contracts are now governed by the rule of reason. *Roland Machinery Co v. Dresser Industries, Inc*., 749 F.2d 380, 393 (7th Cir. 1984). *See also Omega Environmental, Inc. v. Gilbarco, Inc*., 127 F.3d 1157, 1163 (9th Cir. 1997). As a result, there is a wide opening for economic evidence in this class of cases as well.

Vertical distribution agreements

For a short period of time, vertical agreements restricting the territories in which distributors sold or the identities of their customers were treated as *per se* illegal. *United States v. Arnold Schwinn & Co*., 388 U.S. 365 (1967). Economic arguments were the basis for the decision in

Continental T.V., Inc. v. GTE Sylvania, Inc., 433 U.S. 36 (1977), overruling *Schwinn*, and overturning the *per se* rule that had been applied to vertical agreements restricting distributors' sales territories and customers, which now fall under the rule of reason.

Economic issues in merger evaluation

During the 1960s, the Court repeatedly decided the merger cases before it in favor of the government, and was criticized for its inconsistent use of relevant market concepts during that period. Indeed, in its *Pabst* decision, *United States v. Pabst Brewing Co.*, 384 U.S. 546, 549 (1966), the Court (through Justice Black) even suggested that the relevant market concept was dispensable. In the merger arena, economic issues have become increasingly important since the Court's trio of decisions in 1974 in *United States v. General Dynamics Corp.*, 415 U.S. 486 (1974), *United States v. Marine Bancorporation, Inc.*, 418 U.S. 602 (1974), and *United States v. Connecticut National Bank*, 418 U.S. 656 (1974). The Court confirmed the importance of identifying and proving a relevant market in *Connecticut National Bank*. In *General Dynamics*, the Court declined to allow inferences of market power to be drawn based on evidence of low market shares. And it allowed economic argument to redefine the applicability of its potential-competition doctrine in *Marine Bancorporation*. Beginning in 1982, merger guidelines promulgated by the Justice Department, U.S. Dep't of Justice, *1982 Merger Guidelines*, 4 Trade Reg. Rep. (CCH) Paragraph 13,102; U.S. Dep't of Justice, *1984 Merger Guidelines*, 4 Trade Reg. Rep. (CCH) Paragraph 13,103, and then later jointly by the Justice Department and the Federal Trade Commission, U.S. Dep't of Justice & FTC, 1992 Merger Guidelines, 4 Trade Reg. Rep. (CCH) Paragraph 13,104 (as amended 1997), have established criteria for the types of evidence to be used in the evaluation of mergers. These guidelines make a range of economic evidence relevant. Such evidence includes evidence about market, cross-elasticity of demand, concentration, and potential entry.

Among the critical economic issues affecting mergers is the applicability of an efficiencies defense, including the applicability of the so-called Williamson tradeoff.[5] The courts have verbally endorsed an efficiencies defense, but the courts of appeal have not yet clearly applied such a defense. Many courts (both district courts and courts of appeals) have insisted upon some "passing on" of the benefits of efficiencies to consumers as a condition of recognizing an efficiencies defense. *FTC v. Cardinal Health, Inc.*, 12 F.Supp.2d 34, 62 (D.D.C. 1998); *FTC v. University Health, Inc.*, 938 F.2d 1206, 1223 (11th Cir. 1991); *FTC v. Butterworth Health Corp.*, 946 F.Supp.1285 (W.D. Mich. 1996), *aff'd*, 121 F.3d 708 (6th Cir 1997); *FTC v. Swedish Match*, 131 F.Supp.2d 151, 172 (D.D.C. 2000); *United States v. United Tote, Inc.*, 768 F. Supp. 1064, 1084-85 (D. Del. 1991); *California v. American Stores*, 697 F. Supp. 1125, 1133-34 (C.D. Cal. 1988), *aff'd in part and rev'd in part*, 872 F.2d 837 (9th Cir. 1989), *rev'd*, 495 U.S. 271 (1990). This "passing on" language seems to be an endorsement of a consumer-surplus maximization standard of evaluation and thus a rejection of the Williamson tradeoff (which is a total surplus maximization standard). Indeed, it might be beneficial were the courts to drop the passing-on language and instead forthrightly adopt a consumer-surplus maximization standard, as the latter term is less prone to misunderstanding. *See* Paul L. Yde & Michael G. Vita, *Merger Efficiencies: Reconsidering the "Passing On" Requirement*, 64 Antitrust L.J. 735, 742 (1996).

In at least one hospital merger case, a court was persuaded by purportedly economic evidence that there was a correlation between increased concentration and lower prices to consumers. *FTC v. Butterworth Health Corp.*, 946 F. Supp. 1285 (W.D. Mich. 1996), *aff'd*, 121 F.3d 708 (6th Cir. 1997). If the courts' embrace of a passing-on requirement is in fact an adoption of a consumer-surplus standard, then the Robert Lande position that the prevention of wealth transfers from consumers to producers constitutes the primary purpose of Section 7 appears to be correct. Both the courts and the merger guidelines appear to embrace an approach to an efficiencies defense that requires evidence of greater efficiencies to offset greater anticompetitive effects likely to result from a

5. Oliver Williamson, *Economies as an Antitrust Defense: The Welfare Tradeoffs*, 58 Am. Econ. Rev. 18 (1968). Although the Chicago school is associated with an exclusive focus upon efficiency, two of the most prominent Chicago-school scholars have argued against the allowance of an efficiencies defense in merger cases. Robert Bork, *The Antitrust Paradox* 124-29 (1978); Richard Posner, *Antitrust Law* 112 (1976).

proposed merger. The strongest such case may have been the recent proposed Heinz/Beech-Nut merger where evidence of substantial efficiencies was deemed inadequate because of the high-levels of concentration.[6]

Summary

In summary, the history of the antitrust laws shows a continuing struggle over the scope for economic evidence and economic argumentation. Throughout the earlier history of those laws, economics had to vie with other, largely populist concerns for recognition in decision making. *Per se* rules limit the role for economic input (both evidence and argument). Today, *per se* rules have narrowed. The result is that most behavior is presumed to be lawful. Economic argument can be useful in working out the boundaries of *per se* rules. It would be potentially available for arguments (on both sides) on whether to retain *per se* rules whose value has been questioned (such as those involving tying and those involving vertical price-fixing agreements).

The chapters hereafter will review both the proper procedural constraints to be applied to the use of economic evidence in antitrust cases, as well as those areas of substantive law where the Working Group believes economic evidence can make a valuable contribution.

6. *FTC v. H.J. Heinz Co.*, 246 F.3d 708 (D.C. Cir. 2001). The *Heinz* decision is reviewed, *inter alia*, in Jonathan B. Baker, *Efficiencies and High Concentration: Heinz Proposes to Acquire Beech-Nut*, in The Antitrust Revolution: Economics, Competition and Policy (4th ed., 2004, John E. Kwoka, Jr. & Lawrence J. White, eds.).

CHAPTER I.
BEST PRACTICES IN APPLYING FEDERAL RULE OF EVIDENCE 702 TO EXPERT ECONOMIC TESTIMONY IN ANTITRUST CASES

INTRODUCTION

The admissibility of economic testimony, like all other expert testimony, is governed by Federal Rule of Evidence 702. As amended in 2000 in the wake of the landmark decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), Rule 702 provides:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Rule 702 has been said to impose "a trilogy of restrictions on expert testimony: qualification, reliability and fit." *Schneider v. Fried*, 320 F.3d 396, 404 (3d Cir. 2003). *See also Club Car, Inc. v. Club Car (Quebec) Import, Inc.*, 362 F.3d 775, 780 (11th Cir. 2004) ("Expert testimony is admissible if (1) the expert is qualified to testify on the topic at issue, (2) the methodology used by the expert is sufficiently reliable, and (3) the testimony will assist the trier of fact."). As elaborated below, economic testimony is inadmissible in an antitrust case unless:

(1) the witness is an expert in the relevant aspects of economics,
(2) the testimony is well grounded in relevant aspects of economics, and
(3) the testimony applies the tools of economics to the facts of the case.

Qualifications

PRINCIPLE I-1: The qualifications of an economic expert must be evaluated in the light of the specialized nature of the analysis that may be performed in antitrust cases.

COMMENT

Rule 702 requires "specialized expertise," *Schneider*, 320 F.3d at 404, and the "*Daubert* test must be applied with due regard for the specialization of modern science." *Dura Automotive Systems of Indiana, Inc., v. CTC Corp.*, 285 F.3d 609, 614 (7th Cir. 2002) (Posner, C.J.). Economics is highly specialized, as are many of the particular applications of economics in antitrust cases. A witness with a Ph.D. in economics, and even a Nobel Prize, nevertheless may be unqualified to testify about a particular issue or to apply a particular method. Indeed, antitrust law raises issues, such as the definition of the relevant market, not commonly or widely addressed by many fields of study in economics, and only expertise on market definition can qualify a witness to testify on the relevant market. *Cf. Nelson v. Monroe Regional Medical Center*, 925 F.2d 1555, 1572 (7th Cir. 1991) (concurring opinion) (A respected Ph.D. economist with "no background in antitrust markets" and not "a member of any associations or industrial organization groups which form the bulwark of economists specializing in antitrust law and economics" was not qualified to testify on the relevant market.). Moreover, a witness lacking a Ph.D. in economics but experienced in particular methods used in antitrust may be well qualified to testify using such methods.

PRINCIPLE I-2: The qualifications of an economic expert should be evaluated on the basis of training and experience with the particular issues addressed and methods employed, as well as familiarity with relevant scholarly literature.

COMMENT

Neither advanced training in economics nor extensive testimonial experience necessarily qualifies a witness as an expert on any particular issue or analytic method. Rather, a witness must have training and experience on the issues addressed and methods applied. *See Berry v. City of Detroit*, 25 F.3d 1342, 1351 (6th Cir. 1994) (A court should examine "not the qualifications of a witness in the abstract, but whether those qualifications provide a foundation for a witness to answer a specific question.").

The required training and experience depend on the degree of specialization of the issues addressed and methods applied. For example, expert economic testimony in antitrust cases may entail the use of multiple regression or other econometric techniques. *See generally* Daniel L. Rubinfeld, *Reference Guide on Multiple Regression*, in REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 181 (Federal Judicial Center, 2d ed. 2000). General training in economics at the Ph.D. level normally qualifies a witness as an expert on basic applications of basic econometric methods. On more subtle and complex issues, only a witness specializing in econometrics may be qualified. On those rare occasions when economic evidence in a case involves fine points of certain highly specialized techniques, only econometricians with even more specialized knowledge of those particular techniques may be qualified. *See Dura Automotive Sys. v. CTC*, 285 F.3d at 613-14. Of course, a well-trained econometrician is qualified to apply or assess methods never before encountered when they are modest extensions of familiar principles. Nor is this Principle intended to prevent economists from employing their expertise to apply or assess methods not previously encountered where their expertise qualifies them to make use of such methods.

A witness with little or no formal training in economics almost certainly is not qualified to offer testimony with a purported basis in economics. *See Berlyn, Inc. v. Gazette Newspapers, Inc.*, 214 F. Supp. 2d 530, 537 (D. Md. 2002) (excluding testimony on the relevant market by a witness lacking "specific education, training, or experience in economics or antitrust analysis"); *Virginia Vermiculite Ltd. v. W.R. Grace & Co.-Connecticut*, 98 F. Supp. 2d 729, 733 (W.D. Va. 2000) (excluding testimony on the relevant market by a witness lacking the "skill and training of a professional economist necessary to define a relevant market for antitrust purposes"). Similarly, a witness with formal training in economics but totally out of touch with developments in economics over several decades is unqualified to testify about many issues to which such developments are pertinent.

A witness who has published widely on a particular issue or analysis is almost certainly qualified to testify on that issue. The only exception might be a witness with views so far outside the mainstream as to be considered wholly irrational and unsupported. And a witness who has confronted an issue or applied a method many times in professional work most likely has acquired the requisite expertise.

Reliability

PRINCIPLE I-3: To be admissible, testimony from a witness qualified as an expert in aspects of economics must be based on the tools of economics.

COMMENT

As stated by the Advisory Committee Notes to the 2000 amendments of Rule 702, an "expert's testimony must be grounded in an accepted body of learning or experience in the expert's field, and the expert must explain how the conclusion is so grounded." Thus, the testimony of a witness qualified as an expert in economics is admissible only to the extent that the opinions expressed derive from the application of the tools of economics, i.e., only to the extent that they are supported by economic reasoning or predicated on formal economic models or empirical methods used in economics. *Cf. Worldwide Basketball and Sports Tours, Inc. v. NCAA,* 273 F. Supp. 2d 933, 944 (S.D. Ohio 2003) (excluding purely "conclusory" testimony on submarket).

As the Supreme Court held in *General Electric Co. v. Joiner*, 522 U.S. 136, 146 (1997), "nothing requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered." *See also R.J. Reynolds Tobacco Co. v. Premium Tobacco Stores, Inc.*, 2004-2 Trade Cas. (CCH) Paragraph 74,491, at 99,779 (N.D. Ill. 2004) ("If the applicable data and the proffered opinion are separated by an analytical chasm, it cannot be bridged solely by the expert's say-so . . . ."). Nor can the gap between the data and the opinion be bridged through the mere utterance of economic jargon, such as vague references to econometric methods like "multiple regression" or theoretical constructs like "oligopoly theory." A witness purporting to rely on econometric methods or economic models must describe the methods or models in sufficient detail to communicate the particular methods or models on which the witness purports to rely. A witness also must provide the economic reasoning that explains why the methods or models are relevant and how they support the conclusion reached.

Economic experts may be called upon to draw inferences from statements by market participants or to interpret documents, and the lens of economics certainly may bring such evidence into sharper focus. But testimony from a witness qualified as an expert in aspects of economics must be excluded if the principles of economics are not being applied. For example, the application of the tools of economics can never support a conclusion that documentary evidence itself demonstrates that a conspiracy existed, or that it did not. *Cf. City of Tuscaloosa v. Harcros Chemicals, Inc.*, 158 F.3d 548, 565 (11th Cir. 1998) (affirming exclusion of statistician's "characterizations of documentary evidence as reflective of collusion"). In contrast, the tools of economics, properly applied, can support testimony that certain conduct was, or was not, consistent with the pursuit of unilateral self-interest.

Of course, an economist may have relevant expertise not strictly within the field of economics and may be qualified as an expert not just in aspects of economics. For example, an economist may be an expert in aspects of statistics or in specialized methods developed for antitrust such as the hypothetical monopolist test of the *Horizontal Merger Guidelines* promulgated by the U.S. Department and Federal Trade Commission. *See generally* Gregory J. Werden, *The 1982 Merger Guidelines and the Ascent of the Hypothetical Monopolist Paradigm*, 71 ANTITRUST L.J. 253 (2003).

PRINCIPLE I-4: For testimony to be admissible, an expert economist must articulate "good grounds" in economics for the expert's opinions.

COMMENT

The proponent of expert testimony has the burden of establishing its admissibility. *Oddi v. Ford Motor Co.*, 234 F.3d 136, 144 (3d Cir. 2000); *Lust v. Merrell Dow Pharmaceuticals, Inc.*, 89 F.3d 594, 598 (9th Cir. 1996). And an "expert's opinion must be based on the 'methods and procedures of science' rather than on 'subjective belief or unsupported speculation'; the expert must have 'good grounds' for his or her belief." *In re Paoli R.R. Yard PCB Litigation*, 35 F.3d 717, 742 (3d Cir. 1994) (quoting *Daubert*, 509 U.S. at 590). The testimony of a witness qualified as an expert in aspects of economics, therefore, is inadmissible unless it sets out grounds in economics for the opinions offered that are sufficient to make out a prima facie case for admissibility of the testimony. To make out a prima facie case for admissibility, expert economic testimony must identify the specific economic reasoning, and models or methods of economics (if any) supporting each opinion expressed, the rationale for applying those models and methods, and the economic logic that connects them to the opinion.

Precisely what is required of a witness "depends upon the particular circumstances of the particular case." *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 150 (1999). "In deciding whether a step in an expert's analysis is unreliable, the district court should undertake a rigorous examination of the facts on which the expert relies, the method by which the expert draws an opinion from those facts, and how the expert applies the facts and methods to the case at hand." *Amorgianos v. National R.R. Passenger Corp.*, 303 F.3d 256, 267 (2d Cir. 2002).

Judge Posner has held that, under Rule 702, an expert "is not permitted to offer evidence that he has not generated by the methods he would use in his normal academic or professional work, which is to say in work undertaken without reference to or expectation of possible use in litigation." *Khan v. State Oil Co.*, 93 F.3d 1358, 1365 (7th Cir. 1996) (Posner, C.J.), *vacated*, 522 U.S. 3 (1997). While this articulation of Rule 702 could preclude any economic testimony based on methods especially developed for use in antitrust, Justice Breyer has explained that all Rule 702 requires is that an expert "employ[] in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999). *See also Lantec, Inc. v. Novell, Inc.*, 306 F.3d 1003, 1025 (10th Cir. 2002) (affirming exclusion of testimony not employing "the same level of intellectual rigor that characterizes an expert in the field of economics and industrial organization").

"Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Daubert*, 509 U.S. at 596. "A minor flaw in an expert's reasoning or a slight modification of an otherwise reliable method will not render an expert's opinion *per se* inadmissible. 'The judge should only exclude the evidence if the flaw is large enough that the expert lacks "good grounds" for his or her conclusions.'" *Amorgianos*, 303 F.3d at 267 (quoting *In re Paoli*, 35 F.3d at 746). But expert economic testimony lacks good grounds to the extent it relies on reasoning, models or methods, or ways of applying them, deemed clearly erroneous by professional consensus. *See State Oil*, 93 F.3d at 1365 (Posner, C.J.) (The testimony of a witness who "failed to conduct a study that satisfied professional norms," is inadmissible even if the witness is "a Ph.D. in economics from a reputable university and an experienced consultant in antitrust economics, and hence qualified to offer expert economic evidence."), *vacated*, 522 U.S. 3 (1997).

Economics may offer several alternative lines of reasoning, models, or methods that may be useful in analyzing a particular issue in an antitrust case, so two differing analyses leading to conflicting conclusions both may have good grounds in economics. *Cf. ID Security Systems Canada, Inc. v. Checkpoint Systems, Inc.*, 198 F. Supp. 2d 598, 603-09 (E.D. Pa. 2003) (admitting both sides' expert economic testimony over objections). "*Daubert* neither requires nor empowers trial courts to determine which of several competing scientific theories has the best provenance. It demands only that the proponent of the evidence show that the expert's conclusion has been arrived at in a scientifically sound and methodologically reliable fashion." *United States. v. Mitchell*, 365 F.3d 215, 244 (3d Cir. 2004).

PRINCIPLE I-5: Expert economic testimony is not rendered unreliable because it runs contrary to case law precedent, nor is it rendered reliable because it is based on precedent.

COMMENT

Antitrust law has embraced economic learning to a significant extent, but there may remain significant tensions between the two. Expert economic testimony departing from legal precedent is properly excluded when it does not "assist the trier of fact to understand the evidence or to determine a fact in issue," *Williamson Oil Co., Inc. v. Philip Morris USA*, 346 F.3d 1287, 1322-23 (11th Cir. 2003); but departing from legal precedent is not a basis for questioning the reliability of economic testimony. A few courts may have held to the contrary. *See City of Tuscaloosa*, 158 F.3d at 567 n.27 (noting that an economist's testimony should have been excluded for a variety of reasons, including that his market definition was "contrary to law"); *Bailey v. Allgas, Inc.*, 148 F. Supp. 2d 1222, 1242-45 (N.D. Ala. 2000) (excluding relevant market testimony in part because it "runs contrary to well-established law").

In addition, the fact that expert economic testimony is firmly grounded in legal precedent is not a basis for finding that it is reliable. There must be good grounds in economics for the testimony no matter how consistent it is with precedent. For example, the testimony of an economic expert on market delineation is inadmissible if the only grounds for the opinion are the "practical indicia" set out in *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962). The "practical indicia" are not economics at all, much less intellectually rigorous economics. Of course, testimony by an economic expert may be admissible if it merely addresses the presence or absence of Brown Shoe indicia or issues implicated by the indicia.

PRINCIPLE I-6: To be admissible, expert economic testimony must be based on sufficient facts or data.

COMMENT

Rule 702 requires that expert testimony be "based upon sufficient facts or data," and expert economic testimony normally must be well grounded in the facts of the industry and the case. *Accord El Aguila Food Products, Inc. v. Gruma Corp.*, 301 F. Supp. 2d 612, 620-24 (S.D. Tex. 2003) (excluding testimony "based on wholly insufficient data" while ignoring "the facts of the case"). A court should be highly suspect of an expert knowing little, and caring little, about the facts. In a notorious case, the district court excluded most of the testimony of a Nobel Prize winning economist because he had inadequate knowledge of the industry. *In re Brand Name Prescription Drugs Antitrust Litig.*, 1999-1 Trade Cas. (CCH) Paragraph 72,446, at 84,126-28 (N.D. Ill. 1999).

The extent of the grounding in fact required for expert economic testimony, however, necessarily depends on the subject matter of the testimony. In the notorious case just mentioned, the court of appeals held that "the district judge erred in excluding [the] testimony *on the grounds that he did*," because the point of the testimony was something "[e]veryone knows" without studying the industry. Hence, extensive factual knowledge was unnecessary. *In re Brand Name Prescription Drugs Antitrust Litig.*, 186 F.3d 781, 786 (7th Cir. 1999) (Posner, C.J.) (emphasis added). Even purely theoretical economic testimony may thus be admissible in some cases, for example to rebut testimony on a proposition of economic theory from another expert.

Opposing economic experts may legitimately perceive facts differently or take different views of which facts are critical. As noted by the Advisory Committee Notes to the 2000 amendments of Rule 702: "When facts are in dispute, experts sometimes reach different conclusions based on competing versions of the facts. The emphasis in the amendment on 'sufficient facts or data' is not intended to authorize a trial court to exclude an expert's testimony on the ground that the court believes one version of the facts and not the other."

While the word "data" in Rule 702 encompasses more than that term's meaning in statistics or economics, it certainly encompasses that narrower meaning as well. Any data, in the statistical sense, on which a testifying expert relies must be shown to be reasonably suited to the task. *See SMS Systems Maintenance Services, Inc. v. Digital Equipment Corp.*, 188 F.3d 11, 25 (1st Cir. 1999) ("an expert must vouchsafe the reliability of the data on which he relies and explain how the cumulation of that data was consistent with standards of the expert's profession"); *U.S. Information Systems, Inc. v. International Brotherhood of Electrical Workers Local Union No. 3,* 313 F. Supp. 2d 213, 233-35 (S.D.N.Y. 2004) ("As the proponents of the expert, it is the plaintiffs' burden to demonstrate the reliability of his data. Here, the plaintiffs have not met that burden, and [the expert's] data sample therefore cannot provide the basis for his testimony."). Although the economic expert's testimony must be based on sufficient, reliable facts, the expert's role is not necessarily to establish the reliability of the evidence and facts relied upon, the reliability of which may be established elsewhere in the evidentiary record.

Fit

PRINCIPLE I-7: To be admissible, expert economic testimony must fit the facts of the case.

COMMENT

In *Daubert*, the Supreme Court held that expert testimony is admissible only if it "is sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute," i.e., only if there is a good "fit" between the testimony and the pertinent inquiry. 509 U.S. at 591 (quoting *United States v. Downing*, 753 F.2d 1224, 1242 (3d Cir. 1985)). In the most significant application of this Principle in an antitrust case, the Eighth Circuit noted that "a theory that might meet certain *Daubert* factors . . . should not be admitted if it does not apply to the specific facts of the case," and the court excluded expert economic testimony on which a jury verdict rested, because the oligopoly model used by the plaintiffs' expert economist was "not grounded in the economic reality of the" industry. *Concord Boat v. Brunswick Corp.*, 207 F.3d 1039, 1056 (8th Cir. 2000).

In other antitrust cases, courts have similarly excluded expert economic testimony not adequately grounded in the facts. *See Group Health Plan, Inc. v. Philip Morris USA, Inc.*, 344 F.3d 753, 760-61 (8th Cir. 2003) (plaintiffs' expert testimony, although "thorough, sophisticated, and often well-grounded in the relevant scientific literature," excluded because of "excessive speculation"); *Heary Bros. Lightning Protection Co., Inc. v. Lightning Protection Institute*, 287 F. Supp. 2d 1038, 1065-68 (D. Ariz. 2003) (economic expert testimony excluded because the expert had "*no* evidence *at all* supporting [an important] assumption" and because the expert's "Cournot model does not fit the economic reality" of the industry); *American Booksellers Ass'n, Inc. v. Barnes & Noble, Inc.*, 135 F. Supp. 2d 1031, 1041 (N.D. Cal. 2001) (expert's model excluded for purposes of proving damage causation, and summary judgment on damage claims granted, because it contained "too many assumptions and simplifications that are not supported by real-world evidence"). A formal economic model or method, however, does not necessarily need to fit every or even most facts of a case in order to be admissible. The theoretical and empirical modeling tools of economics invariably incorporate assumptions that may not perfectly comport with any particular factual setting, and they may nevertheless appropriately form a basis for an economic opinion. For example, an expert may illustrate an economic principle with a formal model that does not fit all facts in a case, and may explain separately why that principle applies given the particular facts of the case. The applicability of the principle to the facts of the case would then be an issue for the trier of fact that would rarely prevent admissibility. Similarly, a method of data analysis may be admissible even if it incorporates assumptions or simplifications that do not fit all the facts of the case. Under such circumstances, questions involving the robustness of the conclusions under alternative assumptions would be issues for the trier of fact that would rarely prevent admissibility.

PRINCIPLE I-8: The critical test for the fit of a theoretical economic model is not whether it accurately reflects institutional details, but whether it explains the aspects of industry performance it is being used to predict.

COMMENT

A theoretical economic model used to make predictions must fit the facts of the industry to which it is applied. A closer fit to the facts of an industry is required for a theoretical model used to make predictions than for a theoretical model used only to illustrate an economic principle. The same oligopoly model was rejected in both *Concord Boat* and *Heary Bros*. because it was judged to fit both industries poorly. However, a model need not reflect every institutional detail of an industry; indeed, economic models are meant to be abstractions and are useful because they abstract from real-world minutiae. Testimony based on a particular model should not be excluded merely because the stylized actions of economic agents in the model do not comport with the details of actual behavior of agents the industry. The critical test of a model is whether it explains reasonably well those aspects of industry performance that the model is being used to predict. For example, if a model is being used to predict prices for the years following a proposed merger, it should also be able to explain pricing for the years before the merger. *See generally* Gregory J. Werden, Luke M. Froeb & David T. Scheffman, A Daubert *Discipline for Merger Simulation*, ANTITRUST, Summer 2004, at 89. The model also must be calibrated to match important quantitative aspects of an industry, e.g., market shares and prices.

PRINCIPLE I-9: The critical test for fit for an empirical economic model is whether it is capable of aiding the trier of fact by reliably explaining or accounting for a relevant factual issue.

COMMENT

An empirical model used to make predictions or disentangle effects must be tailored to the facts of the case. A necessary predicate to the application of an empirical model is a demonstration, applying economic reasoning to the facts, of the potential for the available data reliably to explain or account for a relevant factual issue. Models used to make predictions or disentangle effects are properly excluded if they fail to account for important causal factors and therefore fail to isolate the cause of interest. *See Craftsmen Limousine, Inc. v. Ford Motor Co.*, 363 F.3d 761, 776-77 (8th Cir. 2004) (damages testimony held inadmissible because it "did not determine whether other factors, including the emergence of two direct competitors, may have affected" the plaintiffs' growth rate); *Blue Dane Simmental Corp. v. American Simmental Ass'n*, 178 F.3d 1035, 1039-41 (8th Cir. 1999) (affirming exclusion of damage estimate because it inferred "causation without considering all independent variables that could affect the conclusion"); *In re Aluminum Phosphide Antitrust Litigation,* 893 F. Supp. 1497, 1504-05 (D. Kan. 1995) (rejecting as unreliable a damage estimate that failed to account for several important factors).

Procedures

PRINCIPLE I-10: Case management orders should address motions to exclude expert economic testimony based on Rule 702, responses to such motions, and, if appropriate, hearings on such motions.

COMMENT

Motions to exclude may be permitted at any time after the filing of an expert report. *See Club Car, Inc. v. Club Car (Quebec) Import, Inc.*, 362 F.3d 775, 780 (11th Cir. 2004) ("A Daubert objection not raised before trial may be rejected as untimely. . . . But a trial court has broad discretion in determining how to perform its gatekeeper function, and nothing prohibits it from hearing a *Daubert* motion during trial.") (citation omitted). It clearly is best, however, that such motions be made well in advance of trial. Thus, case management orders generally should make specific provision for motions to exclude expert testimony based on Rule 702. Such motions should be filed sufficiently in advance of trial to permit responses and rulings on the motions prior to trial. If expert reports are filed at least ninety day before trial, as provided by Fed. R. Civ. P. 26(a)(2)(C), motions to exclude should be required within thirty days after the filing of the corresponding expert report, with responses within thirty days of service of the motion. In expedited proceedings, motions to exclude could be required as little as a week after the filing of the corresponding report, with responses accelerated in a parallel fashion.

Trial courts should not exclude expert economic testimony without careful consideration of the specific admissibility issues raised, but courts have considerable "latitude in deciding *how* to test an expert's reliability, and to decide whether or when special briefing or other proceedings are needed to investigate reliability." *Kumho Tire*, 526 U.S. at 152. In assessing the reliability and fit of expert economic testimony, courts may benefit from declarations from trial or non-trial witnesses, and they may make use of special masters, court appointed experts, or technical advisors. Courts may find an evidentiary hearing useful, although none is required, and a lengthy hearing is most unlikely to be a good use of judicial resources.

See also Chapters II and V, *infra*.

PRINCIPLE I-11: Motions to exclude expert economic testimony made under Rule 702 are appropriate in class certification proceedings.

COMMENT

Rule 702 applies to expert economic testimony in class action certification proceedings; however, in that context, the issue is not "whether a jury at trial should be permitted to rely on" the testimony, but rather whether the court may "utilize it in deciding whether the requisites of Rule 23 have been met." *In re Visa Check/MasterMoney Antitrust Litigation*, 192 F.R.D. 68, 76-77 (E.D.N.Y. 2000), *aff'd*, 280 F.3d 124 (2d Cir. 2001). In particular, a Rule 702 challenge may be made to reliability and fit of the proposed method for the common proof of damages. *E.g., Corley v. Entergy Corp*., 220 F.R.D. 478, 485 (E.D. Tex. 2004). Vague references to the use of a method such as "multiple regression" cannot satisfy the burden to establish either the admissibility of the testimony under Rule 702 or the requisites of Rule 23.

See also Chapter III, *infra*.

PRINCIPLE I-12: Motions to exclude expert economic testimony made under Rule 702 are appropriate in bench trials as well as jury trials.

COMMENT

In *Daubert* the Supreme Court held that a trial judge must serve in "a gatekeeping role" pursuant to Federal Rule of Evidence 104(a) by making a "preliminary assessment" of the reliability and fit of proffered expert testimony. 509 U.S. at 592-93, 597. Although judges obviously do not serve in the same gatekeeping role in bench trials as in jury trials, Rule 702 applies to both. There is no risk of a jury being unduly influenced by unreliable evidence when there is no jury, but judicial resources may be conserved by ruling on motions to exclude before commencement of a bench trial. Moreover, all motions to exclude based on Rule 702 eventually should be granted, denied, or dismissed as moot so that the record for possible appeal is clear.

CHAPTER II.
APPLYING RULES 12 16, AND 26 TO THE USE OF ECONOMIC EVIDENCE IN ANTITRUST CASES

INTRODUCTION

As illustrated in the introduction and throughout this report, economic issues are generally and increasingly intertwined with legal issues in antitrust litigation. An antitrust lawsuit can turn on economic issues in the context of class certification or summary judgment motions, disputes about competitive effect or relevant market, or evidentiary rulings during trial. The pervasiveness of economic issues can extend throughout all stages, including the pretrial stages, of antitrust litigation.

These economic issues merit management focus because economic issues play out in different ways in different types of antitrust cases. In a battle of experts, for example, economic issues may have characteristics of the ultimate question of fact. In considering whether an antitrust claim makes economic sense or is premised on valid economic theory, economic issues have characteristics of questions of law and can sometimes lead to resolutions as a matter of law.

Thus, the economic issues in antitrust litigation merit focus and management from the very beginning of the litigation. Indeed, consistent with Federal Rule of Civil Procedure 1, the focus and management of economic issues can make antitrust litigation faster, cheaper, and more focused on the merits.

PRINCIPLE II-1: The proper consideration of economic analysis should be tailored to the procedural posture of the case, while avoiding unnecessary repetition over the course of the litigation.

COMMENT

Like the antitrust issues with which they are often intertwined, economic issues can arise at multiple stages in an antitrust case. Managing the economic issues requires both analyzing the economic issues in the current procedural context of the litigation, while avoiding the burdens of duplication and inefficiency. Analyzing economic issues is often expensive, and that expense can have a disparate impact on parties with limited resources. In managing the litigation, the court should structure the decisions about economic issues so as to minimize the expense to the parties and the burdens on the court of addressing the same issue repeatedly. For example, motion practice related to economic issues may in many cases be unproductive and unnecessary on issues of whether a complaint states a claim, or whether a class should be certified, while such motion practice may be important and useful with regard to summary judgment or the admissibility of evidence at trial.

PRINCIPLE II-2: An antitrust complaint should rarely be dismissed solely on economic theory.

COMMENT

Parties increasingly make motions to dismiss, and because economic theory is often intertwined with antitrust claims, motions to dismiss in antitrust litigation frequently have an economic component. Motions to dismiss with an economic component are usually predicated on *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986), in which the Supreme Court held that an antitrust claim that did not make any economic sense could not withstand summary disposition. Although *Matsushita* addressed a motion for summary judgment, lower courts have considered motions to dismiss premised on the argument that the antitrust claim did not make any economic sense. *Brunson Communications, Inc. v. Arbitron, Inc.*, 239 F. Supp. 2d 550, 563 (E.D. Pa. 2002); DM Research, Inc. v. College of Am. Pathologists, 170 F.3d 53, 56 (1st Cir. 1999); *United Magazine Co. v. Murdoc Magazine Distrib.*, 146 F. Supp. 2d 385, 402 (S.D.N.Y. 2001).

If a complaint alleges the elements of an antitrust violation, motions to dismiss should not be favored. A court should be cautious about granting a motion to dismiss an antitrust claim based solely on economic theory. Economic theory should not be used as a means to ignore or trump the facts underlying the antitrust claim. For example, the Supreme Court emphasized in *Image Technical v. Eastman Kodak*, 504 U.S. 451, 472-73 (1992), that an economic theory cannot override the evidence of record.

Thus, as a general rule, an antitrust complaint need not plead an economic theory. If it does, however, that theory must make economic sense; and if the theory does not, a motion to dismiss may be appropriate.

Similarly, a court can manage litigation to isolate and accelerate consideration of economic issues if the court believes the claim is unlikely to be supported by valid economic theory. Such management techniques and summary judgment motions can avoid the burden, expense, and delay of antitrust litigation when the economic theory is likely to be unreliable or missing altogether.

PRINCIPLE II-3: The central economic issues in antitrust litigation should be described in the initial and other early status conferences.

COMMENT

The objectives of pretrial conferences are to expedite resolution of the action, establish management to speed resolution, discourage waste and burdens, improve the quality of the ultimate resolution of the dispute, and facilitate settlement. Fed. R. Civ. Pro. 16(a). Because economic issues are often central to antitrust disputes, the objectives of pretrial conferences often can be met only if the economic issues are addressed during pretrial conferences. *See Manual for Complex Litigation, Fourth*, Sections 23.32, 30.2; *Reference Manual on Scientific Evidence*, Second, pp. 41-49.

To further the objectives of Rule 16, a court should require the parties to address formally the economic issues early in the antitrust litigation. Addressing the issues would take the form of a statement that describes the relevant economics, contemplated economic testimony, and proposals how the economic issues will be addressed in the litigation. Such a statement can focus the court and the parties on the economic issues and facilitate the just and speedy consideration of how economic issues impact contemplated motions and discovery.

Both the judge and the magistrate judge should be involved in these early efforts to manage the economic issues in the litigation. Many of the economic disputes ultimately will be addressed by the judge in addressing substantive motions, expert evidentiary issues, and trial presentation issues. Thus, the judge's preferences toward and reaction to the economic issues will assist the magistrate judge and the parties in managing presentation and resolution of the economic issues. The judge's involvement can be crucial to furthering the objectives of Rule 16.

The court might also consider having early presentations from economists to orient the court to the economic issues and to ensure that the parties are working to address the economic issues. In certain instances, early presentations by economists will not be advisable because the economic analysis is dependent on facts, which may not be adequately developed without discovery. Yet, when a party seeks expedited consideration of an economic issue, because the party seeks to expedite the litigation or because early resolution of an economic issue is appropriate, early presentations by economists may be a useful litigation management tool.

PRINCIPLE II-4: An economic expert's opinion, including the factual and experiential basis on which that opinion is based, should be fully disclosed.

COMMENT

Managing the disclosure on economic issues, given the complexity of the issues and the centrality to some antitrust litigation, can be challenging. The disclosure should both avoid unfair surprise, while considering the purpose of the Federal Rules, as articulated in Rule 1, to reach a "just, speedy, and inexpensive determination of every action." The disclosure should focus on the economic issues of the claims being asserted and include the details and all aspects of each opinion, the reasoning and methods underlying each opinion, and the theories and techniques considered or used in reaching each opinion.

The information reviewed by the economist in reaching the opinion should also be disclosed. Specifically disclosed should be the models that the economist used and the reasons for using those models, and the source of the data or other information put into those models, in enough detail to enable the adversary to duplicate the calculations and probe the analysis. Where necessary to an understanding of the models and methods employed by the economic expert, there should also be disclosure of relevant economic literature on which the expert is specifically relying. The expert's understanding of or assumptions concerning the facts and the effect of those understandings or assumptions on the opinion expressed should also be specifically disclosed. Moreover, the facts relied on by the expert should be disclosed, as well as the sources for those facts. When data is relied upon, the expert should either produce it, or provide references to available sources from which to obtain it.

Absent evidence of good cause, a court should not allow experts to testify about opinions and the bases for those opinions that were not disclosed. Applying this standard to antitrust litigation is challenging. Guidance from the court in response to summary judgment motions or otherwise, new factual developments, or significant delays in the litigation may constitute good cause. Yet, in an effort to foster prompt resolution of disputes, the court should provide a strong incentive for parties to disclose economic opinions fully and promptly. *See Reference Manual on Scientific Evidence, Second,* pp. 49-53.

PRINCIPLE II-5: The process by which an economic opinion is reached can and should be shielded from discovery.

COMMENT

Because economic testimony should be closely tied to the antitrust claims, a detailed understanding of the antitrust claims furthers the economic analysis of those claims. Indeed, as explained more fully in Chapter I, courts can reject economic testimony that is not directly connected to an antitrust claim. Because the economic analysis is and should be intertwined with the legal analysis, the economic review should interact with the legal review.

Currently each draft of the testifying expert's report and the expert's notes are required to be disclosed. This obligation contrasts markedly with an attorney's review of a claim, where the work product doctrine applies to provide a zone of privacy to the process of reviewing the facts and law relating to the claim. An economist, on the other hand, arguably has no zone of privacy for the process of reviewing the facts and economics relating to the claim. *E.g., Trigon Ins. Co. v. United States*, 204 F.R.D. 277, 283 (E.D. Va. 2001); *B.C.F. Oil Ref. Inc. v. Consolidated Edison*, 171 F.R.D. 57, 62 (S.D.N.Y. 1997); *Hewlett-Packard, Inc. v. Bausch & Lomb, Inc.*, 116 F.R.D. 533, 536 (N.D. Cal. 1987); *W.R. Grace & Co. v. Zotos International*, 2000 U.S. Dist. LEXIS 18091, 2000 WL 1843258, *10 (W.D.N.Y. 2000).

The need to intertwine the economic review with the factual and legal analysis is in tension with the obligation to disclose the economist's drafts and notes. When drafts are discoverable, parties may engage in non-productive strategic behavior because drafts allow adversaries to argue that any differences illustrate that the final expert opinion is faulty, false, or the result of undue attorney influence. Disclosure of drafts fosters unproductive depositions focused on immaterial details. Economists can lessen this strategic behavior by lessening their interaction with others who review the factual or legal issues, with the effect of distancing the economic analysis from the other analyses of the claim. Lawyers can retain non-testifying economists to combine the economic and legal review, without giving rise to disclosure obligations. Testifying economists learn not to keep drafts and not to take notes, even if taking notes or keeping drafts would improve the economic analysis. Testifying economists sometimes rely on others to draft their report and to combine the economic analysis with the factual analysis.

Parties and the court can and should foster improved economic analysis by avoiding the adverse consequences of disclosure of drafts. Not allowing discovery of drafts will permit the expert to develop opinions, without worrying about defending each written word and each idea considered in the course of the work. The parties can by agreement avoid discovery of economists' drafts. The court can endorse such an agreement as part of a case management order.

Notes taken by the economist should stand on substantially the same footing as drafts. They should be immune from disclosure if they are precursors to and foundation for the economist's opinion. Documents that reflect factual inquiry by the economist, however, such as interviews, field research, and the like, should ordinarily be discoverable. Notes that reflect economic analysis, such as developing thoughts or approaches for economic opinions, should not be discoverable. Under present practice, the discoverability of notes leads experts not to take notes at all, or leads the parties to resort to absurd and unseemly measures to avoid and evade discovery, such as providing an attorney to sit with and take notes for an expert. Courts, litigants, and experts would all be better off if the notes were generally not discoverable.

CHAPTER III.
BEST PRACTICES IN USING ECONOMICS FOR CLASS CERTIFICATION MOTIONS UNDER RULE 23 OF THE FEDERAL RULES OF CIVIL PROCEDURE

INTRODUCTION

As economic concerns have become increasingly prominent in antitrust, it has become standard practice to use economic testimony in support of, or in opposition to, class certification motions. Even in horizontal price-fixing cases, where the *per se* rule limits the use of economics, economic testimony is typically proffered in support of the class certification motion. In most antitrust cases, economic testimony is often necessary to show that antitrust injury can be shown by proof common for all class members. Economic testimony also may be critical to show that individual damages can be proven by a common mechanical formula.

Even though class certification motions are not preliminary inquiries into the merits of the case, parties often introduce economic testimony on class motions to preview their case on the merits. As discussed more fully below, this practice can be problematic, and, as a general rule, economic testimony should be limited to class issues. Courts should not (and usually do not) permit a duel of economic testimony on the merits at the class certification stage. In cases where class and merits issues overlap, however, it may be necessary to delve into merits-based economic issues on a class certification motion. When that happens, economic testimony on the merits should be limited to those issues where class and merits issues are inextricably intertwined. Before setting forth principles regarding the use of economics on a class motion, a brief description of Rule 23 of the Federal Rules of Civil Procedure ("Rule 23") is in order.

1. Rule 23

To be certified as a class action, a case must satisfy all four prerequisites of subsection (a) of Rule 23 and at least one of the criteria set forth in subsection (b). The burden of satisfying these elements rests on the proponent of the class.

(i) Rule 23(a)

Rule 23(a) sets forth four prerequisites, each of which must be satisfied, in order to maintain a class action. These requirements are:

(1) The class members are so numerous that joinder is procedurally impractical;
(2) Common questions of law or fact are present;
(3) The claims or defenses of the representatives are typical of those of the class; and
(4) The putative class representative can fairly and adequately represent the entire class.

(ii) Rule 23(b)

In addition to the prerequisites set forth in Rule 23(a), a party must satisfy at least one of the three criteria outlined in Rule 23(b). These criteria are:

(1) The case would create a risk of inconsistent or varying adjudications affecting the interests of absent class members;
(2) The appropriate relief would be injunctive or declaratory; and
(3) The case involves common questions of law or fact that predominate over individual questions, and the class action device is superior to any other method for the fair and efficient adjudication of the issues in question.

2. Rule 23 Applied

In antitrust class actions, expert economic evidence is offered in certification proceedings most often on issues of whether impact and damages are susceptible of class-wide proof. To show that impact is susceptible to class-wide proof, class action plaintiffs are required to proffer a plausible method of proving that the vast majority of the class has been injured. On a class motion, an expert report must support plaintiffs' "minimum burden of showing there is a reasonable probability of establishing . . . common impact." *In re Playmobil Antitrust Litig.*, 35 F. Supp. 2d 231, 247 (E.D.N.Y. 1998). "To show impact is susceptible to class-wide proof, [p]laintiffs are not required to show that the fact of injury actually exists for each class member." *In re Cardizem CD Antitrust Litig.*, 200 F.R.D. 297, 307 (E.D. Mich. 2001). *But see Newton v. Merrill Lynch, Pierce, Fenner & Smith, Inc.*, 259 F.3d 154, 185-86 (3d Cir. 2001) (to prove common impact, "'the common proof [must] adequately demonstrate[] some damage to each individual'" member of the class) (quoting *Bogosian v. Gulf Oil Corp.*, 561 F.2d 434, 454 (3d Cir. 1977)).

As to damages, differences in the amount of damage suffered by individual class members will not defeat class certification if a plausible method for showing class-wide impact has been advanced by the plaintiff. *Playmobil*, 35 F. Supp. 2d at 246 ("[I]f members of the class suffered varying amounts in damages, this does not interfere with establishing a class action"). While purported conflicts that are merely speculative or hypothetical will not defeat certification, where there is evidence that the economic interests of class members conflict (as some members may have benefited from the conduct at issue, while others may have been harmed), class certification should be denied. "A fundamental conflict exists where some party members claim to have been harmed by the same conduct that benefited other members of the class. In such a situation, the named representatives cannot 'vigorously prosecute the interests of the class through qualified counsel' because their interests are actually or potentially antagonistic to, or in conflict with, the interests and objectives of other class members." *Valley Drug Co., v. Geneva Pharms., Inc.*, 350 F.3d 1181, 1189 (11th Cir. 2003).

On a class motion, expert reports are scrutinized in a manner different from the way they are at summary judgment or trial. *Caridad v. Metropolitan-North Commuter R.R.*, 191 F.3d 283, 292 (2d. Cir. 1999) (Expert "dueling is not relevant to the certification determination," even though it may "prove fatal at the merits stage.") The merit of an expert report "is a matter to be ascertained by trial and not for a determination as to the appropriateness of class certification." *In re Sumitomo Copper Litig.*, 182 F.R.D. 85, 91 (S.D.N.Y. 1998); *In re Industrial Diamonds Antitrust Litig.*, 167 F.R.D. 374, 384 (S.D.N.Y. 1996) ("We need not consider [defendants' expert's criticisms of methodology employed by plaintiff's expert] in detail, as it is for the jury to evaluate this conflicting evidence and to determine what weight to give to the expert's conclusions.") Many cases recognize, however, that class and merits issues are often intertwined. When that is so, courts will engage in a preliminary inquiry into the merits to determine whether class certification is appropriate. *Coopers & Lybrand v. Livesay*, 437 U.S. 463, 469 n. 12 (1978) ("[M]any of the questions entering into [a] determination of class action questions [are] intimately involved with the merits of the claim.")

The standard for evaluating a proposed damages methodology is more relaxed than the burden for showing probability of common impact. *In re Catfish Antitrust Litig.*, 826 F. Supp. 1019, 1042 (N.D. Miss. 1993) ("The court's role at the class certification stage in assessing the proposed methods of proving damages is quite limited. The preliminary inquiry is whether or not the proposed methods are so insubstantial that they amount to no method at all.") Class treatment is likely to be unsuitable where the calculation of damages is not susceptible to a mathematical or formulaic calculation, or where the formula by which the parties propose to calculate individual damages is clearly inadequate. Where individual damage "does not lend itself to . . . mechanical calculation, but requires 'separate mini-trial[s]' of an overwhelming[ly] large number of individual claims," class certification will be denied. *Windham v. American Brands, Inc.*, 565 F.2d 59, 68 (4th Cir. 1977); *see also Broussard v. Meineke Discount Muffler Shops, Inc.*, 155 F.3d 331, 342 (4th Cir. 1998) (decertifying class because, among other things, "each putative class member's claim for lost profits damages was inherently individualized and thus not easily amenable to class treatment").

If the proffered damages methodology would inevitably require thousands of individual trials, class certification will be denied for lack of manageability. *Abrams v. Interco Inc.*, 719 F.2d 23, 31 (2d Cir. 1983) ("An even more serious problem of manageability relates to damages. Each member['s damages] . . . would be complicated by the scores of different products involved, varying local market conditions, fluctuations over time, and the difficulties of proving consumer purchasers after a lapse of five or ten years.") If the classwide damages methodology will likely fail to produce an adequate approximation of any individual class member's damages, certification will also be denied. *Bell Atlantic Corp. v. AT&T Corp.*, 339 F.3d 294, 304 (5th Cir. 2003) ("Upon reviewing the record, however, we are not convinced that this proposed damages calculus represents an adequate approximation of any single class member's damages, let alone a just and reasonable estimate of the damages of every class member included in the two putative classes.")

PRINCIPLE III-1: On motions for class certification, economic evidence should not be subjected to a higher standard of scrutiny than other types of evidence bearing on class issues.

COMMENT

Antitrust plaintiffs typically submit expert testimony, usually from an economist, to support their motion for class certification. Economic testimony is often used to show that common questions predominate, and that the plaintiff has come forward with a plausible method to show class-wide injury. Even in horizontal price-fixing cases -- which generally are the most straightforward antitrust cases to certify as class actions -- plaintiffs often need to submit economic testimony to show class-wide impact where either the products are differentiated, there are different classes of purchasers, or there are regional variations in pricing. Other antitrust cases (particularly tying cases) raise even more complex questions regarding class-wide injury that suggest the efficacy of using an economist.

In a case involving a class of purchasers of Playmobil products alleging a vertical price-fixing conspiracy between Playmobil and its independent retailers, the court found predominance of common questions, as plaintiffs' expert "met the minimum burden of showing there is a reasonable probability of establishing . . . common impact." *In re Playmobil Antitrust Litig.*, 35 F. Supp. 2d 231, 247 (E.D.N.Y. 1998). In so holding, the court stressed that "the battle of the experts is properly left for the trier of fact to determine." *Id.*

PRINCIPLE III-2: Economic evidence submitted in class certification proceedings should be strictly limited to class issues under Rule 23, such as commonality of proof of violation, impact, or damages.

COMMENT

Defendants typically submit economic testimony in opposition to class motions. In some cases, the parties have used the class certification motion to educate the court about the economic theories they intend to use on summary judgment or at trial. The benefits and risks of this approach must be weighed carefully. On the plus side, this tactic might make an impression on the court and therefore contribute in some measure to dismissal of the case on summary judgment.

On the other hand, because courts typically do not indulge in a duel of experts at the class certification stage, when a class certification expert opines upon the merits of the case, the court may simply disregard the opinion, including those portions that are relevant to class issues. Moreover, this strategy can hurt defendants at the summary judgment stage. When courts disregard economic arguments at the class certification stage, they may be disinclined to accept the same arguments when they hear them a second time at summary judgment. For these reasons, economist reports on class certification be confined to issues pertaining to the viability of the case as a class action.

PRINCIPLE III-3: In horizontal price-fixing cases, economic evidence may be helpful in showing whether class-wide proof is or is not feasible with regard to impact or damages.

COMMENT

In price-fixing cases, "[c]ourts repeatedly have held that the existence of a conspiracy is the predominant issue [and warrants] certification of the class even where significant individual issues are present." *In re Nasdaq Market-Makers Antitrust Litig.*, 169 F.R.D. 493, 518 (S.D.N.Y. 1996). Some courts have held that "as a general rule, an illegal price-fixing scheme presumptively impacts upon all purchasers of a price-fixed product in a conspiratorially affected market." *In re Alcoholic Beverages Litig.*, 95 F.R.D. 321, 327 (E.D.N.Y. 1982) (internal quotation omitted).

There are, however, many price-fixing cases where economic testimony is central to the certification decision. These include the following:

In a case involving a putative class of bromine purchasers, economic testimony was necessary to address defendants' argument that numerosity and predominance of common questions were not present because various bromine products traded in different markets. *Bromine Antitrust Litig.*, 203 F.R.D. 403 (S.D. Ind. 2001).

In a case involving a putative class and subclass of flat glass purchasers alleging horizontal price-fixing, the court used economic evidence to show common impact and to show that regression analysis could be used to establish fact of damage for the subclasses. *In re Flat Glass Antitrust Litig.*, 191 F.R.D. 472 (W.D. Pa. 1999).

In a case involving a putative class of quota holders and direct sellers of tobacco alleging price-fixing in the tobacco industry, economic evidence was necessary to show predominance of common questions and to rebut defendants' argument that the non-fungible nature of tobacco created individual questions that undermined the viability of the class. *DeLoach v. Philip Morris Cos.*, 206 F.R.D. 551 (M.D.N.C. 2002).

In a case involving a putative class of food distributors alleging that catfish processors had conspired to fix prices, economic testimony helped show common injury and potential methodologies for computing individual damages. *In re Catfish Antitrust Litig.*, 826 F. Supp. 1019 (N.D. Miss. 1993). The court, however, found that much of the expert testimony was superfluous, as the opinions were pertinent to the merits and not class certification.

In a case involving a putative class of fertilizer producers alleging that potash producers had conspired to raise prices, economic evidence was used to rebut defendants' contention that fact of injury could not be proven in common due to the fungibility of potash and to the differences between class members' purchasing behavior. *In re Potash Antitrust Litig.*, 159 F.R.D. 682 (D. Minn. 1995).

In a case involving a putative class of buyers of industrial diamonds, the class was certified, in part, based on economic testimony that showed predominance of common questions, notwithstanding the diversity of defendants' products and variations in discounts, credits and rebates offered by defendants. *In re Industrial Diamonds Antitrust Litig.*, 167 F.R.D. 374 (S.D.N.Y. 1996).

In a case involving price-fixing allegations in the magnetic audiotape industry, economic analysis of defendants' sales data was used to show class-wide impact. *In re Magnetic Audiotape Antitrust Litig.*, No. 99 Civ. 1580, 2001 WL 619305 (S.D.N.Y. June 6, 2001). Defendants tendered economic evidence regarding individualized pricing in the industry, differences between purchasers, and variances in prices for the products in question. The court certified the class, disregarding the dueling of the experts because the plaintiff had carried its burden of proffering a plausible method for determining class-wide impact:

> At this stage in the proceedings, the Court only must find that plaintiffs have set forth a valid methodology for proving antitrust impact common to the class, not that they will prove it. Plaintiffs have proposed a method which could prove that the defendants charged similar prices class-wide and which appears to take into account the variables of the audiotape industry that defendants claim preclude such proof.

Magnetic Audiotape, 2001 WL 619305, at *6.

In a case involving putative classes of purchasers of various products that use linerboard as an input, testimony of plaintiffs' economist was necessary to establish common questions where defendants argued that plaintiffs did not purchase in the linerboard market and instead only purchased products that incorporated linerboard. *In re Linerboard Antitrust Litig.*, 203 F.R.D. 197 (E.D. Pa. 2001). Plaintiff's expert, for example, examined the close relationship between linerboard prices and the prices of the products purchased by plaintiffs to rebut defendants' argument. The court cited testimony of plaintiffs' expert to rebut defendants' contention that long-term contracts held by some plaintiffs created conflicts among class members. The court also relied on plaintiffs' expert presentation of plausible methods to establish class-wide damages to certify the class.

PRINCIPLE III-4: In cases involving vertical restraints, including vertical price-fixing, economic evidence may be helpful to show common impact.

COMMENT

With the exception of minimum vertical price-fixing cases, vertical cases will be analyzed under the rule of reason. In such cases, to establish antitrust injury, plaintiffs must show a substantial injury to competition and that their injuries stem from the harm to the competitive process. It is difficult to show that this issue is susceptible to common proof without economic testimony, particularly in cases (such as those involving exclusive territories) where local market conditions may necessitate an individualized inquiry to show injury.

Economic testimony also may be necessary in minimum vertical price-fixing cases, particularly those that involve allegations that a manufacturer conspired with numerous individual retailers to fix resale prices. While these cases fall under the *per se* rule, proving a single conspiracy common to the class may be difficult without economic testimony. In a case involving a putative class of consumers alleging a vertical minimum price-fixing conspiracy between a manufacturer of shoes and approximately 7,800 independent retail stores, the court denied class certification because individual questions regarding the defendant manufacturer's dealings with thousands of retail stores would have predominated over common questions. *Abrams v. Interco Inc.*, 719 F.2d 23 (2d Cir. 1983). In a case involving a putative class of independent beer wholesalers asserting that exclusive territories established by brewer defendants and franchised wholesalers violated the antitrust laws, the court declined to certify the class because analysis of injury to competition would likely have varied based on local market conditions. *Vasiliow Co. v. Anheuser-Busch, Inc.*, 117 F.R.D. 345 (E.D.N.Y. 1987).

PRINCIPLE III-5: In other types of cases, such as tying, market allocation, or monopolization cases, economic evidence may be helpful in showing whether or not causation or fact of injury can be proved on a class-wide basis.

COMMENT

Unlike horizontal price-fixing cases where antitrust injury and causation may be inferred from proof of the conspiracy, in most other antitrust cases antitrust injury and causation must be proved based on the alleged restraint's impact on the market and the plaintiff. Economic testimony may be helpful, and in some cases critical, to prove commonality.

In a case involving a class of merchants who purchased Visa/MasterCard credit card services and were also forced to purchase Visa/MasterCard debit card services at supra-competitive prices, the court, in certifying the class, cited plaintiffs' economist's "price theory" that in a but-for world defendants would have lowered their interchange prices to all merchants in order to maintain universal acceptance. *In re Visa Check/MasterMoney Antitrust Litig.*, 192 F.R.D. 68, 83 (E.D.N.Y. 2000). The court also addressed defendants' contention that in a tying case, "elementary economic theory" predicts that a defendant with market power will respond to a decline in the price of the tied product by imposing an offsetting increase in the price of the tying product. *Id*. The plaintiffs rebutted this argument with economic theory showing that defendants' argument was inapposite to variable proportion ties, as well as empirical evidence demonstrating that Visa and MasterCard's tying arrangements had maintained their market power in the tying product market. *Id*. at 83-84. Thus, in a but-for world, the price of both the tying and tied products would have been lower, and all class members would have been better off.

In a case involving a class of direct purchasers of Cardizem, seeking damages for the conspiracy between Cardizem and a potential generic competitor to delay generic entry, the court, in certifying the class, cited plaintiffs' expert's conclusion that "all or substantially all" of the class would have substituted the lower-priced generic but for the conspiracy, and that entry would have disciplined pricing in the market. *In re Cardizem CD Antitrust Litig.*, 200 F.R.D. 297, 308 (E.D. Mich. 2001). The court also relied on non-economic testimony to certify the class, including defendants' own models and forecasts predicting significant generic penetration and cheaper prices, and government and academic studies showing the impact of generic entry in pharmaceutical markets.

In a monopolization case, the Court of Appeals for the Fifth Circuit affirmed the denial of a class certification motion because, among other things, the plaintiffs failed to show a common method of proving fact of injury. *Bell Atlantic Corp., v. AT&T Corp.*, 339 F.3d 294 (5th Cir. 2003).

PRINCIPLE III-6: In cases where the plaintiffs are pursuing multiple theories on liability or damages, economic testimony may be helpful in showing whether or not class members' interests conflict.

COMMENT

The court denied certification in a case where some class members' interest would have been to pursue an overcharge theory, while others would have preferred a lost profits theory of damages. According to the court, these different theories of damages created an inherent conflict between class members. *Bradburn Parent/Teacher Store, Inc. v. 3M*, No. Civ. A. 02-7676, 2004 WL 414047 (E.D. Pa. Mar. 1 2004). The court later certified the class when it was limited to class members with a common interest in pursuing a potential overcharge (but not lost profits) damage theory. *Bradburn*, 2004 WL 1842987 (E.D. Pa. Aug. 18, 2004).

In a case involving a class of direct purchasers of a branded pharmaceutical whose price was allegedly elevated by market allocation agreements with potential generic competitors, the Court of Appeals for the Eleventh Circuit vacated an order certifying the class and remanded the case for further discovery regarding whether the interests of certain members of the class (who benefited from the allegedly higher prices for the branded product) were in conflict with the interests of others (who were harmed by the alleged overcharges). *Valley Drug Co. v. Geneva Pharms.*, 350 F.3d 1181 (11th Cir. 2003). On remand, the district court decertified the class, citing the inherent conflict of interest among putative class members. *In re Terazosin Hydrochloride Antitrust Litig.*, No. 99-MDL-1317, 98-3125, 99-7143, 2004 WL 2072362 (June 23, 2004).

PRINCIPLE III-7: In most antitrust cases, economic testimony should be helpful to show whether or not the case is manageable as a class action because a common method exists to prove individual damages.

COMMENT

While the standard for evaluating a proposed damages methodology is more relaxed than the burden for showing probability of common impact, many appellate courts have denied certification because individual class members would have to prove their damages. If the proffered damages methodology would inevitably require thousands of individual trials, class certification is generally denied on manageability grounds. As a result, economic testimony may be helpful (particularly in cases with a large number of putative class members) to show that individual damages may be determined by a mathematical or formulaic calculation.

Proof of individual damages in class actions also must satisfy the general standards for establishing antitrust damages. Once liability has been established, antitrust plaintiffs are not held to a stringent burden with respect to proving damages. Proof of damages, however, may not be based on speculation or guesswork. Individual damages should be based on a "just and reasonable estimate of the damage based on relevant data." *Bigelow v. RKO Radio Pictures*, 327 U.S. 251, 580 (1946). If a proposed class-wide damages methodology falls short of this standard because it fails to produce an adequate approximation of any individual class member's damages, certification will be denied. *Windham v. American Brands, Inc.*, 565 F.2d 59, 68 (4th Cir. 1977) (Where an individual damages methodology "does not lend itself to . . . mechanical calculation, but requires 'separate mini-trial[s]' of an overwhelming[ly] large number of individual claims," class certification will be denied.) In *Broussard v. Meineke Discount Muffler Shops, Inc.*, 155 F.3d 331, 342 (4th Cir. 1998), the court rejected a proposed class because, among other things, "each putative class member's claim for lost profits damages was inherently individualized and thus not easily amenable to class treatment." In *Abrams v. Interco Inc.*, 719 F.2d 23, 31 (2d Cir. 1983), the court determined that "[a]n even more serious problem of manageability relates to damages. Each member['s damages] . . . would be complicated by the scores of different products involved, varying local market conditions, fluctuations over time, and the difficulties of proving consumer purchasers after a lapse of five or ten years." In *Bell Atlantic Corp., v. AT&T Corp.*, 339 F.3d 294, 304 (5th Cir. 2003), the court held that "[u]pon reviewing the record . . . we are not convinced that this proposed damages calculus represents an adequate approximation of any single class member's damages, let alone a just and reasonable estimate of the damages of every class member included in the two putative classes."

PRINCIPLE III-8: In class certification proceedings, *Daubert* rules should be limited to considering whether proffered economic evidence is sufficiently reliable to be considered in those proceedings, and should not be used to consider trial admissibility.

COMMENT

Because *Daubert* inquiry is intended to shield the finder of fact at trial from fundamentally flawed expert opinions, use of *Daubert* in class certification proceedings should focus on the issues raised by those proceedings, which are different from and narrower than issues of trial admissibility. Recognizing this distinction, courts have held that a limited *Daubert* test may be performed at the class certification stage. *In re Visa Check/MasterMoney Antitrust Litig.*, 192 F.R.D. 68, 76-77 (E.D.N.Y. 2000) ("Although there is a role for a *Daubert* test here, it is a limited one, tailored for the purpose for which the expert opinion is offered. The question is not, therefore, whether a jury at trial should be permitted to rely on [plaintiffs' economist's report] to find facts as to liability, but rather whether I may utilize it in deciding whether the requisites of Rule 23 have been met.")

CHAPTER IV. ECONOMIC EVIDENCE & SUMMARY JUDGMENT

INTRODUCTION

Rule 56(c) of the Federal Rules of Civil Procedure provides that, upon an appropriate motion, summary judgment "shall be rendered forthwith if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed. R. Civ. P. 56(c); *see Celotex Corp. v. Catrett*, 477 U.S. 317, 321-23, 327 (1986); *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247-48 (1986); *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 585-87 (1986). Summary judgment is not a "disfavored procedural shortcut," but an important device to "to isolate and dispose of factually unsupported claims or defenses." *Celotex Corp. v. Catrett*, 477 U.S. at 324.[1] Today, grants of summary judgment in antitrust cases are common.[2]

1. Rule 56

To be entitled to summary judgment, the moving party must prove that there is no genuine issue of material fact to be resolved before judgment is rendered and that on the undisputed facts the moving party is entitled to judgment as a matter of law. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. at 256; *Celotex Corp. v. Catrett*, 477 U.S. at 322-23; *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 456 (1992). A fact is "material" if it may affect the legal outcome under the governing law. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. at 248. An issue of material fact is "genuine" if, under the applicable evidentiary standard, a reasonable trier of fact could find for the nonmoving party on the issue, so that the issue cannot be decided absent trial. *Id.*[3]

In a motion for summary judgment on a claim where the moving party would bear the burden of persuasion at trial, the moving party must submit affirmative evidence that demonstrates a *prima facie* showing of each and every element of its *prima facie* case or defense, so that in the absence of any contravention the moving party would be entitled to judgment as a matter of law.[4] Once the moving party has satisfied this initial burden, the burden shifts to the opposing party. The party opposing summary judgment may not rest on its pleadings but must present "significant probative evidence" demonstrating that a genuine dispute of material fact exists and that the moving party is not entitled to judgment as a matter of law. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. at 249. In particular, the opposing party may defeat a motion for summary judgment by either: (1) demonstrating that the moving party's evidence, even if uncontested, is insufficient to establish one or more essential elements of the moving party's prima facie case; or (2) submitting affirmative evidence sufficient to create a genuine issue of material fact on one or more essential elements of the moving party's prima facie case. *Celotex Corp. v. Catrett*, 477 U.S. at 324; *see Anderson v. Liberty Lobby, Inc.*, 477 U.S. at 256-57; *First Nat'l Bank v. Cities Serv. Co.*, 391 U.S. 253, 288-90 (1968).

Where the moving party would not bear the burden of persuasion at trial, the moving party

1. *See Tops Markets, Inc. v. Quality Markets, Inc.*, 142 F.3d 90, 95 (2d Cir. 1998) ("By avoiding wasteful trials and preventing lengthy litigation that may have a chilling effect on pro competitive market forces, summary judgment serves a vital function in the area of antitrust law."); *Collins v. Associated Pathologists, Ltd.*, 844 F.2d 473, 475 (7th Cir. 1988) ("[T]he very nature of antitrust litigation encourages summary disposition of such cases when permissible."); *cf. Eastern Food Servs., Inc. v. Pontifical Catholic Univ. Servs. Ass'n, Inc.*, 2004 WL 110844 (1st Cir. Jan. 20, 2004) ("The time of judges and lawyers is a scare resource; the sooner a hopeless claim is sent on its way, the more time is available for plausible causes."); *Raskin v. Wyatt Co.*, 125 F.3d 55, 66 (2d Cir. 1997) ("The resolution of evidentiary questions on summary judgment conserves the resources of the parties, the court, and the jury.").
2. *See, e.g., Thompson Everett, Inc. v. National Cable Advertising*, L.P., 57 F.3d 1317, 1322 (4th Cir. 1995) ("[B]ecause of the unusual entanglement of legal and factual issues frequently presented in antitrust cases, the task of sorting them out may be particularly well-suited for Rule 56 utilization."); *Indiana Grocery, Inc. v. Super Valu Stores, Inc.*, 864 F.2d 1409, 1412 (7th Cir. 1989) ("The Supreme Court has emphasized, however, that summary judgment may be especially appropriate in an antitrust case because of the chill antitrust litigation can have on legitimate price competition.") (citing *Matsushita Electric Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 594-95 (1986)); *McGahee v. Northern Propane Gas Co.*, 858 F.2d 1487, 1493 (11th Cir. 1988). Nonetheless, the Supreme Court has also said, "Summary procedures should be used sparingly in complex antitrust litigation where motive and intent play leading roles, the proof is largely in the hands of the alleged conspirators, and hostile witnesses thicken the plot." *Poller v. Columbia Broadcasting Sys., Inc.*, 368 U.S. 464, 473 (1962). The Court has never disavowed this statement, and lower courts from time to time refer to it. *E.g., Dickson v. Microsoft Corp.*, 309 F.3d 193, 212 (4th Cir. 2002).
3. *Accord Nebraska v. Wyoming*, 507 U.S. 584, 590 (1993); *Celotex Corp. v. Catrett*, 477 U.S.at 322; *see also Thompson Everett, Inc. v. National Cable Advertising*, L.P., 57 F.3d 1317, 1322 (4th Cir. 1995) ("While it is axiomatic that Rule 56 must be used carefully so as not improperly to foreclose trial on genuinely disputed, material facts, the mere existence of some disputed facts does not require that a case go to trial. The disputed facts must be material to an issue necessary for the proper resolution of the case, and the quality and quantity of the evidence offered to create a question of fact must be adequate to support a [judgment in favor of the nonmoving party].").
4. The analogous standard applies where a defendant moves for summary judgment on the basis of an affirmative defense. *Rushing v. Kansas City S. Ry. Co.*, 185 F.3d 496, 505 (5th Cir. 1999).

may either: (1) demonstrate that the non-moving party's evidence is insufficient to establish one or more essential elements of the non-moving party's claim; or (2) submit affirmative evidence that negates an essential element of the nonmoving party's claim. *Celotex Corp. v. Catrett*, 477 U.S. at 327, 325. The burden then shifts to the non-moving party to submit affirmative evidence sufficient to create a genuine issue of material fact on each of the elements of the non-moving party's *prima facie* case put in issue by the motion for summary judgment. *M&M Medical Supplies & Serv., Inc. v. Pleasant Valley Hosp., Inc.*, 981 F.2d 160, 163 (4th Cir. 1993) (*en banc*) (citing *Celotex*).

In deciding a motion for summary judgment, the court must review the record "taken as a whole." *Matsushita Electric Indus. Co. v. Zenith Radio Corp.*, 475 U.S. at 587; *accord Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000). The court must construe the evidence in the light most favorable to the non-moving party without weighing it, assessing its probative value, or resolving any factual disputes. *See, e.g., Williams v. Time Warner Operation, Inc.*, 98 F.3d 179, 181 (5th Cir. 1996). Determinations of the weight to accord evidence or of the credibility of witnesses are within the sole province of the jury and as such are improper on a motion for summary judgment.[5]

2. Admissibility and the summary judgment record

Rule 56(e) governs the record in a summary judgment proceeding and provides in pertinent part:

> Supporting and opposing affidavits shall be made on personal knowledge, shall set forth such facts as would be admissible in evidence, and shall show affirmatively that the affiant is competent to testify to the matters stated therein.[6]

Rule 56(e) requires that, when deciding a motion for summary judgment, a federal district court may consider only admissible evidence.[7] Pursuant to Rule 104(a), the court must evaluate evidence for admissibility before it considers that evidence in ruling on a summary judgment motion.[8]

3. Sufficiency

Sufficiency of the evidence is analytically separate and distinct from admissibility.[9] Admissibility pertains to the threshold determination whether particular proffered evidence ought to be admitted for the consideration of the trier of fact, while sufficiency asks whether the collective weight of the evidence taken as a whole is adequate to support a judgment in a party's favor. Although *Daubert* significantly changed the standards governing the admissibility of expert evidence by expanding the gatekeeper role of the district courts in evaluating reliability and relevance, neither *Daubert* nor its progeny changed the standards for evaluating the sufficiency of admitted evidence, even when expert testimony is a critical part of the evidentiary record. Indeed, the standard for determining

---

5. *See, e.g., McCorvey v. Baxter Healthcare Corp.*, 298 F.3d 1253, 1257 (11th Cir. 2002); *Humetrix, Inc., v. Gemplus S.C.A.*, 268 F.3d 910, 919 (9th Cir. 2001) ("Authority to determine the victor in such a "battle of expert witnesses" is properly reposed in the jury."); *Wyler Summit Partnership v. Turner Broadcasting System, Inc.*, 235 F.3d 1184, 1192 (9th Cir. 2000) ("Weighing the credibility of conflicting expert witness testimony is the province of the jury."); *Carlo v. Keller Ladders, Inc.*, 211 F.3d 465, 468 (8th Cir. 2000) ("Determining the credibility of a witness is the jury's province, whether the witness is lay or expert."); *Heating & Air Specialists, Inc. v. Jones*, 180 F.3d 923, 936 n.8 (8th Cir. 1999); *Newport Ltd. v. Sears, Roebuck & Co.*, 6 F.3d 1058 (5th Cir. 1993) ("Where, as here, the district court has not excluded expert evidence as inadmissible, it ordinarily is the province of the jury to gauge the expert witness's credibility and the reliability of his data.").
6. Fed. R. Civ. P. 56(e). Some courts have held that the opinion of an expert is the expert's "personal knowledge" within the meaning of Rule 56(e) and should be accepted into the summary judgment record to the extent it is admissible under the Federal Rules of Evidence. *See United States v. Dailide*, 227 F.3d 385, 406 (6th Cir. 2000). Other courts hold that the rules of evidence provide an exception to the "personal knowledge" requirement for otherwise admissible expert testimony. *See, e.g., City of Chanute, Kansas v. Williams Natural Gas Co.*, 743 F. Supp. 1437, 1444 (D. Kan. 1990).
7. *See, e.g., Orr v. Bank of Am., NT & SA*, 285 F.3d 764, 773 (9th Cir. 2002); *Sports Unlimited, Inc. v. Lankford Enterprises, Inc.*, 275 F.3d 996, 999 (10th Cir. 2002); *Nora Beverages, Inc. v. Perrier Group of America, Inc.*, 269 F.3d 114, 123 (2d Cir. 2001); *Raskin v. Wyatt Co.*, 125 F.3d 55, 66 (2d Cir. 1997); *Duluth News-Tribune v. Mesabi Publishing Co.*, 84 F.3d 1093, 1098 (8th Cir. 1996); *Wiley v. United States*, 20 F.3d 222, 226 (6th Cir. 1994); *Arnold Pontiac-GMC, Inc. v. Budd Baer, Inc.*, 826 F.2d 1335, 1339 n.3 (3d Cir. 1987); *Hall v. United Air Lines, Inc.*, 296 F. Supp..2d 652, 666 n.17 (E.D.N.C. 2003).
8. Rule 104(a) provides:
   Preliminary questions concerning the qualification of a person to be a witness, the existence of a privilege, or the admissibility of evidence shall be determined by the court, subject to the provisions of subdivision (b) [relevancy conditioned on fact]. In making its determination it is not bound by the rules of evidence except those with respect to privileges.
   Fed. R. Evid. 104(a). *See, e.g., Colon ex rel. Molina v. BIC USA, Inc.*, 199 F. Supp..2d 53, 68 (S.D.N.Y. 2001); *Heller v. Shaw Indus., Inc.*, 1997 WL 535163, at *7 (E.D. Pa. Aug 18, 1997).
9. *See Vollmert v. Wisconsin Dep't of Transp.*, 197 F.3d 293, 298 (7th Cir. 1999); *Ambrosini v. Labarraque, M.D.*, 966 F.2d 1464, 1470 (D.C. Cir.1992); *Monks v. General Elec. Co.*, 919 F.2d 1189, 1192-93 (6th Cir. 1990); *Mid-State Fertilizer Co. v. Exchange Nat'l Bank of Chicago*, 877 F.2d 1333, 1339 (7th Cir. 1989); *Evers v. General Motors Corp.*, 770 F.2d 984, 986 (11th Cir. 1985); *United States v. Various Slot Machines on Guam*, 658 F.2d 697, 700-701 (9th Cir. 1981); *Merit Motors, Inc. v. Chrysler Corp.*, 569 F.2d 666, 673 (D.C. Cir.1977).

whether a witness may offer expert testimony does not require the proponent of the testimony to prove that the expert's opinion is correct. *See, e.g., In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 744 (3d Cir. 1994); *ID Sec. Sys. Canada, Inc. v. Checkpoint Sys., Inc.*, 198 F. Supp.2d 598. 605 (E.D. Pa. 2002). The focus of a *Daubert* inquiry is on the principles and methodology employed by the expert and not on the conclusions. *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 595 (1993).

On a motion for summary judgment, the essential sufficiency question is whether, on the evidence properly admitted into the summary judgment record, the moving party would be entitled to judgment as a matter of law at trial, or whether a reasonable fact finder, under the applicable evidentiary standard, could return a verdict for the non-moving party. On an element on which a party bears the burden of proof, the evidence must be sufficient to permit the trier of fact to find for the party on that element at trial. *See, e.g., Menasha Corp. v. News America Marketing In-Store, Inc.*, 238 F. Supp.2d 1024 (N.D. Ill. 2003) (rejecting expert report as insufficient to create a genuine issue of material fact on market definition). On an element on which the opposing party has the burden of proof, the evidence must be sufficient to permit the trier of fact to find for the party by a preponderance of the evidence (or whatever other quantum of proof is required on the issue) in light of the opposing party's evidence. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. at 248 ("[S]ummary judgment will not lie if the dispute about a material fact is 'genuine,' that is, if the evidence is such that a reasonable jury could return a verdict for the nonmoving party."). The applicable evidentiary standard is important, since a party's failure to raise at least a genuine issue of material fact under the evidentiary standard with respect to an essential element of its *prima facie* case or defense on which it bears the burden of proof is grounds for rejecting its claim or defense, even in the absence of evidence on the element by the opposing party. *See, e.g., Daubert v. Merrell Dow Pharm., Inc.*, 43 F.3d 1311, 1315 (9th Cir. 1995), on remand from 509 U.S. 579 (1993). *See generally Celotex Corp. v. Catrett*, 477 U.S. at 325.

4. Necessity

Finally, if an expert report is found inadmissible on a particular point, the party advancing the point need not necessarily lose it in the summary judgment proceeding, depending on whether the point is adequately made by evidence elsewhere in the record.

PRINCIPLE IV-1: Expert economic opinion evidence should be considered in deciding a motion for summary judgment only if the evidence meets the standards for admissibility at trial.

COMMENT

As an application of the general rule that only admissible evidence may be considered in deciding a summary judgment motion, the trial court has a duty to assess the admissibility of expert evidence under Rule 702.[10] The admissibility of expert testimony is governed by the same rule at the summary judgment stage as it is at trial.[11] The burden of laying the proper foundation for the admission of expert testimony is on the party offering the testimony, and admissibility under Rule 702 must be shown by a preponderance of the evidence.[12]

Some courts have taken the view that difficult *Daubert* questions, especially when the supporting facts are complex, should be left for trial and that the challenged testimony should be admitted for the limited purpose of deciding the summary judgment motion.[13] The primary concern

10. *See, e.g., Raskin v. Wyatt Co.*, 125 F.3d 55, 66 (2d Cir. 1997). For cases applying *Daubert* at the summary judgment stage, *see, e.g., Peitzmeier v. Hennessy Indus., Inc.*, 97 F.3d 293, 296 97 (8th Cir. 1996); *Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316 (7th Cir. 1996); *Cacciola v. Selco Balers, Inc.*, 127 F. Supp.2d 175, 180 (E.D.N.Y. 2001).
11. *See, e.g., Raskin v. Wyatt Co.*, 125 F.3d 55, 66 (2d Cir. 1997); *First United Financial Corp. v. United States Fidelity & Guaranty Co.*, 96 F.3d 135, 136-37 (5th Cir. 1996) (per curiam); *Lavespere v. Niagara Mach. & Tool Works, Inc.*, 910 F.2d 167, 175-76 (5th Cir. 1990); *O'Neil v. JC Penny Life Ins. Co.*, No. CV-97-7467 (CPS), 1998 WL 661513 (E.D.N.Y. Aug. 6, 1998).
12. *See, e.g., Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 5at 593 n.10; *Wills v. Amerada Hess Corp.*, 379 F.3d 32, 47 n.9 (2d Cir. 2004); *Hall v. United Ins. Co. of Am.*, 367 F.3d 1255, 1261 (11th Cir. 2004); *Lauzon v. Senco Products, Inc.*, 270 F.3d 681, 686 (8th Cir. 2001); *Meister v. Medical Engineering Corp.*, 267 F.3d 1123, 1128 n.9 (D.C. Cir. 2001); *Cooper v. Smith and Nephew, Inc.*, 259 F.3d 194, 199 (4th Cir. 2001); *Nelson v. Tenn. Gas Pipeline Co.*, 243 F.3d 244, 251 (6th Cir. 2001); *Oddi v. Ford Motor Co.*, 234 F.3d 136, 144 (3d Cir. 2000); *Allison v. McGhan Med. Corp.*, 184 F.3d 1300, 1306 (11th Cir. 1999); *United States v. Griffith*, 118 F.3d 318, 321 (5th Cir. 1997).
13. *See, e.g., Cortes-Irizarry v. Corporacion Insular de Seguros*, 111 F.3d 184, 188 (1st Cir. 1997); *Alcan Aluminum Corp. v. BASF Corp.*, 133 F. Supp..2d 482, 493 (N.D. Tex. 2001); *Granos Nacionales, S.A. v. N. Cent. Commodities*, No. A2-96-145, 1998 WL 1776579, at *4 (D.N.D. Sept. 21, 1998).

expressed by these courts is affording the proponent of the evidence adequate opportunity to defend its admissibility before excluding it.[14] This procedure is open to question because Rule 56 provides that disposition of summary judgment motions is to be made on the basis of admissible evidence, and nothing in the language of the rule or in the cases decided by the Supreme Court indicates that there is an exception when the *Daubert* challenges are complex or difficult.

On the other hand, in the interests of judicial economy and conserving the time and resources of the parties, if the court does decide admissibility of expert testimony at the summary judgment stage, there is no need for the court to revisit the issue in any later stage of the proceedings, including trial, absent a convincing showing of changed circumstances by the party seeking to reopen the matter.

PRINCIPLE IV-2: If reasonably possible, questions of the admissibility of expert economic evidence should be raised and decided prior to the parties' submission of their substantive memoranda in the summary judgment proceeding.

COMMENT

Since expert economic opinion evidence should be considered in deciding a motion for summary judgment only if it meets the standards for admissibility at trial, the court should ordinarily determine whether the proffered expert evidence is admissible in time for the parties to know what expert economic testimony is useable-or not useable-prior to the submission of their substantive memoranda on a summary judgment motion. Contrary to the practice of courts that have decided questions of the admissibility of expert opinion evidence in the course of a summary judgment motion, or deferred them until trial, this Principle recommends that the court entertain and decide Rule 104(a) challenges prior to the summary judgment submissions, if reasonably possible.

In the summary judgment context, challenges to the admissibility of an opponent's expert testimony typically arise in the substantive papers on the summary judgment motion itself. In antitrust cases, defendants, for example, often move for summary judgment in part on the ground that the plaintiff's expert testimony as revealed in the expert's Rule 26(a)(2) report or in the expert's deposition is inadmissible in whole or in part, and that in the absence of the challenged testimony the plaintiff cannot make out a *prima facie* case. This procedure almost always leads to a decision on the admissibility of the challenged testimony as part of the disposition of the summary judgment motion. Occasionally, a party will file a separate Rule 104(a) motion to prohibit the admission into the summary judgment record of some or all of its opponent's expert testimony, but even here the tendency is for courts to decide the admissibility challenge at the same time as the disposition of the summary judgment motion.

A variety of problems can arise when courts decide admissibility questions simultaneously with the disposition of a motion for summary judgment. If the parties do not know whether the evidentiary challenge will be sustained by the court, they must make their substantive arguments in the alternative. In antitrust cases, where multiple strains of expert evidence frequently are proffered on numerous aspects of the case, and where the admissibility of this evidence cannot be predicted with confidence by the parties, the result may be highly complex briefs with various lines of logic depending on whether certain expert evidence is admissible or not. To avoid these problems, the judge in an early Rule 16 conference should discuss with counsel their intentions to predicate any summary judgment motion or opposition on expert economic opinion evidence, as well as their expectations about challenging the admissibility of such evidence that may be proffered by the opposing side. The court may then be able to fashion a schedule that permits an admissibility determination before the parties must file their substantive memoranda on the summary judgment motion.[15]

In addition to relieving a great deal of confusion in the substantive arguments, deciding

---

14. *See, e.g., Cortes-Irizarry v. Corporacion Insular de Seguros*, 111 F.3d 184, 188 (1st Cir. 1997); *Alcan Aluminum Corp. v. BASF Corp.*, 133 F. Supp..2d 482, 493 (N.D. Tex. 2001). *See generally Weisgram v. Marley Co.*, 528 U.S. 440 (2000).
15. *See* Fed. R. Civ. P. 16(c)(4)-(5). *See also General Elec. Co. v. Joiner*, 522 U.S. 136, 149 (1997) (Breyer, J., concurring) (urging greater use of Rule 16 conference authority to resolve or narrow issues pertaining to expert testimony).

admissibility questions separately from the summary judgment proceeding provides a better basis for determining questions of admissibility and eliminates any question that the court provided sufficient process to a party in defending its evidentiary submissions.[16]

Of course, as noted previously, once the court rules on the admissibility of expert testimony, the court should not permit the issue to be raised again in later proceedings or trial without a compelling showing of changed circumstances by the party asking for reconsideration.

Finally, separating questions of the admissibility of expert evidence from the merits of the summary judgment motion facilitates review under the proper appellate standard. The admissibility of expert evidence into the summary judgment record is reviewed for abuse of discretion, while the grant or denial of the summary judgment motion is reviewed *de novo*. *See, e.g., Kirstein v. Parks Corp.*, 159 F.3d 1065, 1067 (7th Cir. 1998). A failure by the trial court to distinguish between admissibility and disposition can lead to unnecessary confusion on appeal.

PRINCIPLE IV-3: Questions as to the admissibility of expert testimony must be decided in accordance with Rule 702 and with sufficient opportunity for the proponent of the evidence to be heard.

COMMENT

Under Rule 702, expert testimony is admissible if (1) the proffered testimony will assist the trier of fact to understand the evidence or to determine a fact in issue; (2) the witness is qualified to give the testimony by virtue of knowledge, skill, experience, training, or education; (3) the testimony is based upon sufficient facts or data; (4) the testimony is the product of reliable principles and methods; and (5) the witness has applied the principles and methods reliably to the facts of the case. Fed. R. Evid. 702; *see Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. at 592. The admissibility inquiry is necessarily factually intensive, and a sound basis is required on which to make an admissibility determination. The Supreme Court has afforded trial courts great latitude in determining procedures for testing the admissibility of proffered expert testimony in light of the facts and circumstances of the case. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999). Whatever procedure is used, a key requirement is that the court ensure that the proponent of the testimony has an adequate opportunity to defend its admissibility before the evidence is excluded. *See, e.g., Group Health Plan, Inc. v. Philip Morris USA, Inc.*, 344 F.3d 753, 761 n.3 (8th Cir. 2003); *Nelson v. Tennessee Gas Pipeline Co.*, 243 F.3d 244, 249 & n.3 (6th Cir. 2001); *Padillas v. Stork-Gamco*, 186 F.3d 412, 417-18 (3d Cir. 1999); *Cortes-Irizarry v. Corporacion Insular de Seguros*, 111 F.3d 184, 188 & n.3 (1st Cir. 1997); *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 739 (3d Cir. 1994) ("Given the 'liberal thrust' of the federal rules it is particularly important that the side trying to defend the admission of evidence be given an adequate chance to do so.") (citation omitted).[17]

The court should require the proponent of the evidence to discharge its burden of proof by showing by a preponderance of the evidence that the testimony is admissible before relying upon it in deciding the summary judgment motion. It is an abuse of discretion for the court to reject evidence that would make a difference in the disposition of the summary judgment motion without providing the proponent of the evidence an opportunity to make the case for admissibility. The failure of the proponent of the evidence to make a prima facie showing of admissibility is grounds for excluding the expert testimony, even if the opposing party does not submit its own expert testimony opposing

16. *See, e.g., In re Paoli R.R. Yard PCB Litig.*, 916 F.2d 829, 854-55 (3d Cir. 1990) (party proffering expert evidence in summary judgment proceeding entitled to notice of the deficiency and an opportunity to cure).

17. If no objection is raised to the testimony, there is no requirement that the district court conduct sua sponte an in-depth Daubert analysis and make explicit findings on the record as to the elements of Rule 702. *See United States v. Locascio*, 6 F.3d 924 (2d Cir. 1993) ("We decline, however, to shackle the district court with a mandatory and explicit trustworthiness analysis. . . . In fact, we assume that the district court consistently and continually performed a trustworthiness analysis *sub silentio* of all evidence introduced at trial. We will not, however, circumscribe this discretion by burdening the court with the necessity of making an explicit determination for all expert testimony."); *accord Hoult v. Hoult*, 57 F.3d 1, 5 (1st Cir. 1995). The standard of review for the admission of expert testimony in the absence of a timely objection is plain error. *See, e.g., McKenzie v Benton*, 388 F.3d 1342, 1350 (10th Cir. 2004); *Macsenti v. Becker*, 237 F.3d 1223, 1232 (10th Cir. 2001); *Goebel v. Denver and Rio Grande Western R.R. Co.*, 215 F.3d 1083, 1088, n.2 (10th Cir. 2000); *Scott v. Ross*, 140 F.3d 1275, 1285 (9th Cir. 1998); *Christopher v. Cutter Laboratories*, 53 F.3d 1184, 1191 (11th Cir. 1995); *McKnight v. Johnson Controls, Inc.*, 36 F.3d 1396, 1406-07 (8th Cir. 1994). In civil cases, the plain error exception is limited to errors that significantly affect "the fairness, integrity or public reputation of judicial proceedings." *Polys v. Trans-Colorado Airlines, Inc.*, 941 F.2d 1404, 1408 (10th Cir. 1991).

admissibility. *See Brooks v. Outboard Marine Corp.*, 234 F.3d 89, 91-92 (2d Cir. 2000) (*per curiam*) (sustaining exclusion of expert testimony in the absence of opposing expert testimony from challenger).

Generally there is no obligation for the court to question *sua sponte* the Rule 702 admissibility of proffered expert evidence so long as the record makes a *prima facie* case of admissibility, and a party's failure to object to the admissibility of the testimony may waive the objection at least for the purposes of summary judgment. *See, e.g., Club Car, Inc. v. Club Car (Quebec) Import, Inc.*, 362 F.3d 775, 780 (11th Cir. 2004) ("A *Daubert* objection not raised before trial may be rejected as untimely. But a trial court has broad discretion in determining how to perform its gatekeeper function, and nothing prohibits it from hearing a *Daubert* motion during trial.") (citation omitted); *Questar Pipeline Co. v. Grynberg*, 201 F.3d 1277, 1289-90 (10th Cir. 2000) ("A party may waive the right to object to evidence on *Kumho/Daubert* grounds by failing to make its objection in a timely manner"); *Lithuanian Commerce Corp. v. Sara Lee Hosiery*, 202 F. Supp.2d 371, 376 (D.N.J. 2002).

If a proper objection is raised to the admissibility of expert testimony, the court is required to make a determination on the record. *In Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999), the Supreme Court instructed that "where [expert] testimony's factual basis, data, principles, methods, or their application are called sufficiently into question . . . the trial judge must determine whether the testimony has 'a reliable basis in the knowledge and experience of [the relevant] discipline.'" *Id.* at 149 (quoting *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. at 592); *see Macsenti v. Becker*, 237 F.3d 1223, 1232 (10th Cir. 2001); *United States v. Jasin*, 292 F. Supp.2d 670, 681 (E.D. Pa. 2003); *De Puy Inc. v. Biomedical Eng'g Trust*, 216 F. Supp.2d 358, 374-75 (D.N.J. 2001). Upon a proper challenge the trial court must make some type of admissibility determination. "[T]rial court discretion in choosing the manner of testing expert reliability [ ] is not discretion to abandon the gatekeeping function." Kumho, 526 U.S. at 158-59 (Scalia, J., concurring); *accord United States v. Velarde*, 214 F.3d 1204, 1209-11 (10th Cir. 2000).

Although neither side is entitled to an evidentiary hearing as a matter of right,[18] the court may conduct a *voir dire* hearing *in limine* when an opposing party raises a material admissibility challenge before trial. This practice can be extended to the summary judgment stage, especially when the challenge concerns the factual dimensions of the expert evidence.[19] Some appellate court have criticized trial courts for failing to conduct an *in limine* hearing in the summary judgment context when the admissibility of expert evidence material to a summary judgment proceeding is clearly in question and the factual record for determining admissibility is lacking.[20] At the very least, if the court does not permit an *in limine* hearing when requested, the court should provide alternative procedures sufficient to allow the parties to make an adequate record concerning the expert evidence at issue.[21]

18. *See, e.g., Group Health Plan, Inc. v. Philip Morris USA, Inc.*, 344 F.3d 753, 761 n.3 (8th Cir. 2003); *Nelson v. Tennessee Gas Pipeline Co.*, 243 F.3d 244, 248-49 (6th Cir. 2001) (holding that district court not required to hold hearing before excluding expert evidence and affirming summary judgment based on exclusion of evidence); *Oddi v. Ford Motor Co.*, 234 F.3d 136, 154-55 (3d Cir. 2000) (affirming summary judgment for defendants, although outcome-determinative evidence was excluded without an *in limine* hearing); *see also United States v. Alatorre*, 222 F.3d 1098, 1104-05 (9th Cir. 2000) (no abuse of discretion in criminal case when district court denied the defendant a separate *Daubert* hearing but permitted the defendant to conduct *voir dire* of the proffered expert at trial). The decision to hold an evidentiary hearing is in the trial court's discretion and is reviewed for abuse of discretion. *See, e.g., In re Hanford Nuclear Reservation Litig.*, 292 F.3d 1124, 1138 (9th Cir. 2002); *Nelson v. Tennessee Gas Pipeline Co.*, 243 F.3d 244, 248-49 (6th Cir. 2001); *Elcock v. Kmart Corp.*, 233 F.3d 734, 745 (3d Cir. 2000); *United States v. Nichols*, 169 F.3d 1255, 1262-64 (10th Cir. 1999). *See generally Kumho Tire Co. v. Carmichael*, 526 U.S. at 152 (whether to hold an evidentiary hearing on *Daubert* admissibility within trial court's discretion).
19. *See, e.g., Hauck v. Michelin N. Am., Inc.*, Civ.A.03-F-107 CBS, 2004 WL 2504513, at *2 (D. Col. Sept. 14, 2004) (on defendant's motion to strike expert's opinions accompanied by motion for summary judgment, court heard direct testimony and cross examination of plaintiff's expert, received into evidence articles and information tendered by plaintiff, viewed the physical evidence on which the expert opinion of a defect was rendered, and heard arguments of counsel for all parties on both motions); *Virginia Vermiculite, Ltd. v. W.R. Grace & Co.*, 98 F. Supp.2d 729, 731-32 (W.D. Va. 2000) (where motion to strike filed less than a week before initial summary judgment hearing and was arguably untimely, "it would have been waste of judicial resources not to hold a *Daubert* hearing prior to summary judgment" and the court held a four-day hearing).
20. *See Padillas v. Stork-Gamco*, 186 F.3d 412, 417-18 (3d Cir. 1999) (abuse of discretion not to hold an *in limine* hearing before excluding plaintiff's export report for lack of adequate explication of supporting facts and granting summary judgment to the defendant); *see In re Paoli R.R. Yard PCB Litig.*, 916 F.2d 829, 854 n.29a (3d Cir. 1990).
21. *See Group Health Plan, Inc. v. Philip Morris USA, Inc.*, 344 F.3d 753, 761 n.3 (8th Cir. 2003) (no abuse of discretion in procedure used to exclude expert testimony from summary judgment record where trial court allowed parties to exceed normal page limits in their summary judgment briefs to address evidentiary questions and permitted proponent of testimony to submit written submissions by the expert in question and other experts in support of admissibility); *Nelson v. Tenn. Gas Pipeline Co.*, 243 F.3d 244, 249 (6th Cir. 2001) (no abuse of discretion not to hold evidentiary hearing when the admissibility question was fully briefed by the parties and the opinion below reveals an adequate basis for determining the reliability and validity of the expert's testimony); *Claar v. Burlington N. R.R. Co.*, 29 F.3d 499, 500 (9th Cir. 1994) (noting district court had ordered two rounds of affidavits directing experts to explain the basis of their opinions); *In re Paoli R.R. Yard PCB Litig.*, 916 F.2d 829, 859 (3d Cir. 1990); *McConaghy v. Sequa Corp.*, 294 F. Supp.2d 151, 168 (D.R.I. 2003) ("Any motion for summary judgment on these grounds [inadmissibility of expert testimony] is premature, as it is made before this court has had the opportunity to hold a *Daubert* hearing and consider the admissibility of Plaintiff's proffered expert testimony."); *Colon ex rel. Molina v. BIC USA, Inc.*, 199 F. Supp..2d 53, 70 (S.D.N.Y. 2001) ("Moreover, failure to hold an in limine hearing, especially in the context of summary judgment, may be an abuse of discretion when the ruling on admissibility turns on factual issues."); *Heller v. Shaw Indus., Inc.*, 1997 WL 535163 (E.D. Pa. Aug. 18, 1997).

PRINCIPLE IV-4: Where reasonable and without prejudice to the opposing party, the court should allow the proponent of expert testimony the opportunity to cure a deficiency preventing the testimony's admission into evidence.

COMMENT

Courts should permit the proponent of expert testimony to cure a deficiency where reasonable in the circumstances. In determining the reasonableness of permitting a cure, the court should consider the nature of the deficiency and the feasibility of the cure; the significance of the evidence to the proponent's case; the proponent's opportunity to develop expert testimony, test theories, and respond to any specific challenges; the amount of time the cure will take; and the burden of the delay of the cure on the opponents. Courts should, and typically do, allow proponents to correct deficiencies that are more technical than substantive in nature, do not completely replace the originally proffered evidence, can be accomplished in a short amount of time, and do not unduly prejudice the opponents. On the other hand, this Principle does not open the door to "do-overs" by the same or different experts where the original evidence was fundamentally flawed, and the opponents-having built their case on the assumption that this was the best evidence available to the proponent-would be substantially prejudiced by having to confront new and presumably significantly different evidence.[22]

In *Weisgram v. Marley Co.*, 528 U.S. 440 (2000), the Supreme Court considered the scope of discretion in providing an opportunity for a cure of an expert evidentiary defect where the court of appeals had held that the trial court abused its discretion in admitting expert testimony critical to the plaintiff's product liability case at trial. In affirming the court of appeals's direction that the trial court enter judgment as a matter of law for the manufacturer without any opportunity for a cure, a unanimous Court observed:

> Since *Daubert*, moreover, parties relying on expert evidence have had notice of the exacting standards of reliability such evidence must meet. It is implausible to suggest, post *Daubert*, that parties will initially present less than their best expert evidence in the expectation of a second chance should their first try fail. We therefore find unconvincing [plaintiff's] fears that allowing courts of appeals to direct the entry of judgment for defendants will punish plaintiffs who could have shored up their cases by other means had they known their expert testimony would be found inadmissible. In this case, for example, although [plaintiff] was on notice every step of the way that [defendant] was challenging his experts, he made no attempt to add or substitute other evidence.[23]

Although *Weisgram* sets the bar high on a right to cure as a matter of law, in the interest of justice the court should consider allowing a party a reasonable opportunity to cure a deficiency in expert testimony when it will not result in undue prejudice to the opposing party.

PRINCIPLE IV-5: For expert opinion testimony to create a genuine issue of material fact warranting denial of a motion for summary judgment, the testimony must sufficiently disclose the basis for the conclusion.

---

22. *See, e.g., In re TMI Litig.*, 199 F.3d 158, 159 (3d Cir. 1999) (no need for district court to "provide a plaintiff with an open ended and never ending opportunity to meet a *Daubert* challenge until plaintiff 'gets it right' "); *Kirstein v. Parks Corp.*, 159 F.3d 1065, 1068-69 (7th Cir. 1998); *Claar v. Burlington N. R.R. Co.*, 29 F.3d 499, 504 (9th Cir. 1994); *Lippe v. Bairnco Corp.*, 249 F. Supp..2d 357, 386 (S.D.N.Y. 2003).
23. 528 U.S. at 455-56 (citations and footnote omitted); *accord Nelson v. Tenn. Gas Pipeline Co.*, 243 F.3d 244, 249-50 (6th Cir. 2001) ("We likewise find that fairness does not require that a plaintiff, whose expert witness testimony has been found inadmissible under Daubert, be afforded a second chance to marshal other expert opinions and shore up his case before the court may consider a defendant's motion for summary judgment.").

COMMENT

For expert opinion testimony to establish a *prima facie* showing or to create a genuine issue of material fact, it must provide not only the conclusion, but also the basis for the conclusion.[24] The weight to be given the conclusion depends on the strength with which the expert's conclusion may be drawn from the basis on which the expert has relied. "Expertise is a rational process and a rational process implies expressed reasons for judgment." *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 627 (1944) (Frankfurter, J., dissenting). *See Petrogradsky Mejdunarodny Kommerchesky Bank v. National City Bank*, 253 N.Y. 23, 25, 170 N.E. 479, 483 (1930) (Cardozo, J.) (an "opinion has a significance proportioned to the sources that sustain it.").

As a result, an unsupported expert conclusion has no probative value and cannot either make a *prima facie* showing or create a triable issue of fact. *See, e.g., Weigel v. Target Stores*, 122 F.3d 461, 468-69 (7th Cir. 1997); *Rebel Oil Co. v. Atlantic Richfield Co.*, 51 F.3d 1421, 1436 (9th Cir. 1995); *Microbix Biosystems Inc. v. Biowhittaker, Inc.*, 172 F. Supp.2d 665, 677 n.22 (D. Md. 2000) ("[E]xpert's 'naked opinions,' though admissible at trial, may not suffice to defeat summary judgment."). In particular, where expert testimony has been admitted into the summary judgment record, but the expert does no more in an affidavit than state an opinion and provide as the basis the review of the pleadings, depositions, documents, and the expert's education, training, and experience, the testimony cannot make a *prima facie* showing or create a genuine issue of fact, since there must be some connection drawn by the expert between the foundation and the conclusion.[25]

It is not necessary, however, for the proponent of expert testimony in a summary judgment proceeding to establish by a preponderance of the evidence that the expert's conclusion is correct. The sufficiency question on summary judgment is only whether the expert testimony has sufficient weight, taken together with the other evidence in the summary judgment record, to establish a *prima facie* showing if uncontested or to create a genuine issue of fact, as the case may be.

Nor is it necessary in a summary judgment proceeding for the expert to provide a detailed "roadmap" explicating the logic of connecting each conclusion to the stated basis of each opinion, provide all the underlying data, or answer all challenges in order for the opinion to be given weight in the proceeding.[26] Rule 705 of the Federal Rules of Evidence allows experts to testify in terms of opinion or inference without first testifying to the underlying facts or data, provided that the expert provides some reasons for drawing the conclusions. Fed. R. Evid. 705 ("The expert may testify in terms of opinion or inference and give reasons therefor without first testifying to the underlying facts or data, unless the court requires otherwise. The expert may in any event be required to disclose the underlying facts or data on cross-examination."). Although such detailed explanation may be necessary at trial to give the conclusion persuasive force, it is sufficient in a summary judgment proceeding that the expert states the conclusion, the basis, and the general connection between the two. *See Hayes v. Douglas Dynamics, Inc.*, 8 F.3d 88, 92 (1st Cir. 1993) ("Although an expert affidavit need not include details about all of the raw data used to produce a conclusion, or about scientific or other specialized input which might be confusing to a lay person, it must at least include the factual

24. *See also* Fed. R. Civ. P. 56(e) (requiring affidavits adduced by non-moving party to "set forth specific facts showing that there is a genuine issue for trial"); *Vollmert v. Wisconsin Dep't of Transp.*, 197 F.3d 293, 298 (7th Cir. 1999); *M&M Medical Supplies & Serv., Inc. v. Pleasant Valley Hosp., Inc.*, 981 F.2d 160, 165 (4th Cir. 1993) (*en banc*) (noting that Rule 705, which allows an expert to give her opinion without prior disclosure of the underlying facts, does not alter the requirement of Rule 56(e) that affidavits submitted in summary judgment proceedings set forth specific facts); *Mid-State Fertilizer Co. v. Exchange Nat'l Bank of Chicago*, 877 F.2d 1333, 1339 (7th Cir. 1989) (expert affidavits "shall 'set forth facts' and by implication in the case of experts (who are not 'fact witnesses') a process of reasoning beginning from a firm foundation.").

25. *See, e.g., Hayes v. Douglas Dynamics, Inc.*, 8 F.3d 88, 92-94 (1st Cir. 1993); *Mid-State Fertilizer Co. v. Exchange Nat'l Bank of Chicago*, 877 F.2d 1333, 1338-39 (7th Cir. 1989). Some pre-1993 cases indicated that Rule 56(e) required no more of an expert affidavit than an affiant competent to give an expert opinion and a statement of the factual basis for the opinion, even if the reasoning upon which the opinion was based was not stated. *See, e.g., Ambrosini v. Labarraque*, 966 F.2d 1464, 1470-71 (D.C. Cir. 1992); *Bulthuis v. Rexall Corp.*, 789 F.2d 1315, 1318 (9th Cir. 1985). But the increased emphasis on the expert's reasoning process as part of the admissibility inquiry following the Supreme Court's decision in *Daubert* in 1993 undoubtedly and properly drove Rule 56(e) analysis in the direction of *Mid-State/Hayes* and away from *Ambrosini/Bulthuis* approach.

26. *See Vollmert v. Wisconsin Dep't of Transportation*, 197 F.3d 293, 301 (7th Cir. 1999); *M&M Medical Supplies & Serv., Inc. v. Pleasant Valley Hosp., Inc.*, 981 F.2d 160 (4th Cir. 1993) (*en banc*) ("[A]n affidavit that states facts on which the expert bases an opinion satisfies Fed. R. Civ. P. 56(e) even though the expert does not attach the data supporting the facts. If need be, the court, acting pursuant to Fed. R. Civ. P. 56(e) and Fed. R. Evid. 705, can require the expert to furnish the supporting data.").

basis and the process of reasoning which makes the conclusion viable in order to defeat a motion for summary judgment."); *accord Williams v. Ford Motor Co.*, 187 F.3d 533, 544 (6th Cir. 1999). This is enough to permit the opposite party, if it chooses, to develop its own evidence-through depositions or opposing testimony-that the conclusion does not follow from the basis or that the basis is in some way fundamentally flawed. *See M&M Medical Supplies & Serv., Inc. v. Pleasant Valley Hosp., Inc.*, 981 F.2d 160, 165 (4th Cir. 1993) (*en banc*) (discovery may be used to elicit additional information about the facts underlying an expert's conclusions).

PRINCIPLE IV-6: When an expert's opinion is not supported by sufficient facts; depends on an assumption clearly contradicted by the record or an assumption unsupported by fact or accepted economic theory; or utilizes an economically untenable inference, the opinion cannot support a judicial finding of fact and hence cannot be a basis for deciding summary judgment.

COMMENT

Expert testimony is not a talisman against summary judgment. *Raskin v. Wyatt Co.*, 125 F.3d 55, 66 (2d Cir. 1997); *see Viterbo v. Dow Chem. Co.*, 826 F.2d 420, 422 (5th Cir. 1987) (although the Federal Rules of Evidence "expanded the acceptable bases for expert opinion[,] . . . this expansion does not extend to make summary judgment impossible whenever a party has produced an expert to support its position."). Expert testimony, even when squarely on point, may be insufficient as a basis for establishing a *prima facie* showing or creating a genuine issue of fact for one of three reasons: (1) the testimony merely provides a suggestion of the finding; (2) the expert's conclusion depends on an assumption clearly contradicted by the record, or an assumption unsupported by fact or accepted economic theory; or (3) the expert's conclusion utilizes an economically untenable inference.

The usual rule in summary judgment proceedings is that courts may not rely on the "mere existence of a scintilla of evidence."[27] If evidence is merely colorable, or is not significantly probative, that evidence does not create a genuine issue of material fact and summary judgment is appropriately granted. *Anderson v. Liberty Lobby*, 477 U.S. at 249-50; *accord Flip Side Productions, Inc. v. Jam Productions, Ltd.*, 843 F.2d 1024, 1032 (7th Cir. 1988). This rule applies to expert testimony just as it does to other types of evidence.[28]

An expert opinion that depends on an assumption clearly contradicted by the record or an assumption unsupported by fact or accepted economic theory cannot support a judicial finding of fact and hence cannot be a basis for deciding summary judgment. *See, e.g., Rebel Oil Co. v. Atlantic Richfield Co.*, 51 F..3d 1421, 1436 (9th Cir. 1995).

Finally, although summary judgment is inappropriate "where there is no dispute as to the evidentiary facts but only as to the conclusions to be drawn therefrom," *M&M Medical Supplies & Serv., Inc. v. Pleasant Valley Hosp., Inc.*, 981 F.2d 160, 163 (4th Cir. 1993) (*en banc*) (citations omitted), an expert's conclusions drawn from undisputed facts must be reasonable. The rule that the court must draw all inferences from the evidence in the non-moving party's favor, *Anderson v. Liberty Lobby, Inc.*, 477 U.S. at 255, only applies to reasonable inferences. The court may not make unreasonable inferences in order to find a genuine issue of material fact, and all inferences must be reasonable in light of the competing inferences. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. at 588. Moreover, certain inferences from circumstantial evidence may be prohibited as a matter

27. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. at 252; *see Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. at 596 (noting that a court may grant summary judgment under Rule 56 after properly admitting expert testimony under Rule 702 where "the scintilla of evidence presented supporting a position is insufficient to allow a reasonable juror to conclude that the position more likely than not is true").

28. *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. at 596; *On-Line Tech. v. Bodenseewerk Perkin-Elmer*, 386 F.3d 1133, 1144 (Fed. Cir. 2004) (conclusory assertions by expert witnesses are not sufficient to avoid summary judgment); *Thomas v. Christ Hosp. & Med. Ctr.*, 328 F.3d 890, (7th Cir. 2003) ("conclusory assertions, unsupported by specific facts made in affidavits opposing a motion for summary judgment, are not sufficient to defeat a motion for summary judgment"); *Matthiesen v. Banc One Mortgage Corp.*, 173 F.3d 1242, 1247 (10th Cir. 1999) ("The testimony of an expert can be rejected on summary judgment if it is conclusory and thus fails to raise a genuine issue of material fact."); *Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316 (7th Cir. 1996) (affirming grant of summary judgment on basis that plaintiff's expert witness' testimony was conclusory and did not satisfy Daubert test for admissibility of scientific evidence); *Hayes v. Douglas Dynamics, Inc.*, 8 F.3d 88, 92 (1st Cir. 1993) ("Although expert testimony may be more inferential than that of fact witnesses, in order to defeat a motion for summary judgment an expert opinion must be more than a conclusory assertion about ultimate legal issues."). *See generally Mid-State Fertilizer Co. v. Exchange Nat'l Bank of Chicago*, 877 F.2d 1333, 1340 (7th Cir. 1989) ("Judges should not be buffaloed by unreasoned expert opinions.").

of substantive law. *See, e.g., Matsushita Electric Indus. Co. v. Zenith Radio Corp.*, 475 U.S. at 588 (conduct that is "as consistent with permissible [activity] as with illegal conspiracy does not, standing alone, support an inference of antitrust conspiracy.").

PRINCIPLE IV-7: The rule that courts cannot assess the credibility or weight to be accorded admitted evidence applies as equally to expert testimony as it does to normal fact testimony.

COMMENT

Daubert's gatekeeper role should not invade the province of the jury to decide issues of credibility and to determine the weight that should be accorded evidence. *See, e.g., Arkwright Mut. Ins. Co. v. Gwinner Oil, Inc.*, 125 F.3d 1176, 1183 (8th Cir. 1997). Credibility determinations, the weighing of evidence, and the drawing of legitimate inferences from the facts are functions for the trier of fact, not the judge in a dispositive pretrial motion. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. at 249 ("[A]t the summary judgment stage the judge's function is not himself to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for trial.").

PRINCIPLE IV-8: Expert testimony is admissible when it satisfies the requirements of Rule 702 even if it conflicts with other admissible expert testimony. Conflicts in admissible expert testimony, like conflicts in evidence generally, must be resolved by the trier of fact and not on summary judgment.

COMMENT

It is not unusual for the opposing parties in litigation to proffer conflicting expert testimony. Expert testimony that satisfies the requirements of Rule 702 is admissible even if it conflicts with other admissible evidence, including other expert testimony. Assuming that each side's record evidence is sufficient standing alone to make a *prima facie* showing of the fact in question, conflicts in expert testimony must be resolved by the trier of fact and not on summary judgment. *See, e.g., Goldman v. Standard Ins. Co.*, 341 F.3d 1023, 1035 (9th Cir. 2003); *TFWS, Inc. v. Schaefer*, 325 F.3d 234, 241-43 (4th Cir. 2003); *Leggett & Platt, Inc. v. Hickory Springs Mfg. Co.*, 285 F.3d 1353, 1362 (Fed. Cir. 2002); *Klein v. Tabatchnick*, 610 F.2d 1043, 1048 (2d Cir. 1979); *ID Sec. Sys. Canada, Inc. v. Checkpoint Sys., Inc.*, 198 F. Supp.2d 598. 605 (E.D. Pa. 2002); *Telecomm Technical Serv., Inc. v. Siemens Rolm Communications, Inc.*, 66 F. Supp.2d 1306, (N.D. Ga. 1998); *Grismer v. The Upjohn Co.*, 1995 WL 390053, at * 4 (N.D. Ill. June 26, 1995).

PRINCIPLE IV-9: Expert testimony, while typically useful as a means for efficiently organizing and persuasively advancing the evidence, is rarely if ever strictly necessary to establishing a prima facie case or creating a material issue of fact.

COMMENT

The Supreme Court has held that expert evidence is not essential "if all the primary facts can be accurately and intelligibly described to the jury, and if they, as men [sic]of common understanding, are as capable of comprehending the primary facts and of drawing correct conclusions from them as are witnesses possessed of special or peculiar training, experience, or observation in respect of the subject under investigation." *Salem v. United States Lines*, 370 U.S. 31, 35 (1962) (quoting *United States Smelting Co. v. Parry*, 166 F. 407, 415 (8th Cir. 1909)); *accord Padillas v. Stork-Gamco*, 186 F.3d 412, 415-16 (3d Cir. 1999); *ID Sec. Systems Canada, Inc. v. Checkpoint Sys., Inc.*, 198 F. Supp.2d 598, 612 (E.D. Pa. 2002). When expert testimony on a material fact is rejected as inadmissible or insufficient standing alone, the proponent of the testimony does not necessarily lose the point, since the question is whether on the record as a whole the proponent adduced enough admissible evidence-from whatever sources-to create a genuine issue of material fact with respect to the issue. *See, e.g., Daubert v. Merrell Dow Pharm., Inc.*, 43 F.3d 1311, 1315 (9th Cir. 1995), on remand from 509 U.S. 579 (1993).

PRINCIPLE IV-10 A trial court's determination of the admissibility of expert testimony under Rule 403 or 702 into the summary judgment record is reviewed under the abuse of discretion standard.

COMMENT

The grant or denial of a motion for summary judgment is reviewed de novo. *Eastman Kodak Co. v. Image Technical Services, Inc.*, 504 U.S. at 465 n.10; *United States v. Diebold, Inc.*, 369 U.S. 654, 655 (1962). A trial court's determination of the admissibility of expert testimony under Rule 403 or Rule 702 into the summary judgment record, however, is reviewed for abuse of discretion. *Kumho Tire Co. v. Carmichael*, 526 U.S. at 142; *General Elec. Co. v. Joiner*, 522 U.S. 136, 142-43 (1997). Abuse of discretion is the proper standard even if the trial court conducted no in limine hearing. *Group Health Plan, Inc. v. Philip Morris USA, Inc.*, 344 F.3d 753, 761 n.3 (8th Cir. 2003). An appellate court should not reverse a district court's admissibility determination unless it is "manifestly erroneous" and prejudicial.[29]

Significantly for summary judgment proceedings, the admission of evidence in a bench trial is rarely grounds for reversal, for the trial judge is presumed to be able to exclude improper inferences from the decisional analysis. *See, e.g., Schultz v. Butcher*, 24 F.3d 626, 631-32 (4th Cir. 1994) ("For a bench trial, we are confident that the district court can hear relevant evidence, weigh its probative value and reject any improper inferences."). The exception, of course, is when the trial judge could have based the decision only on evidence that was inadmissible.

PRINCIPLE IV-11: The same standard of review applies regardless of whether the trial court has allowed or disallowed the proffered expert testimony or whether the ruling is determinative of the outcome of the summary judgment motion.

COMMENT

In *General Elec. Co. v. Joiner*, 522 U.S. 136 (1997), the Supreme Court made clear that, even where the exclusion of proffered expert testimony is determinative of the outcome of a summary judgment motion, the usual standards for the review of admissibility determinations apply. The *Joiner* Court held that a court of appeals may not "categorically distinguish between rulings allowing expert testimony and rulings disallowing it." 522 U.S. at 143 (reversing 78 F.3d 524 (11th Cir. 1996)). The Court reversed the Eleventh Circuit for applying an admittedly more stringent standard of review to the exclusion of the plaintiff's proffered expert evidence, even though the evidence was "outcome determinative" in the sense that it was critical to creating a genuine issue of material fact and so avoiding summary judgment for the defendant. 522 U.S. at 142-43.

---

29. *See, e.g., Club Car, Inc. v. Club Car (Quebec) Import, Inc.*, 362 F.3d 775 (11th Cir. 2004) (requiring "substantial prejudicial effect"); *Orr v. Bank of Am., NT & SA*, 285 F.3d 764, 773 (9th Cir. 2002) (citing *General Elec. Co. v. Joiner*, 522 U.S. 136, 142 (1997)); *Wilson v. Merrill Dow Pharm., Inc.*, 160 F.3d 625, 629-30 (10th Cir. 1998) (same); *Hayter v. City of Mount Vernon*, 154 F.3d 269, 273-74 (5th Cir. 1998); *Raskin v. Wyatt Co.*, 125 F.3d 55, 66 (2d Cir. 1997) ("manifest error"). *See generally Salem v. United States Lines Co.*, 370 U.S. 31, 35 (1962) (district judge's admission or exclusion of evidence "is to be sustained unless manifestly erroneous"); *Group Health Plan, Inc. v. Philip Morris USA, Inc.*, 344 F.3d 753, 760 (8th Cir. 2003) ("Even if we believe that we might have come to a different conclusion as an original matter from the one that the district court did, we can reverse only if "we are convinced that the District Court made a clear error of judgment on the basis of the record before it.") (citation omitted); *TFWS, Inc. v. Schaefer*, 325 F.3d 234, 240 (4th Cir. 2003) (giving "great deference" to a district court's decision to admit or exclude expert testimony under *Daubert*); *Christophersen v. Allied Signal Corp.*, 939 F.2d 1106, 1109 (5th Cir. 1991) (*en banc*) (*per curiam*).

CHAPTER V.
ECONOMIC EVIDENCE & TESTIMONY IN MOTIONS *IN LIMINE* & AT TRIAL

INTRODUCTION

As earlier chapters indicate, economic testimony is useful at virtually all stages of an antitrust case and for various purposes. Because *Daubert* challenges can and have occurred through motions *in limine* and after trial has begun (as late as just before plaintiff rests), there is a continuing need for the parties to make sure that economic evidence, which typically will come in through expert testimony, meets the requirements of Federal Rule of Evidence 702, addressed in Chapter I. Economic testimony also is vulnerable to post-trial attack. *See Concord Boat Corp. v. Brunswick Corp.*, 207 F.3d 1039, 1056-57 (8th Cir. 2000) (holding that economic expert's testimony should have been excluded because it failed to incorporate all aspects of the economic reality of the relevant market and because it failed to separate lawful from unlawful conduct).

In addition, however, parties approaching trial also must be sure that any economic evidence can survive challenges under Federal Rules of Evidence 103, 104, 401, 402, 403, 703, and 704. Courts employ different approaches to determining what economic evidence reaches the jury, ranging from permitting experts to testify before making a reliability determination, *see Lantec, Inc. v. Novell, Inc.*, 306 F.3d 1003, 1025-26 (10th Cir. 2002) (affirming district court's exclusion of expert testimony regarding relevant market after expert testified at trial), to holding extensive evidentiary hearings to determine admissibility before trial. *See In re Polypropylene Carpet Antitrust Litig.*, 93 F. Supp. 2d 1348 (N.D. Ga. 2000) (determining not to exclude plaintiffs' experts after four-day evidentiary hearing). The court also may, on its own motion or on the motion of any party, appoint expert witnesses agreed upon by the parties or of its own selection, as set forth in Federal Rule of Evidence 706. *See In re High Fructose Corn Syrup Antitrust Litig.*, 295 F.3d 651, 665 (7th Cir. 2002) (recommending that district court "use the power that Rule 706 of the Federal Rules of Evidence expressly confers upon him to appoint his own expert witness, rather than leave himself and the jury completely at the mercy of the parties' warring experts."). Given the increasing complexity of economic evidence being produced in antitrust cases and the numerous means available to challenge economic evidence, it is necessary for courts to implement strategies to promote fair and clear presentation of economic evidence at trial while preventing unnecessary delay in resolving the case and increasing the parties' costs. As prior chapters have stressed, case management, including scheduling and pre-trial orders, should address and provide for not only the timing of expert disclosures and reports, but also the procedure for filing, responding to, and ruling on motions to exclude expert testimony, as well as how such motions will be coordinated with proceedings involving dispositive motions.

PRINCIPLE V-1: Case management orders should generally include a time for the parties to confer with the court regarding the issues for which economic testimony will be necessary at trial.

COMMENT

To facilitate efficient and coherent presentation of economic evidence at trial, the parties should confer with the court to determine which specific economic issues are in dispute and which may be presented by stipulation. Generally, the parties should be able to resolve issues regarding the admissibility of expert economic testimony via *Daubert* motions well in advance of trial, thus obviating the need for motions *in limine* addressing the issue.

PRINCIPLE V-2: Timely *Daubert* motions should generally render unnecessary motions in limine directed at the same expert testimony, but do not preclude objections and motions to strike as the evidence is presented at trial.

COMMENT

Adequate procedures, in particular *Daubert* motions, exist and should be used to test the admissibility of expert testimony well in advance of trial. By the time the parties reach trial, they should know which experts will be allowed to testify and about what. Best practice counsels deciding issues of admissibility of economic evidence well before trial to the extent reasonably possible.

When challenges to economic testimony have occurred earlier in a case, such as in conjunction with a motion for summary judgment or a *Daubert* challenge, a party whose expert survived such a challenge should generally be permitted to present the economic testimony. Opposing parties should use cross-examination to show any alleged infirmities in the proposed testimony. *See, e.g., In re Industrial Silicon Antitrust Litig.*, No. 95-2104, 1998 WL 1031507, at *4 (W.D. Pa. Oct. 13, 1998) (permitting expert to testify at trial and concluding that "should the jury find that defendants conspired to fix prices, [the expert's] proffered testimony will assist the jury in determining the amount of damages, if any that plaintiffs incurred as a result of that conspiracy. Thus, if defendants wish to challenge [the] expert testimony, they must do so by vigorous cross-examination and by proffering their own expert to present contrary evidence.").

The parties remain free to make objections and motions to strike with respect to expert testimony that that fails to meet the requirements of Rule 702 or any other Federal Rule of Evidence. *In Lantec, Inc. v. Novell, Inc.*, Case No. 2:95-CV-97-ST, slip op. (D. Utah Feb. 13, 2001), for example, the court had denied a *Daubert* challenge to plaintiffs' expert brought the day before the expert was to testify at trial. After the expert testified before the jury, however, the court determined that the testimony should be excluded because it lacked foundation and was unreliable. Without the expert's testimony, plaintiffs were left with insufficient evidence of the relevant market, market power, power to control prices, and probability of success of monopolization, and lost the case when defendant moved for judgment as a matter of law at the close of plaintiffs' case. *Lantec*, 146 F. Supp. 2d 1140 (D. Utah 2001), aff'd, 306 F.3d 1003 (10th Cir. 2002). Similarly, in *In re Brand Name Prescription Drugs Antitrust Litig.*, 1999-1 Trade Cas. (CCH) Paragraph 72,446 (N.D. Ill. Jan. 19, 1999), the court denied defendants' pretrial requests to exclude the testimony of plaintiffs' economic expert, but found the testimony unreliable when defendants raised the issue again on their motion for judgment as a matter of law at the end of plaintiffs' case.

PRINCIPLE V-3: Courts analyzing challenges to expert economic testimony through motions *in limine* or during trial should take care not to usurp the jury's function as fact finder and should require parties challenging economic evidence to present more than contrary conclusions or speculation.

COMMENT

Challenges to expert economic testimony must focus on the particular matter to which the expert testimony is directly relevant, analyzing the reasonableness of the expert's approach along with the expert's particular method of analyzing the data. A laundry list of the opposing expert's differences with the way an expert applies methodology generally should be insufficient to render the testimony inadmissible, and courts should require the party opposing the economic evidence to come forward with more than "a hodge-podge of miscellaneous attacks on so-called 'absurd results' and 'faulty assumptions,' cute rhetorical stratagems, and unsubstantiated speculation about problems that may or may not infect [the expert's] work." *Law v. National Collegiate Athletic Ass'n*, Civil Action Nos. 94-2053-KHV, 94-2392-KHV, 95-2026-KHV, 1998 U.S. Dist. Lexis 6640, at *20 (D. Kan. Apr. 23, 1998).

Courts should also not allow the opposing expert to criticize proffered economic testimony on a basis not asserted in the opposing expert's report. Further, the opposing expert must show specific flaws in the challenged testimony through concrete data, such as the opposing expert's own analysis, and should demonstrate either that the opposing expert has performed or tested any calculations that are criticized, or that the methodology employed is demonstrably improper. A party challenging an economic expert's methodology also can identify a methodology that is preferable to the one being challenged, and the court may find failure to do so to be indicative of the weakness of the attack on the expert. *Id.* Ultimately, the court must evaluate challenges to proffered economic testimony under the well-established principle that "the evidentiary requirement of reliability under *Daubert* is lower than the merits standard of correctness." *Id.* at *24. "The grounds for the expert's opinion merely have to be good, they do not have to be perfect. The judge might think that there are good grounds for an expert's conclusion even if the judge thinks there are better grounds for some alternative conclusion, and even if the judge thinks that a scientist's methodology has some flaws such that if they had been corrected, the scientist would have reached a different result." *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 744 (3d Cir. 1994).

PRINCIPLE V-4: Although court-appointed experts may in some cases offer the fact-finder a more neutral and more reliable perspective on issues at trial, they present a multitude of problems and are not necessary or advisable in the vast majority of cases, and a court should carefully balance the pros and cons of using court-appointed experts before exercising its discretion to do so.

COMMENT

Under Fed. R. Evid. 706, the court has broad discretion to appoint an expert *sua sponte* or on the request of the parties. There are several possible advantages to the court's appointing an expert. First, if a particular antitrust case threatens to become a battle of the experts or an impenetrable thicket of conflicting expert testimony, a court-appointed expert may provide a more neutral and more intelligible perspective on key economic issues. Second, the presence of a court-appointed expert may reduce the adversariness of the parties' experts and induce the parties' respective experts to be more careful in their own testimony. Third, a court-appointed expert may assist the court in clarifying and narrowing disputed issues as well as assist the court and jury in comprehending the issues and the evidence. Finally, a court-appointed expert may facilitate settlement.

There are, however, a number of disadvantages to having a court-appointed expert, and these disadvantages will outweigh any potential claimed benefits in the vast majority of cases. First, although court-appointed experts theoretically are neutral, any expert will have experience and opinions that may predispose the expert on disputed issues relevant to a case. The court thus cannot be confident that the expert selected is genuinely neutral. There also is the danger that the jury may view testimony from the court-appointed expert as the court's view, and thus will put exclusive or undue emphasis on the court-appointed expert's testimony to the exclusion of other expert testimony. It may not be possible to impose sufficient procedural safeguards to prevent improper influence on the jury.

Further, as a practical matter, because the need for a court-appointed expert usually is not evident early in an antitrust case, using a court-appointed expert may lead to delay owing to the process for identifying and selecting a neutral expert. The addition of an expert to provide a perspective on the respective parties' experts also may lengthen the trial and increase the costs of litigation, as the parties typically bear the cost of the court-appointed expert.

Finally, the process of selecting a court-appointed expert is highly likely to lead to appointment of someone far from ideal or even desirable. If the court decides to appoint a neutral expert, it may select the expert on its own or with input from the parties. As part of this process, the court will have to determine the qualifications the expert should meet, define the scope of the expert's work and the information the expert should review, set a timetable, and define the work product the expert will submit to the court. The court will also have to determine whether the neutral expert will have access to the parties' experts and, if so, what kind of access. The court also must decide whether the parties will depose the expert or examine the expert at trial and craft jury instructions related to the court-appointed expert. Most courts are not particularly well-suited for or interested in undertaking these responsibilities, given their workloads and experience. To the extent the court involves the parties in the process, the result is likely to be advocacy and conflict rather than consensus, with the consequence that the litigation becomes more unwieldy, delayed, and expensive, rather than less so.

In those exceptional cases where a court-appointed expert makes sense, the "ideal" court-appointed expert will be one who has not worked on the litigation in question or related litigation and who has no financial affiliation with any of the economic consulting firms already involved in the case. Such an expert also should agree to refuse any future work from the parties or their counsel during the pendency of the litigation and should not be currently engaged by any of the parties, their subsidiaries or affiliated companies, their officers, directors, or other representatives, or their counsel. For a discussion of best practices regarding court-appointed experts, *see Manual for Complex Litigation, Fourth*, Section 11.51; *Reference Manual on Scientific Evidence, Second*, pp. 59-63.

Unlike other countries such as Germany and France, which have official licensing bodies authorized by statute to assemble lists of professionals deemed especially qualified to serve as experts, this country currently has no particular source that assists in selecting court-appointed experts. *See, e.g.*, Robert Goldspink, *The Expert Witness in Int'l Litig.*, INT'L COMM. LITIG. 29 (May 1, 1998); John H. Langbein, *The German Advantage in Civil Procedure*, 52 UNIV. CHI. L. REV. 823 (1985). The court in *In re High Fructose Corn Syrup Antitrust Litig.* sought referrals from the American Association for the Advancement of Science, but there likely exist other sources of potential court-appointed experts. The problem, of course, is that none of these sources guarantees neutral experts.

As an alternative to appointing an expert, the court may consider appointing a "technical advisor" to assist it in understanding the "jargon and theory" relevant to the technical aspects of the evidence. Such technical advisors are not subject to the provisions of Fed. R. Civ. P. 706. They may not supply new evidence and they do not testify at trial. They may or may not submit an expert report. *See Association of Mexican-American Educators v. California*, 231 F.2d 572 (9th Cir. 2000) (dissent by Tashima, J.).

A recent example of the use of Fed. R. Civ. P. 706 occurred in *In re High Fructose Corn Syrup Antitrust Litig.*, 295 F.3d 651 (7th Cir. 2002), where the Seventh Circuit recommended that the court appoint an expert to assist it and the jury in understanding the inferences to be drawn from technical statistical evidence. In implementing this recommendation, the trial court, with the assistance of the parties, identified criteria for selection of the expert, specifically defined the expert's task, and elicited input from the parties (which split the costs of the expert) in the selection of the expert (resulting in additional motion practice in the case). The selection and work of the court-appointed expert lengthened the pretrial process significantly as the parties briefed their positions on, *inter alia*, protocol and choice of expert, and then proceeded with the discovery necessary for the court-appointed expert to fulfill his task. Ultimately, the court-appointed expert never testified in the case, as the parties settled the case, defendant by defendant, with the last defendant settling virtually on the eve of trial. *See also* JOE S. CECIL & THOMAS E. WILLGING, COURT-APPOINTED EXPERTS: DEFINING THE ROLE OF EXPERTS APPOINTED UNDER FEDERAL RULE OF EVIDENCE 706 (Federal Judicial Center 1993).

The Australian system of handling expert testimony at trial provides instruction on how courts in this country might streamline the procedural and substantive problems that have arisen when courts here have invoked Fed. R. Evid. 706, or obviate the need to invoke Rule 706 at all. In Australia, the parties' counsel must give experts a written copy of the Federal Court's Guidelines for experts. One part of the Guidelines specifies that the expert's responsibility is to the Court, not to the party that has retained the expert. Experts then submit a "Draft Expert Statement," and opposing experts are required to confer and to identify areas of agreement and disagreement as well as prepare a memorandum to the Court identifying those areas. Shortly before trial, the parties submit an Updated Statement, which is intended to take into account any new information or reconsideration by the expert. The goal of having this exchange of expert views is to narrow the areas of difference and to highlight the reasons for any remaining differences. At trial, experts for all parties appear together (a practice that has come to be termed the "hot tub") and each expert takes 15-20 minutes to summarize the expert's position in a monologue (there is no "direct examination"). Then, subject to orders the judge may impose on this process, the judge may ask questions, opposing lawyers may ask questions, or the experts may question one another. Australian judges believe that this system reduces the incidence of experts acting essentially as advocates for their side rather than as genuinely objective analysts. Note, however, that there are no juries in the Australian system. See Australian Federal Court Guidelines for Expert Witnesses, http://www.fedcourt.gov.au/pracproc/ practice_direct.html.

CHAPTER VI.
ECONOMICS & PROOF OF CONCERTED ACTION

INTRODUCTION

Proof of conspiracy in antitrust cases has become one of the more muddled areas of antitrust law. For many years, from the passage of the Sherman Act in 1890 up to the 1980s, the general trend of the law was towards liberalizing the type of proof sufficient to sustain a finding of fact that defendants had engaged in concerted action either unreasonably to restrain trade in violation of Section 1 of the Sherman Act, or to monopolize in violation of Section 2. Beginning in the mid 1980s, however, courts began taking a much narrower view of the type of evidence sufficient to create a submissible issue on the question of conspiracy or concerted action. The result has been to limit the types and increase the amount of proof required to prove conspiracy or concerted action when the plaintiff's proof consists of circumstantial evidence.

Along with increasing complexity and confusion in the law, a particular issue, the so-called oligopoly problem, has come into sharper focus. In an oligopoly setting, coordination of pricing and other activities is said by many commentators to become easier, if not inevitable, through conscious parallelism alone. Economic theory has posited that price uniformity that could be achieved only through express collusion in an unconcentrated market becomes much more organic and structural in an oligopoly, whose members are able to operate through conscious parallelism. Because the law has long been that conscious parallelism alone is insufficient to prove unlawful agreement, the issue for the courts has been where to draw the line between presumably lawful conscious parallelism, and unlawful collusion or agreement. In recent years, the use of economic evidence has received much attention and debate in this area. *E.g., In re High Fructose Corn Syrup Antitrust Litig.*, 295 F.3d 651 (7th Cir. 2002); *Williamson Oil Co., Inc. v. Phillip Morris U.S.A.*, 346 F.3d 1287 (11th Cir. 2003); Werden, Gregory J., *Economic Evidence on the Existence of Collusion: Reconciling Antitrust Law with Oligopoly Theory*, 71 *ANTITRUST LAW JOURNAL* 719 (2004).

The Economics and Antitrust Working Group believes this to be an area in which the formulation of well-supported, economically sound principles can be of great help in guiding litigants and courts towards greater clarity, uniformity, rationality, and conformity with the best economic thinking on the subject of concerted action. The Principles that follow are intended to achieve these objectives.

At the outset, however, some preliminary matters are worth noting. First is the critical distinction between proof by direct evidence and proof by circumstantial evidence. Direct evidence is proof that establishes the existence of a fact without the need for additional inferences or other evidence. For example, direct evidence of agreement may include admissions by co-conspirators that a conspiracy exists, eye witness accounts of conspiratorial meetings, *In re Brand Name Prescription Drugs Antitrust Litig.*, 186 F.3d 781, 785 (7th Cir. 1999), or a written agreement memorializing a conspiracy. Circumstantial evidence, on the other hand, is evidence that requires inferences or additional evidence in order to establish an ultimate fact. Sometimes the chain of inferences may be relatively short and the path to the ultimate fact relatively direct, e.g., the smoking gun in the hand of the suspect. At other times, especially in antitrust cases, with their factual complexity, the chain will be much longer and the path more circuitous to the ultimate fact. Courts have observed, "Evidence in an antitrust conspiracy case is, in most cases, circumstantial." *C O 2 Fire Equip. Co. v. United States*, 197 F.2d 489, 494 (9th Cir. 1952).

In those cases in which proof of conspiracy is by direct evidence only, economic evidence generally has a much smaller role to play than in circumstantial evidence cases. Where the direct evidence of conspiracy is incontrovertible, the probative value of economic evidence from the defense should be seriously questioned by the court. If, however, the defense denies that the direct evidence is clear proof of conspiracy, economic evidence may be appropriate on the issue of agreement *vel non*, as discussed more fully hereafter.

Where economic evidence increasingly plays a role is in cases where proof of conspiracy is by circumstantial evidence, particularly cases seeking to establish agreement from parallel conduct and plus factors. These are the cases that the Principles enunciated hereafter address.

A second important preliminary matter is that the subject of concerted action involves two fundamental and interrelated issues. The first is what constitutes agreement under the antitrust laws. The second is what are the permissible means of proving agreement. Although the case law has answered both questions, one cannot say that the decisions have been uniformly clear, consistent, or helpful as precedents.

The Supreme Court attempted to answer both questions in *Monsanto Co. v. Spray-Rite Serv. Corp.*, 465 U.S. 752 (1984). To show agreement, a plaintiff must establish "a conscious commitment to a common scheme designed to achieve an unlawful objective," and must do so through "evidence that tends to exclude the possibility of independent action." 465 U.S. at 768. The problem with the Supreme Court's pronouncements is that they may have raised more questions than they have answered.

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." *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) ("It is not necessary that there be a formal agreement between the conspirators. If the evidence satisfies the jury that they acted in concert, understandingly and with the design to consummate an unlawful purpose, it is sufficient.") In *Interstate Circuit, Inc. v. United States*, 306 U.S. 208, 227 (1939), 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."

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. *Esco Corp. v. United States*, 340 F.2d 1000, 1007-08 (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-2 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.") Indeed, even after *Monsanto* these rules have retained a measure of vitality. *Toys R Us, Inc. v. F.T.C.*, 221 F.3d 928 (7th Cir. 2000).

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," *In re High Fructose*, 295 F.3d at 654; and, if not, the nature and extent of the communication that must exist for an unlawful agreement under the Sherman Act. See discussion in Werden, 71 *Antitrust Law Journal* at 734-59. This is obviously more a question of law than economics, an issue on which expert economic evidence cannot provide guidance to a finder of fact. Accordingly, the Principles stated hereafter do not address it.

The legal definition of agreement under Section 1 is, nonetheless, a significant issue affecting the use of economic evidence to prove conspiracy *vel non*, because the definition of agreement used by an expert economist cannot be different from the legal definition guiding the court if the economic evidence is to be probative and admissible. Indeed, failure to observe and follow the court's definition of agreement has resulted in the refusal of courts to admit or give credence to expert economic evidence. *Williamson Oil*, 346 F.3d at 1322-23. The need for expert economic evidence to conform to the applicable definition of agreement, whatever it may be, is therefore treated in the Principles hereafter.

The second aspect of agreement - how to prove it - is where economics and antitrust law intersect. In particular, economic evidence comes into play when a case involves proof of conspiracy from conscious parallelism. Conscious parallelism occurs when "the defendants' behavior was parallel," and "the defendants were conscious of each other's conduct and . . . this awareness was an element in their decision-making process." *Petruzzi's IGA Supermarkets, Inc. v. Darling-Delaware Co., Inc.*, 998 F.2d 1224, 1242-43 (3d Cir. 1993). Under well-established law, conscious parallelism alone is insufficient to create a jury issue on the fact of agreement. *Theatre Enters, Inc. v. Paramount Film Distrib. Corp.*, 346 U.S. 537 (1954).[30] The courts have thus drawn a line between acting with knowledge of what rivals are doing, which does not amount to agreement, and acting pursuant to a commitment to a conscious scheme, which does.

In conscious parallelism cases, the issue thus becomes what else is needed to allow the trier of fact to bridge this gap and find agreement. The law has long been clear that "business behavior is admissible circumstantial evidence from which the fact-finder may infer agreement." Theatre Enters., 346 U.S. at 540. In *American Tobacco Co. v. United States*, 328 U.S. 781, 809-10 (1946), the Supreme Court expatiated on this point:

> It is not the form of the combination or the particular means used but the result to be achieved that the statute condemns. It is not of importance whether the means used to accomplish the unlawful objective are in themselves lawful or unlawful. Acts done to give effect to the conspiracy may be in themselves wholly innocent acts. Yet, if they are part of the sum of the acts which are relied upon to effectuate the conspiracy which the statute forbids, they come within its prohibition. No formal agreement is necessary to constitute an unlawful conspiracy. Often crimes are a matter of inference deduced from the acts of the person accused and done in pursuance of a criminal purpose. . . . The essential combination or conspiracy in violation of the Sherman Act may be found in a course of dealings or other circumstances as well as in an exchange of words.

Eastern States Retail Lumber Dealers' Ass'n v. United States, 234 U.S. 600, 612 (1914) ("It is elementary, however, that conspiracies are seldom capable of proof by direct testimony, and must be inferred from the things actually done. . . .").

The rule commonly articulated in conscious parallelism cases is that for a conspiracy to be inferred from conscious parallelism, the plaintiff must present evidence of what are known as "plus factors." *Interstate Circuit v. United States*, 306 U.S. at 222-27; *C-O-2 Fire Equip. Co. v. United States*, 197 F.2d at 493; *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). Although there is no definitive and exhaustive list of plus factors, among those listed by the courts have been motive to conspire; opportunity to conspire; conduct against independent economic self-interest, rational only in the presence of agreement; departure from past business practice; and signaling or other information exchanges. *Merck-Medco Managed Care, LLC v. Rite-Aid Corp.*, 201 F.3d 436, 1999 WL 601840, *8-9 (4th Cir. 1999); *Apex Oil v. DiMauro*, 822 F.2d at 253-54; *Minpeco, S.A. v. Conticommodity Servs., Inc.*, 673 F. Supp. 684, 688 (S.D.N.Y. 1987). The Eleventh Circuit requires a plaintiff in a conscious parallelism case to demonstrate the existence of a single plus factor, which the court expansively defines as "any showing . . . that 'tends to exclude the possibility of independent action.'" *Williamson Oil v. Philip Morris*, 346 F.3d at 1300.

The problem with the current state of the law, however, is a lack of uniformity among the courts in defining, applying, and giving weight to plus factors. For example, opportunity to conspire is treated by some courts as being of no weight in the absence of proof of actual agreement. *Williamson Oil*, 346 F.3d at 1319 ("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*

30. Although *Theatre Enters*. is universally cited for the proposition that conscious parallelism alone cannot establish agreement, the case in fact holds that conscious parallelism alone does not require a finding of agreement. 346 U.S. at 540-41.

States v. Taubman, 297 F.3d 161 (2d Cir. 2002). While the Fourth Circuit finds that "evidence of acts contrary to an alleged conspirator's economic interest is perhaps the strongest plus factor indicative of a conspiracy," *Merck-Medco*, at *10; the Third Circuit finds that "evidence that the defendant acted contrary to its interest" "largely restate[s] the phenomenon of interdependence," which is what produces conscious parallelism. *In re Flat Glass Antitrust Litig.*, 385 F.3d 350, 360 (3e Cir. 2004).

Into this cloudy broth, the parties have increasingly added the seasoning of expert economic evidence, which has two principal flavors. 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: 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." R.A. Posner, Antitrust, pp. 51-100, "Price Fixing and the Oligopoly Problem" (2d ed.) (University of Chicago 2001). To this endeavor, economists bring a variety of tools, such as econometric modeling, and a variety of economic theories and teachings, some of which courts find helpful, *In re High Fructose*, 295 F.3d at 654-55; and some not, *Williamson Oil*, 346 F.3d at 1317. Still other courts find such economic evidence relevant, but neither necessary nor sufficient to permit a trier of fact to find agreement. *In re Flat Glass Antitrust Litig.*, at n.12.

Assuming an economist has applied sound methods based on valid and accepted theory, the question of whether the court will accept the economic evidence may well turn on the court's own economic theory of oligopoly, which may or may not have a sound basis in economics. The economics of oligopoly have not been free of controversy, and have evolved and changed over time.

Much of the current judicial thinking on oligopoly derives from Donald F. Turner, *The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusals to Deal*, 75 HAR. L. REV. 655 (1962). In his influential article, Professor Turner argued that coordinated pricing and other cooperative behavior resulting from conscious parallelism should not be treated as agreement under the Sherman Act. Turner's rationale was three-fold: (1) he believed oligopoly behavior to be no different from that of sellers in a competitive industry in taking into account probable actions and reactions by competitors; (2) he concluded that to outlaw oligopoly behavior would be to make oligopoly pricing a violation, which would be inconsistent with the Sherman Act's not treating monopoly pricing as a violation; and (3) he found meaningful injunctive relief to be impossible because the conduct at issue was rational behavior taking into account probable responses of competitors. Werden, *Economic Evidence of Collusion*, 71 *ANTITRUST LAW JOURNAL* at 772-73.

The Turner view of oligopoly, at least with courts considering the issue, has consistently carried the day, and is deeply entrenched with the courts, even if they do not give Turner due attribution in their decisions. *E.g., Williamson Oil*, 346 F.3d at 1298-1300.

In 1969, another distinguished thinker in antitrust, Professor Richard A. Posner, now Judge Posner, laid out a dissenting view, differing from the Turner view on oligopoly. Richard A. Posner, *Oligopoly and the Antitrust Laws: A Suggested Approach*, 21 STANFORD LAW REV. 1562 (1969). Since his original article, Posner has amplified and refined his thesis in scholarship and judicial opinions. Posner, *Antitrust Law: An Economic Perspective*, Chapter 4 (1976); Posner, *Antitrust*, pp. 51-100, "Price-Fixing and the Oligopoly Problem" (2d ed.) (University of Chicago 2001); *In re High Fructose*, 295 F.3d at 654. In Posner's view, ". . . the interdependence theory of oligopolistic pricing . . . is inadequate," *Antitrust* (2d ed.) at p. 57, because: (1) time lags in matching price cuts and differences in ability to expand output in response to price cuts may render price competition feasible in oligopolies; (2) price cuts may not affect rivals if they result in sales to new customers, or are only partial, and are thereby feasible in oligopolies; (3) the interdependence theory does not adequately explain how prices have risen above competitive levels in the first place; and (4) matching price increases involves choices to forgo benefits from competing that are against self-interest in the absence of agreement. He concludes, "There is no sound basis in economic theory for thinking that if there are just a few major sellers in a market, competition will disappear automatically." *Id.* at 69.

Posner has also argued that the courts can and should find agreement based solely on the operation of conscious parallelism in an oligopoly setting. "Each seller must still decide whether to limit output, and this implies at least tacit negotiation with his major competitors." *Id.* Accordingly, "it may be possible to demonstrate through economic evidence the existence of collusive pricing even though no overt acts of collusion are detected." *Id.* at 79. The same views are floated in *Fructose*, 295 F.3d at 654.

Unlike Turner, whose view has received general acceptance by the courts, Posner's position has received hardly a mention in reported decisions. *In re Flat Glass Antitrust Litig., Id.* (in the course of stating and embracing the Turner position, the Third Circuit gives Posner two "but see" references and no more).

Economics has brought to bear on the "Turner-Posner debate" modern oligopoly theory, which applies the teachings of game theory and the Prisoners' Dilemma. Werden, *id*. 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 one implicates the other, while the other remains silent, the prisoner accusing the other will go free, while the one remaining silent 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 prisoner will become a dominant strategy, because of the potential cost of not doing so.

One important contribution of modern oligopoly theory is to recognize that 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 present a Prisoners' Dilemma. 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, moreover, as most competitive situations are not one-shot interactions, as in the Prisoners' Dilemma, but involve repeated and continuing interactions among firms over time.

Where firm conduct is inconsistent with the outcome of a one-shot interaction, it is reasonable to infer that firm conduct reflects the outcome of repeated interaction, and thus coordination in an economic sense, but that result may or may not reflect the outcome of an agreement in the legal sense. The point is that with repeated interaction, many outcomes are often possible, and firms may find an outcome with higher than competitive prices that will be sustainable, although they need not necessarily find that outcome through agreement. Mere price leadership, for example, may be enough. In such circumstances, without more, there is no agreement under the present state of the law.

It is therefore important to distinguish between coordination and agreement. Coordination, in which firms act with knowledge and expectations of what their rivals are doing, may properly be considered a prerequisite for agreement, and can be inferred from a multitude of factors on which an economic expert might appropriately opine. (For example, evidence as to concentration and entry barriers might be relevant, as might simulation modeling.) Agreement, however, under the present state of the law, requires more than mere coordination. In addition, the trier of fact must be able to conclude that it is more likely than not that the particular outcome could not have been reached absent negotiation through some form of communication, either verbal or nonverbal. This is what distinguishes mere price leadership and coordination from agreement. An economist may be able to opine on this question to some extent, such as by analyzing whether a particular outcome is too complex to have arisen plausibly through price leadership, but would instead have required greater communication than simple price signaling would permit. Non-economic evidence, *e.g.*, as to communication or the opportunity to communicate, would of course also be relevant.

Modern oligopoly theory provides a basis for expert economic testimony that action is contrary to individual economic self-interest in the absence of agreement. Although the courts generally recognize this as a plus factor, the cases have generally been unable to define and apply this concept in a clear and consistent manner. Expert economic testimony may thus be helpful in enabling the trier of fact to understand whether conduct in question is truly contrary to individual economic interests in the absence of agreement.

For example, firms in an oligopoly may have increased prices more or less simultaneously, where there is an irreversible penalty associated with an unsuccessful attempt to lead or follow a price increase, like the permanent, irrecoverable loss of important customers if all firms do not match. Given such a permanent disadvantage from guessing wrong about whether other competitors will match, 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 would be contrary to individual economic self-interest, but rational if the firms had reached agreement. Such expert economic analysis, applying game theory and the Prisoners' Dilemma, may provide a principled basis for showing when conduct is or is not contrary to economic self-interest in the absence of agreement. The question then becomes whether this should be sufficient to infer agreement, or whether additional evidence ought to be required, and of what sort, such as evidence of actual verbal or nonverbal communication. These, however, are questions not of economics, but of law, for the courts to resolve.

The contribution of modern oligopoly theory is to 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. Economics has something to offer here, and there is no reason not to receive and consider this evidence in deciding whether there is a genuine issue of fact on action contrary to self-interest in the absence of agreement. Accordingly, the Principles hereafter will address this issue.

Finally, there is the matter of the terms used by economists in expressing their opinions on issues of concerted action. It is one thing for economists to say that in their opinion economic conditions are conducive or not conducive to the formation of an agreement, or that conduct is or is not consistent with the existence of an agreement. It is quite another to testify to opinions that agreements do or do not exist. The line to be drawn is between Rule 702's allowance of expert evidence to "assist the trier of fact to understand the evidence or to determine a fact in issue," and testimony that improperly usurps the functions of the jury. Expert economic testimony on issues of concerted action ought to observe this distinction, and not violate it. The Principles hereafter address this.

PRINCIPLE VI-1: Economic evidence on the existence *vel non* of agreement should have a foundation in sound economic theory.

COMMENT

For economic evidence on agreement to be considered, the testifying economist must clearly specify the economic assumptions, theories, and models relied upon, and the court must be satisfied that the underlying economics is sound in the sense of being "the product of reliable principles and methods," as required by Federal Rule of Evidence 702. This means that the economist must be clear about the underlying model or theory of oligopoly relied upon if the model affects the opinions expressed. Similarly, if the expert economist is testifying regarding conduct against apparent self-interest in the absence of agreement, the economist ought to describe clearly the theoretical basis for this opinion. In opining whether conduct is consistent or inconsistent with the presence or absence of agreement, the economist must make clear to the court that there is a sound economic basis for the opinions expressed. Obviously, there must also be disclosure of all other significant economic principles and assumptions relied upon. Finally, as expressed in Principle VI-4, *infra*, the economics relied upon must respect and be consistent with the legal definition of agreement guiding the court.

PRINCIPLE VI-2: Evidence of market structure may, in appropriate circumstances, shed light on whether a claim of conspiracy is plausible or implausible, but must be examined carefully.

COMMENT

Although the general principle favors the receipt of evidence of market structure, this can only occur where the theory of the plaintiff's case is clearly articulated and understood. There is no point in receiving such evidence in a vacuum and then divining whether the economic evidence can support a theory. The plaintiff's expert economist should first articulate the plaintiff's theory of the case, and then explain why the economic evidence supports the theory. The defense expert economist is entitled to know the plaintiff's theory before analyzing and opining on the economic evidence. Similarly, the defense expert economist should clearly articulate the theory of any defense before opining on whether the economic evidence supports the defense, and the plaintiff's expert economist is entitled to know the theory of any defense before analyzing whether the economic evidence rebuts it.

Depending on the plaintiff's theory, there may well be specific aspects of market structure relevant to the issue of the existence or nonexistence of concerted action. In particular, the structure of the market may render the plaintiff's theory either plausible or implausible, a factor that may have an effect on the quantum of proof required to raise a triable jury issue. *Merck-Medco, id*. at *8; *Fructose*, 295 F.3d at 661; *In re Flat Glass, id* at 357-58.

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. *Fructose*, 295 F.3d at 656-58; *In re Flat Glass, id*, at 358-59. 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. 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 should always examine such evidence carefully to ascertain whether it truly explains and is logically connected with the conduct that is at issue in the case. The economist must be required to 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.

PRINCIPLE VI-3: Economic evidence offered on the issue of concerted action must respect and acknowledge the legal principle that conscious parallelism alone does not constitute agreement.

COMMENT

Since *Theatre Enters*., the law has been clear that conscious parallelism alone is insufficient to establish an agreement under Section 1 or Section 2 of the Sherman Act. There is no point in receiving economic evidence that does not recognize this fundamental rule of antitrust law. Thus, if economic evidence does no more than establish the existence of conscious parallelism, it is of no probative value and should be excluded. If the law regarding conscious parallelism is to be changed, that is for the courts, not for economists.

On the other hand, if the thrust of economic evidence is to show a market structure in which concerted action is plausible, then the evidence ought to be received. If, at the end of the day, the plaintiff's case is no more than proof of a market structure in which concerted action is plausible, coupled with conscious parallelism, then, under the present state of the law, the plaintiff has not carried the burden of creating a triable issue of conspiracy.

PRINCIPLE VI-4: Economic evidence offered on the issue of concerted action must respect and acknowledge the legal definition of agreement guiding the court in the case at issue.

COMMENT

As a baseline and prerequisite for testifying regarding concerted action, an economist should acknowledge and clearly specify the definition of agreement to which the economist will be applying the economist's findings. If the applicable definition of agreement used by the economist does not comport with the legal definition of agreement guiding the court, the court should exclude the economic evidence. Not only is the definition of agreement a matter of law for the court, but also it is a crucial touchstone for determining whether economic evidence has relevance and should be admissible. The court, the parties, and their experts should be clear and specific as to the applicable legal definition of agreement, and the economist's testimony must respect and conform to that definition. Without knowing the legal definition of agreement to be applied in a particular case, there is no way to give credit to the testimony of an economist that evidence either supports or rebuts the existence of agreement. Although the operable definition of agreement may not always be clear or consistent from court to court, the economist ought to ascertain, to the extent possible, the definition of agreement guiding the court that will be considering the economist's testimony, and the testimony should be consistent with that definition.

PRINCIPLE VI-5: Economic evidence offered on the issue of concerted action in an oligopoly setting should particularly describe the economic principles and theory underlying the analysis and justify its applicability to the evidence of record.

COMMENT

This Principle is merely a more specific application of Principle VI-1. It is set out separately, however, because of the frequency with which economists are called upon to testify in conspiracy cases involving oligopoly markets; the burgeoning and evolving economic scholarship in the area of oligopoly theory; and the lack of uniformity and clarity in the case law dealing with oligopoly issues.

Whether conscious parallelism acting alone in a particular business setting can produce coordinated, noncompetitive pricing is not a pure issue of law, but involves the application of economic theory to facts of record. The parties and the court ought to know the economic principles and theories of oligopoly that are being applied, so that they can be properly critiqued and evaluated.

As discussed in the introduction, *supra*, the Turner approach posits that conscious parallelism alone can often produce coordinated, noncompetitive pricing, which ought not to be treated as agreement under the law. The Posner approach disputes elements of the theoretical underpinning of Turner, and promotes a more expansive definition of agreement under the antitrust laws. Modern oligopoly theory to some degree synthesizes the Turner and Posner approaches, by positing that game theory and the Prisoners' Dilemma can be applied to test whether coordinated, noncompetitive pricing in an oligopoly setting is or is not the result of actual agreement.

When an economist testifies that such pricing results from purely conscious parallelism, or from actual agreement, the economist ought to be clear about whether the expert's opinion is the product of the application of any theoretical model of oligopoly, and, if so, which one, and how it has been applied. If this is done, then the court and opposing parties have a better opportunity to test and weigh the economic evidence.

PRINCIPLE VI-6: Economic evidence offered on the issue of whether conduct is or is not contrary to independent self-interest in the absence of agreement should be consistent with the teachings of sound economic scholarship and theory.

COMMENT

The particular plus factor often given greatest weight by the courts, and yet the one where most confusion exists is action contrary to independent economic self-interest in the absence of agreement. Courts state the principle, stress its importance, and yet the case law generally fails to provide guidance on its application.

Modern oligopoly theory offers a means of clarifying this area of law through application of game theory and the Prisoners' Dilemma, which provide a framework for analyzing whether conduct may or may not be contrary to individual economic self-interest in the absence of agreement. These analytic tests can be applied to an oligopolist deciding whether to implement or follow a price increase.

Modern oligopoly theory thus provides a principled, economically-sound methodology for framing economic testimony tending to prove or disprove the existence of a long-recognized and emphasized plus factor in conscious parallelism cases. When expert economists testify concerning action contrary to independent self-interest in the absence of agreement, they should be prepared to defend their opinions on the basis of sound oligopoly theory, and the admissibility of their testimony should be affected by whether they can effectively do so.

Nonetheless, showing that this plus factor exists does not necessarily answer the questions of whether conscious parallelism and this plus factor should be sufficient to permit the trier of fact to find an unlawful agreement, and, if they are not, what additional proof should be required, such as evidence of actual communication. These, however, are not questions of economics, but of law; and their resolution must lie with the courts. What economic testimony soundly grounded in accepted theory and scholarship can contribute is proof that conduct occurred that, depending on the circumstances, is probative or not probative of actual agreement. Whichever way the economist comes out will and should affect the degree of scrutiny and weight the court gives to the remaining evidence in the record. To that extent, such evidence should be helpful.

PRINCIPLE VI-7: Evidence of market performance may, in appropriate circumstances, be relevant in showing whether or not conduct is the result of agreement, but must be examined carefully.

COMMENT

In his antitrust treatise, Posner lists 17 types of evidence of market performance that are probative in his view of the existence of agreement. *Antitrust, id.*, pp. 79-93. He discusses others in *Fructose*. 295 F.3d at 658-61. Some of these are relatively uncontroversial (e.g., identical bids; constant market shares in a period of rising demand; higher prices during the period of the alleged conspiracy than before or after). Others are subject to debate in the economic literature (*e.g.*, price discrimination; past antitrust violations; exchanges of pricing information).

There can really be no general rule or guideline with regard to economic evidence of market performance as it bears on the issue of agreement *vel non*, other than to say that in appropriate circumstances, such evidence may be probative, but it should always be examined carefully before it is admitted or weighed. In considering such evidence, the court should always first require the economist to specify the basis in economic theory that supports the opinion that the evidence of market performance demonstrates the existence *vel non* of agreement. This will afford a fair opportunity for opposing parties to discredit or qualify the underlying theory, demonstrate its inapplicability, or both.

Second, in each instance where market performance is claimed to demonstrate agreement *vel non*, the economic expert should be required to demonstrate that the particular aspect of market performance is not attributable to factors other than what is claimed by the economist to be causative. If the economist cannot rule out other factors, then the economist must justify the choice of causation as more probable than not.

Market performance includes a wide range of indicia, many of which are uncertain of measurement and debatable with respect to their meaning and significance. Among its more problematic aspects are profit levels, market shares over time, bidding and pricing behavior, and past antitrust violations. Accordingly, evidence of market performance should be received only when its proponent has properly justified the proffer in economic theory and its applicability to the facts of record.

PRINCIPLE VI-8: Economic evidence on the issue of agreement *vel non* must be stated in appropriate non-conclusory language that is grounded in economic theory and does not usurp the function of the finder of fact.

COMMENT

There are appropriate and inappropriate ways to express opinions about the existence or nonexistence of concerted action. It should almost always be appropriate to express an opinion that an economic model of non-cooperative behavior posits certain conduct, and evidence is consistent or inconsistent with that model. Likewise, an economist can testify that an economic model defines conduct against self-interest in the absence of agreement in particular terms, and that conduct shown by the evidence is or is not consistent with that definition. It will almost always be inappropriate, in a circumstantial evidence case, to testify that an agreement exists or does not exist. Between these two extremes, there is a range of forms of expression, from "the evidence suggests or is consistent or inconsistent with agreement or the absence of agreement," to "my opinion as an expert economist is that the evidence I have reviewed, in light of economic theory, demonstrates the existence or nonexistence of an agreement." The court must ultimately make the decision whether the expert has exceeded the limit of Federal Rule of Evidence 704: ". . . testimony in the form of an opinion or inference otherwise admissible is not objectionable because it embraces an ultimate issue to be decided by the trier of fact." Nonetheless, the more categorical the economist's testimony is concerning the existence or nonexistence of agreement, the less useful the opinion becomes, and the more explanation is required to justify it. The trier of fact is better served by testimony that evidence is consistent or inconsistent with an economic model, or supportive or not supportive of an economic model related to understanding whether behavior is cooperative or non-cooperative. The opinions are only as persuasive as the analysis of fact and theory that produces them, and this is where the focus of the testimony should be, not on stating the opinions in the most categorical terms possible.

PRINCIPLE VI-9: Courts should receive economic evidence on the issue of agreement *vel non* only after ensuring that an adequate foundation exists.

COMMENT

This Principle is essentially a recapitulation and summary statement of Principles 1 - 8. When a party presents expert economic evidence on the issue of concerted action, the adequate foundation that must exist to make the evidence admissible should include: (1) a clearly articulated theory of the party's case; (2) an appropriate fit of the economic evidence with the theory of the case; (3) for quantitative evidence, the use of accurate and generally accepted methods of measurement; (4) the identification and explanation of all economic theory supporting the expert's opinion that market structure or market performance is consistent or inconsistent with agreement; and (5) a reasoned elimination of other possible factors as causes of observed market performance relied upon for the expert's opinion.

In summary, economic evidence has its place in the proof or disproof of concerted action. What is needed is rigor in requiring economists to make their work transparent, so that courts can better understand its theoretical underpinnings and how they apply to the evidence of record. When that is achieved, the courts will be much better able to create a coherent, well-reasoned jurisprudence of concerted action under Sections 1 and 2 of the Sherman Act.

CHAPTER VII. HARM TO COMPETITION

INTRODUCTION

Antitrust law proscribes practices that harm competition. This chapter addresses what is harm to competition for purposes of antitrust law, and how is such harm proved or refuted.

The term "harm to competition" is used not in a dictionary sense but in a legal sense. The words mean harm that does or should trigger the application of the antitrust laws. The terms "harm to competition," "competitive harm," and "antitrust harm" are used interchangeably.

While there is some disagreement among courts as to what constitutes harm to competition, and how such harm is proved or refuted, there is agreement on outer limits. This discussion will start with areas of consensus and then proceed to more difficult issues.

In general, agreements and strategies that increase market power, raising prices and lowering output, and that are not justified as legitimate market responses, cause harm to competition. Cartels are the most notorious example. At the other extreme, injury to competitors from competition itself is not harm to competition.

Most antitrust harms are actual or threatened consumer harms, and most antitrust harms to consumers are harms from price increases. At high levels of concentration, lessened choice and lessened innovation may also be antitrust harms. Harms to producers from buyers' cartels also qualify as antitrust harms. Some but apparently a dwindling number of cases recognize as antitrust harm unjustified foreclosures from the chance to contest a market. At the other extreme, according to a few courts, consumer harm from anticompetitive transactions may not be sufficient to sustain a violation. In merger cases it is argued by some that harm to total welfare should be required.

Even assuming agreement on what is necessary to constitute harm to competition, questions remain as to what constitutes sufficient proof that the harm has occurred or will probably or may occur. For example, courts disagree as to whether an inference of a probable price rise can be drawn from the fact of unjustified conduct by a firm with market power that significantly excludes rivals.

History

Until the mid to late 1970s, the Supreme Court, and thus the lower courts, had a view of harm to competition that is very different from the view prevalent today. Competition was seen as a multi-valued dynamic process among more than a few competitors. The process, it was expected, would check the market power of dominant firms in concentrated markets, protecting the autonomy and opportunities of firms without power, preserving diversity, and providing governance by the market, not by powerful firms. This process and its protection by antitrust law were expected to work for the benefit of consumers and the benefit of the market, as well as the benefit of firms without power. *See* Eleanor M. Fox, *The Modernization of Antitrust: A New Equilibrium*, 66 Cornell L. Rev. 1140 (1981). The law, however, began to tilt in the direction of protecting smaller competitors from efficient competition, thus handicapping efficient competition. *See Brown Shoe Co. v. United States*, 370 U.S. 294 (1962) (prohibiting a merger in part because it was efficient); *United States v. Arnold, Schwinn & Co.*, 388 U.S. 365 (1967), overruled by *Continental T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36 (1977) (protecting the autonomy of dealers without regard to the efficiency of the vertical restraints that limited their freedom). This phenomenon led to significant revisions and adjustments beginning with small steps in the mid 1970s,[31] changes to the underlying concept of antitrust and

31. *See United States v. General Dynamics Corporation, et al.*, 415 U.S. 486 (1974) (refusing to credit a statistical merger case of relatively high concentration and a significant increase in concentration when, under the circumstances of exhausted coal reserves, the statistics were not a good proxy for the future market position of one of the acquired firms).

antitrust harm in 1977,[32] and finally the creation of a new model -- a price-theory consumer welfare model -- after 1980.[33]

The *Brunswick* case is a particularly strong symbol of the changes. In *Brunswick*, plaintiff bowling alley sought to recover profits lost by reason of defendant's acquisition of failing bowling alleys, which acquisition reinvigorated the failing firms. *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477 (1977). In denying relief to the plaintiff on the ground that an "antitrust injury" had not been shown, the Court said: "The antitrust laws [] were enacted for 'the protection of competition not competitors.'" *Id.* at 320 *citing Brown Shoe Co. v. United States*.

The theme of *Brunswick* has been repeated in many cases, including *Spectrum Sports, Inc. v. McQuillan*, where a manufacturer of a polymer declined to sell the polymer to a distributor, which went out of business. *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447 (1993). As the Court said: "The purpose of the [Sherman] Act is not to protect businesses from the working of the market; it is to protect the public from the failure of the market. The law directs itself not against conduct which is competitive, even severely so, but against conduct which unfairly tends to destroy competition itself." *Id.* at 458.

Brunswick has helped to focus courts on screening out conduct from antitrust condemnation that is responsive to the market and that benefits consumers. The "harms" such conduct causes are the normal harms from competition itself. This is the concept articulated in Principle VII-1.

Brunswick, however, does not give guidance within the larger area that remains: e.g., when do market-foreclosing acts produce competitive harms; when may competitive harms be inferred; what are plaintiffs' burdens; and when does the burden shift. These and other questions are dealt with below.

PRINCIPLE VII-1: Harm to competitors from competition itself is not harm to competition.

COMMENT

Harm from competition is not antitrust harm. This is a lesson from Brunswick, as explained above. Thus, if Wal-Mart targeted and destroyed a community of small stores by sustainable low-priced competition, the damage to the small stores would not be harm to competition; it would be harm from competition.

PRINCIPLE VII-2: Cartels harm competition.

COMMENT

The clearest case of harm to competition is harm from cartels. By their nature, cartels harm competition, legally, economically, and definitionally. Cartels typically lead to higher prices, which harm consumers. Selling cartels harm intermediate buyers and consumers; buying cartels harm producers.

32. *See Continental T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36 (1977) (declaring that antitrust is based on economics and rejecting the free-trader doctrine).
33. *See* 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 (1987).

PRINCIPLE VII-3: Conduct that interferes with the competitive process and harms consumer welfare is conduct that harms competition.

COMMENT

This Principle, too, is commonly accepted.[34] Reduction in consumer welfare from anticompetitive conduct is the paradigm market harm. Robert Lande argues that the prevention of wealth transfers from consumers to producers constitutes the primary purpose of antitrust laws. *See* Robert H. Lande, *Wealth Transfers As The Original And Primary Concern Of Antitrust: The Efficiency Interpretation Challenged*, 34 Hastings L.J. 65 (1982).

There are, however, a few exceptions to this common principle. First, some argue that antitrust law should require harm to total welfare, i.e., that conduct, to be actionable, must decrease aggregate efficiency or the sum of consumer and producer surplus. For instance Bork states that "[t]he whole task of antitrust can be summed up as the effort to improve allocative efficiency without impairing productive efficiency so greatly as to produce either no gain or a net loss in consumer welfare." Bork, *supra* note 4, at 91. While the distinction between consumer harm and total harm is not usually material, it is fundamental in the sense of whom or what antitrust protects -- the consumer, or a more abstract notion of aggregate efficiency or total wealth.[35]

The distinction between consumer and total welfare could be case-determinative at least in merger cases. To the extent that efficiencies may offset consumer harm, the goal of consumer welfare is trumped. One analyst explains the difference as follows: "A price increase causes a wealth transfer from consumers to producers. Under a consumer surplus test, this is the basis for condemnation of the merger, but under a total surplus test it is irrelevant. What matters under that standard is the portion of the loss in consumer surplus that is not merely transferred to producers, but rather lost to society as a result of the inefficient reduction in output." Gregory J. Werden, *An Economic Perspective On The Analysis Of Merger Efficiencies,* 11 Antitrust 12, 14 (Summer 1997). Note that the consumer surplus and total surplus standards generally yield the same outcomes, particularly where efficiencies reduce marginal costs sufficiently.

The case law generally but not always adopts the consumer welfare standard. The Merger Guidelines are likewise consumer-oriented. Under the Guidelines, the inquiry is whether "cognizable efficiencies are of a character and magnitude such that the merger is not likely to be anticompetitive," and the federal enforcement agencies consider whether "cognizable efficiencies likely would be sufficient to reverse the merger's potential to harm consumers in the relevant market, e.g., by preventing price increases in that market." U.S. Dep't of Justice & Federal Trade Comm'n, Horizontal Merger Guidelines Section 4 (as amended Apr. 8, 1997).

Second, in some cases, the consumer may be harmed but the law will not trace the consequences of the particular conduct or performance either because producer incentives are generally aligned with consumer interests or because in general the costs of antitrust intervention are greater than its benefits. Monopoly pricing,[36] a dominant firm's design changes that have a meaningful claim to product improvement,[37] targeted low prices not below cost but en route to yet higher monopoly prices,[38] exclusion of a non-rival from an essential facility,[39] and most other unilateral refusals to deal[40] are examples.

Third (in addition to the above), the conduct may not qualify as anticompetitive even though consumers are ultimately harmed. The conduct may be a tort but not an antitrust offense.

34. *See Reiter v. Sonotone Corporation*, 442 U.S. 330, 342-343 (1979); Robert H. Bork, *The Antitrust Paradox; A Policy At War With Itself* 66 (The Free Press 1978); Howard H. Chang, David S. Evans & Richard Schmalensee, *Has The Consumer Harm Standard Lost Its Teeth*?, published in *High-Stakes Antitrust The Last Hurrah?*" (Robert W. Hahn ed., AEI-Brookings Joint Center for Regulatory Studies 2003).
35. Also in contention is the notion of protecting market competition. See principles VII-5 through VII-8.
36. *See Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP.*, 124 S.Ct. 872 (2004).
37. *See United States v. Microsoft Corporation*, 253 F.3d 34 (D.C. Cir. 2001), *cert. denied*, 534 U.S. 952 (2001).
38. *See Brooke Group Ltd. v. Brown & Williamson Tobacco Corporation*, 509 U.S. 209 (1993).
39. *See Official Airline Guides, Inc. v. Federal Trade Commission*, 630 F.2d 920 (2d Cir. 1980).
40. *See Trinko*, 124 S.Ct. 872 (2004).

For instance, in *NYNEX Corporation v. Discon Incorporated*, defendants' vertical restraint was a fraud on the public and raised prices, but did not harm the market (for removal of obsolete phone wires). *NYNEX Corporation v. Discon Incorporated*, 525 U.S. 128 (1998).

PRINCIPLE VII-4: Higher prices and lower output are consumer welfare harms. Coerced choice may qualify. Also, net loss to innovation and attendant loss of choice in highly concentrated markets may qualify.

COMMENT

"The touchstone of illegality is raising prices to consumers." Robert H. Bork, *Legislative Intent and The Policy of The Sherman Act*, 9 J.L. & Econ. 7 n.2 (1966). Both courts and the enforcement agencies agree in theory (although not necessarily in practice) that consumer harm in the form of actual or threatened material and sustained reduction in output or an increase in price is a necessary element of an antitrust violation (in other than per se cases).[41]

In *California Dental Ass'n v. Federal Trade Commission*, 526 U.S. 756 (1999), dentists' by-laws restricted discount and quality advertising, among other things. The Federal Trade Commission and the appellate court found the restrictions obviously anticompetitive and illegal. No economist had testified, however, as to whether or how consumers were harmed. The Supreme Court reversed, noting that the ultimate question was not the restriction of output of advertising but the reduction of the total delivery of dental services. It noted the absence of empirical evidence, and held that the record did not provide a sufficient basis for concluding that the by-laws harmed competition. *Id.* at 776-77.

The notion of consumer harm is an integral part of the Supreme Court's treatment of claims arising under Section 2 of the Sherman Act. Predatory pricing is an a *fortiori* example, in view of the value of low pricing. In *Brooke Group*, the Supreme Court required a showing that "real market injury" is likely to occur. *Brooke Group*, 509 U.S. at 231-237. Such a showing, it said, would include an estimate of the cost of the predation and a close analysis of both the scheme alleged and the relevant market's structure and conditions to determine whether the putative predator could probably recoup its loss. *Id.* at 231-232. "[A]lthough unsuccessful predatory pricing may encourage some inefficient substitution toward the product being sold at less than its cost, unsuccessful predation is in general a boon to consumers." *Id.* at 224.

In highly concentrated markets, net loss to innovation and attendant loss of choice may also be consumer welfare harms. These, however, are not generally accepted harms. Some courts and authorities prefer a principle of non-intervention in the absence of price rise and output limitation, believing that net loss of innovation is too difficult to detect or predict and that loss of significant choice is too rudderless a test.

The FTC's closing of its investigation of Genzyme Corp.'s acquisition of Novazyme Pharmaceuticals presented insights into the FTC's position on elimination of potential competition in innovation markets. *In the matter of Genzyme Corp. and Novazyme Pharms., Inc.*, FTC File No. 021-0026 (Muris, Chairman), *available at* http://www.ftc.gov/os/2004/01/ murisgenzymestmt.pdf. The merger partners were the only two firms innovating a treatment for a rare infant disease. In voting to close the investigation, the FTC was split as to whether the potential significant loss of innovation competition constituted anticompetitive harm. Chairman Muris maintained that the FTC should be cautious in using innovation-market analysis because "economic theory and empirical investigations have not established a general causal relationship between innovation and competition." *Id.* Commissioners Thompson and Harbour Jones disagreed.

Commissioner Thompson feared that closing the investigation without issuing a complaint "could raise questions about the enforcement policies concerning innovation competition embodied in the [various agency guidelines], as well as the Commission's long-standing merger enforcement efforts

41. In practice, however, lower courts have not always required such effects. As discussed herein, there is disagreement whether dynamic or process harms, often in the form of unjustified exclusions, are properly accepted as antitrust harms. This section addresses the clearer case -- outcome harms -- while Principles VII-6 and VII-7 address the issue of dynamic and process harms.

involving innovation markets." *Id.* Commissioner Harbour Jones, who did not participate in the disposition of the case, nonetheless summarized her views. She emphasized that competition drives innovation, and stated that a rebuttable presumption of anticompetitive effects may be appropriate where a firm has acquired, over time, all the research and development tracks of its immediate rivals and is unencumbered by the threat of timely and sufficient entry by any challenger. *Id.*

In addition, coerced choice may possibly be a consumer harm. Recognition of this harm can be a function of the character of the conduct. For example, in *FTC v. Indiana Federation of Dentists*, where the dentists collectively refused to provide insurers with their patients' x-rays, the harm was that consumers' demands were defeated. *FTC v. Indiana Federation of Dentists*, 476 U.S. 447 (1986). Consumers (impliedly, through the insurers) wanted their dentists to give the x-rays to their insurers. Consumer sovereignty was undermined. *See National Collegiate Athletic Association v. Board of Regents of the University of Oklahoma*, 468 U.S. 85, 107 (1984) ("A restraint that has the effect of reducing the importance of consumer preference in setting price and output is not consistent with this fundamental goal [to protect consumer welfare] of antitrust law."). Output harm was not likely. Also, in tie-in cases governed by the qualified *per se* rule, forcing consumers to buy something that they might otherwise choose not to buy may be a recognized harm, as language in *Jefferson Parish Hospital District No. 2 v. Hyde* seems to state.[42] *See also Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985) (Section 2 violation where defendant reduced number of ski areas in all-Aspen ticket package from four to three.)

PRINCIPLE VII-5: There may be anticompetitive conduct and resulting antitrust harm that is not, or is not directly, consumer harm; e.g., exploitation of producers or middlemen through buying cartels or monopsonistic joint ventures.

COMMENT

While usually competitive harm is consumer harm, in some cases a defendant's conduct hurts market competition in some other way.

In *Telecor Communications, Inc. v. Southwestern Bell Telephone Company*, the Tenth Circuit rejected Southwestern Bell's argument that monopsonistic conduct is not actionable unless it "injures consumers by forcing up the price of the end product." *Telecor Communications, Inc. v. Southwestern Bell Telephone Company*, 305 F.3d 1124, 1133-1134 (10th Cir. 2002). In support of its opinion, the court cited Judge Posner's observation in *Khan v. State Oil Co.* that monopsony pricing is analytically the same as monopoly or cartel pricing and treated as such by the law, and noted that "[t]he Supreme Court's treatment of monopsony cases suggests that suppliers [] are protected by antitrust laws even when the anticompetitive activity does not harm end-users." *Id.* at 1134 citing *Khan v. State Oil Co.*, 93 F.3d 1358, 1361 (7th Cir. 1996).

Also the court assumed that monopsonistic practices will ultimately harm consumers, *id.* at 1135-1136, as have other courts. *See Addamax Corporation v. Open Software Foundation, Inc.*, *et al.*, 888 F. Supp 274 (D. Mass. 1995).

Basic economic theory supports this view. Harm to the end users may be presumed from the dead-weight loss associated with the imposition of monopsony pricing restraints. "Some producers will either produce less or cease production altogether, resulting in less-than-optimal output of the product or service, and over the long run higher consumer prices, reduced quality, or substitution of less efficient alternative products."[43]

---

42. *Jefferson Parish Hospital District No. 2 v. Hyde*, 466 U.S. 2, 15 (1984) (E.g., "And from the standpoint of the consumer-whose interests the statute was especially intended to serve-the freedom to select the best bargain in the second market is impaired by his need to purchase the tying product, and perhaps by an inability to evaluate the true cost of either product when they are available only as a package."). It should be noted, however, that other language in the decision can be read as going the other way on this point. In addition, the qualified *per se* rule is under pressure; see Principle VI-10.
43. *Telecor*, 305 F.3d at 1136 *citing* Herbert Hovenkamp, *Economics and Federal Antitrust Law* Section 1.2 at 17-18 (1985); *see also* Roger D. Blair & Jeffrey L. Harrison, *Monopsony* 36-43 (1993). On the other hand, bargaining for lower input prices without restricting output is not an exercise of monopsony power and can result in lower prices to final consumers.

PRINCIPLE VII-6: Unreasonable, unjustified foreclosure may be harm to competition; but courts must take care that they are protecting the market and not competitors.

COMMENT

Courts and scholars disagree as to whether there are only "outcome harms" - *e.g.*, the conduct lessens output and decreases consumer surplus - or whether there are also dynamic and process harms - *e.g.*, a dominant firm blocks the market by unjustified conduct but prices will not necessarily rise.

The diverging opinions generated by the Seventh Circuit in *Fishman v. Wirtz* exemplify this debate. *Fishman v. Wirtz*, 807 F.2d 520 (7th Cir. 1986). In that case plaintiffs lost their bid for the Chicago Bulls to defendants (after having initially won the contract) due to the defendant stadium owners' preemption of the (only) stadium. *Id.* The court found blockage of the right to compete for the market (the stadium) to constitute injury to competition and violate the antitrust laws. It said the "antitrust laws are concerned with the competitive process, and their application does not depend in each particular case upon the ultimate demonstrable consumer effect."[44] The court held that the Sherman Act protects competition to acquire a natural monopoly.[45] Judge Easterbrook dissented. Because the conduct in question -- preemption of the right to compete for the Chicago Bulls by preempting control over the only stadium -- did not affect price or quality, Judge Easterbrook considered it a "non-event" as far as antitrust was concerned. He would limit antitrust law to "*results* harmful to consumers." *Id.* at 564.

Thus, according to the majority in Fishman, where competition is for the market, unjustifiable foreclosure of the right to compete for the market is harm to competition.

Other cases also protect against harm to the dynamic aspects of the competitive process. In *FTC v. Indiana Federation of Dentists*, the insurance companies requested dentists to submit x-rays with insurance claims so that the insurers could detect unnecessary procedures and hold down their costs. *Indiana Federation of Dentists*, 476 U.S. 447 (1986). The dentists concertedly refused to comply. The FTC found the concert illegal, and the Supreme Court agreed. It equated the insurers with the consumers, and found a violation even though no "outcome" harm was shown. The dentists' concerted action was "likely enough to disrupt the proper functioning of the price-setting mechanism of the market . . . . The Federation is not entitled to pre-empt the workings of the market by deciding for itself that its customers do not need that which they demand." *Id.* at 461-462.

PRINCIPLE VII-7: Whether a plaintiff must prove actual or potential harm to competition depends on the nature of the plaintiff's cause of action.

COMMENT

For Sections 3 and 7 of the Clayton Act, the violation is based on a prediction that competition may be lessened in the relevant product market. It is often said that plaintiff must prove as a matter of "reasonable probability" that the harm (usually a price rise) will result, e.g., from a merger. *See FTC v. H.J. Heinz Co.*, 246 F.3d 708, 713, 719 (D.C. Cir. 2001). "Section 7 does not require proof that a merger has caused higher prices or other actual harm. All that is necessary is that the merger create an appreciable danger of such consequences in the future. A predictive judgment, necessarily probabilistic and judgmental rather than demonstrable … is called for." *See Hospital Corp of Am v. FTC*, 807 F.2d 1381, 1389 (7th Cir. 1986).

44. On the basis, however, that a healthy and unimpaired competitive process is presumed to be in the consumer interest. *Id.* at 536.
45. *Id. citing Havoco of America, Ltd. v. Shell Oil Co.*, 626 F.2d 549, 558 (7th Cir. 1980) (relevant question is whether restraint promotes or suppresses competition). The court stated that defendants had committed a classic violation of the antitrust laws by using a monopoly in one market to foreclose competition in another, and reasoned that "[a] rule that made the legality of arguably predatory conduct at one level of entry into the consumer market depend on whether *post hoc* analysis could clearly identify adverse impacts on ultimate consumers would be capricious, as well as unjust." *Id.* at 537.

For Sherman Act Section 1 and 2 cases the type of proof required is "an inquiry meet for the case." *California Dental Ass'n v. FTC*, 526 U.S. 756, 758 (1999). Thus, if the facts "give rise to an intuitively obvious inference of anticompetitive effect [e.g. output limitation]," the plaintiff makes its prima facie case and the conduct is illegal absent a procompetitive justification.[46] Accordingly, the nature of the conduct, in its context, may be sufficient proof of competitive harm. The plaintiff need not prove consumer harm directly.[47]

PRINCIPLE VII-8: As noted, the most common theory of harm to competition is price rise or output limitation. In some cases, burden-shifting presumptions of a price rise or output limitation are economically or legally appropriate. This is the case in the event of a monopolist's imposition of serious and apparently unjustified exclusionary practices.

COMMENT

Exclusive contracts and other conduct that has exclusionary effects may be procompetitive or anticompetitive. It may reduce parties' costs, create new products, reduce a manufacturer's costs of maintaining the reputation and quality of its products after title and control have passed to the purchaser, or prevent free-riding by competitors. On the other hand, it may be a part of a strategy for acquiring market power. *See* Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power Over Price*, 96 Yale L.J. 209, 228-229 (December 1986). According to Professors Krattenmaker and Salop: "[C]laims of anticompetitive exclusion should be judged according to whether the challenged practice places rival competitors at a cost disadvantage sufficient to allow the defendant firm to exercise monopoly power by raising price." *Id.* at 214.

Many cases turn on the question of whether the exclusionary contracts or other practices at issue are a strategy to raise price, and, if so, whether they are reasonably likely to do so. In U*nited States v. Dentsply*, 277 F. Supp. 2d 387 (D. Del. 2003), *rev'd*, 399 F.3d 181 (3d Cir. 2005), the lower court took a view of the facts particularly sympathetic to a dominant firm that purposely tied up almost all dealers with the hope of blocking competitors, and found that the competitors could nonetheless bypass the Dentsply phalanx and that the Department of Justice had fatally failed to "establish[ ] a market of supracompetitive pricing." *Id.* at 453. On appeal, however, the Third Circuit had little trouble finding an unlawful exercise of monopoly power in violation of Section 2, reversed the lower court, and directed entry of judgment for the government.

Other courts have also taken a legal stance sympathetic to the plaintiff. In *Microsoft*, for example, the D.C. Circuit found that Microsoft's exclusionary practices sufficiently threatened to harm competition and innovation, even though the government had not proved that competition would probably have eroded Microsoft's monopoly position but for its intentional and unjustified exclusionary practices. It was enough that, in this action by the government, Microsoft engaged in significant and unjustified exclusionary practices and its intent was to protect its monopoly position by shooting down the approaching potential competitors and thus disabling them from the opportunity to try.[48]

The approach of the D.C. Circuit in *Microsoft* has proved attractive to other courts confronted with practices of a monopolist intended to exclude rivals, notwithstanding the absence of demonstrable market effects. Thus, in *LePage's Incorporated v. 3M*, 3M, with more than 90% of the market for brand-name transparent tape, in response to Le Page's innovation of competitive cheap tape, launched a fighting brand and offered bundled rebates across several products to large customers -- an offer they could not refuse. *LePage's Incorporated v. Minnesota Mining and Manufacturing*

---

46. *Id.* at 780-81. *See also* concurring and dissenting opinion of Justice Breyer, joined by Justices Stevens, Kennedy and Ginsburg, to whom " 'genuine adverse [competitive] effects'" from dentists' privately-agreed price and quality advertising restraints were more readily apparent than they were to Justices Souter, Scalia, Thomas, Rehnquist and O'Connor.
47. *See* Principle VII-8 infra and particularly the *Microsoft* case, wherein proof of monopoly power, significant foreclosure, and specific intent were sufficient.
48. *See* Eleanor M. Fox, *What Is Harm To Competition? Exclusionary Practices and Anticompetitive Effect*, 70 Antitrust L.J. 371 (2002). Fox interpreted the Microsoft case to hold: "Conduct that intentionally, significantly and without business justification excludes a potential competitor from outlets, where access to those outlets is a necessary though not sufficient condition to waging a challenge to a monopolist and fear of challenge prompts the conduct, is 'anticompetitive.'"

Company, 324 F.3d 141 (3d Cir. 2003), *cert. denied*, 124 S. Ct. 2932 (2004). The court held the bundled rebates exclusionary and illegal, apparently primarily for their exclusionary effect and their consequent undermining of the pioneering rival's competition on the merits. Secondarily, the court stated, apparently without record evidence, that prices were likely to rise. *Id.* at 159.

As a best practice in the case of serious, unjustified exclusionary harms, courts should either seek actual evidence of an appreciable chance of price rise, or should require record evidence that supports a conclusion that increased future prices are more probably than not going to result from the exclusionary conduct. Courts should refrain from "concluding" that prices will probably rise in the "long run" when the record does not support this claim.

At the other extreme, courts should dismiss cases where the challenged practice is likely on balance to be good for consumers. In the middle ground, harm to competition from unjustified blocking of rivals' best routes to the market should not be ruled out. The *Microsoft* approach is wise practice.

PRINCIPLE VII-9: In cases of mergers of significant competitors in concentrated markets leading to significant increases in concentration, the Philadelphia National Bank presumption shifts the burden of going forward to defendants; the burden of persuasion stays with plaintiffs. The presumption is not necessarily reflective of a logical inference, and courts using the presumption should be receptive to evidence that the merger does not harm competition.

COMMENT

In general, to establish a Section 7 violation, a plaintiff must show that a pending acquisition is reasonably likely to cause an anticompetitive effect in the relevant market. *United States v. Oracle Corporation*, 331 F. Supp. 2d 1098 (N.D. Cal. 2004) *citing United States v. Penn-Olin Chem. Co.*, 378 U.S. 158, 171 (1964). In *United States v. Philadelphia Nat'l Bank ("PNB"),* the Supreme Court devised essentially a market share and concentration figure burden-shifting approach to assessing the legality of particular horizontal transactions. *United States v. Philadelphia Nat'l Bank ("PNB"),* 374 U.S. 321 (1963). A rule of "presumptive illegality" was applied in that case, in which the merger caused a "significant increase in the concentration of firms" and produced a surviving firm with an "undue percentage share" of the market. *Id.* at 363.

According to the court in *United States v. Oracle Corporation*, the PNB rule should be applied as follows: once the market is defined, the inquiry is whether there is a "level of concentration sufficient" to trigger the presumption "that the proposed transaction will lead to a substantial lessening of competition under the principles set forth in the Horizontal Merger Guidelines." *Oracle*, 331 F. Supp. 2d at 1108, 1110 (N.D. Cal. 2004). A significant trend toward concentration creates a presumption that the transaction violates Section 7. *Id. citing United States v. Baker Hughes Inc.*, 908 F.2d 981, 982-983 (D.C. Cir. 1990). The defendant may rebut the presumption by showing that the market-share statistics do not accurately depict the merger's probable effects on competition in the relevant market. *Id. citing FTC v. H.J. Heinz Co.*, 246 F.3d 708, 715 (D.C. Cir. 2001).

In *FTC v. H.J. Heinz Co.*, the court laid out "the analytical approach by which the Government establishes a Section 7 violation," relying on *Philadelphia Nat'l Bank*. "First the Government must show that the merger would produce 'a firm controlling an undue percentage share of the relevant market, and [would] result [] in a significant increase in the concentration of firms in that market.'" *Id.* "Such a showing establishes a 'presumption' that the merger will substantially lessen competition." *Id.* Then, "to rebut the presumption, the defendants must produce evidence that 'show[s] that the market-share statistics [give] an inaccurate account of the [merger's] probable effects on competition' in the relevant market." If the defendant is able to rebut the presumption of illegality successfully, "the burden of producing additional evidence of anticompetitive effect shifts to the Government, and merges with the ultimate burden of persuasion, which remains with the Government at all times." *Id.*, quoting from *Unites States v. Baker Hughes, Inc.*, 908 F.2d 981, 983 (D.C. Cir. 1990).

Affirmative cases of presumed illegality have been overcome by a variety of countervailing factors, including the inability to obtain needed raw materials, technological weaknesses relative to competitors, low entry barriers presenting a threat to incumbents, and other market evidence establishing that the statistics do not form a good proxy for predicting the future, or otherwise that the challenged acquisition is unlikely substantially to lessen competition. *See United States v. General Dynamics Corp.*, 415 U.S. 486 (1974); *Marine Bancorp*, 418 U.S. 602; *Heinz*, 246 F.3d at 708; *AlliedSignal Inc. v. B.F. Goodrich Co.*, 183 F.3d 568 (7th Cir. 1999); *Dr. Pepper/Seven-Up Cos. v. FTC,* 991 F.2d 859 (D.C. Cir. 1993); *Olin Corp. v. FTC*, 986 F.2d 1295 (9th Cir. 1993). If the defendant successfully rebuts the presumption of illegality, the burden of producing additional evidence of anticompetitive effects shifts to the plaintiff, and merges with the ultimate burden of persuasion, which remains with the plaintiff at all times. *See United States v. Baker Hughes Inc.*, 908 F.2d 981, 983 (D.C. Cir. 1990).

While the *PNB* presumption is still customarily used in merger analysis, the presumption is not a logical economic inference, and with economics eclipsing earlier socio-political concerns, the PNB presumption has been called into question. See Robert H. Lande & James Langenfeld, *From The Surrogates To Stories: The Evolution Of Federal Merger Policy*, 11 Antitrust 5 (Spring 1997). Professor Robert Lande points out that every merger involves different competitive circumstances that can affect whether the merger is likely to reduce competition. He argues that the "traditional" approach of *PNB* has many problems, id., including the weight it puts on the choice of a market definition.[49]

Also, the "conventional approach can lead to little predictability in 'heterogeneous' or 'differentiated' markets composed of products with substantially different features and prices, such as automobiles, or with significant brand distinction and (arguably) less product differences, such as bath tissues. This problem can be serious because one can almost always find enough differences in products to make an argument that any market is heterogeneous." *Id*.

For instance, in *U.S. v. Oracle*, the court noted that "strong presumptions based on mere market concentration may be ill-advised in differentiated products unilateral effects cases" and observed that without analysis beyond market concentration, a presumption that a firm controls a certain market share is generally misleading. Oracle, 331 F. Supp. 2d at 1121-1122 *citing* Roscoe B. Starek III & Stephen Stockum, *What Makes Mergers Anticompetitive?: "Unilateral Effects" Analysis Under The 1992 Merger Guidelines*, 63 Antitrust L.J. 801, 804 (1995).

In view of its weaknesses, the PNB presumptive approach "has eroded over time." Lande & Langenfeld, *supra* note 54. Its vitality may lie not in analytical substance but administrative efficiency. As a legal presumption, it puts the burden on the parties that know the most.

When the presumption is used, courts should be receptive to evidence of the parties that the merger does not harm competition.

PRINCIPLE VII-10: In tying cases applying the qualified *per se* rule, defendants may defend by showing a good business justification.

COMMENT

Under the traditional rule, if a plaintiff proves use of market power in a tying product to force buyers to purchase a separate tied product affecting a not insubstantial amount of commerce, the conduct is illegal *per se*. This qualified *per se* rule is not robust. It was adopted at a time of popular understanding that tying virtually never has a good business justification. Over time, there has been recognition that even a monopolist may use a tying arrangement for an efficient purpose.

49. *Id*. For instance, albeit not a merger case but exemplary nonetheless, in *Eastman Kodak Co. v. Image Technical Services, Inc*, the narrow market definition accepted by the Court was for a single brand market consisting of repair services on Kodak's own line of equipment. In assessing the case based on this narrow market, the Court found it reasonable to infer market power in the aftermarket, and refused to dismiss the independent services operators' claim that Kodak illegally monopolized Kodak imaging machine repair parts and aftermarket service.

In her concurring opinion in *Jefferson Parish*, Justice O'Connor advocated the abandonment of *per se* treatment for tying and the requirement that competitive harm in the relevant market -- usually the market of the tied product -- be proved. *Jefferson Parish*, 466 U.S. at 33-35.

In *Microsoft* the court said that software platform tie-ins were appropriately treated under the rule of reason because there had not been enough experience to consider them anticompetitive *per se*. People might prefer a package of software, and developing packages might be an efficient mode of business. *Microsoft*, 253 F.3d at 84-95.

Moreover, in *Verizon v. Trinko*, the Supreme Court rejected "monopoly leveraging" as a violation, noting that mere leveraging does not imply an increase in market power, such as by monopolizing the target market, and stating that dangerous probability of monopolizing the second market is a necessary element of the violation. *Trinko*, 124 S.Ct. at 883, n.4. Tie-ins are a subset of leveraging.

Tie-ins by definition block firms from contesting market segments on their merits, override consumer choice, and, some would argue, are almost never necessary to achieve efficiencies. The latter point, however, is deeply contested. It is appropriate, therefore, for courts to consider whether, in particular situations, there has not been sufficient experience to condemn tie-ins per se and to apply a rule of reason, as in *Microsoft*; and in any event to admit efficiencies and other good business justifications.

PRINCIPLE VII-11: In *per se* cases, although the government need not prove competitive harm, private plaintiffs must show standing and antitrust injury, which generally require a showing that the plaintiffs' injuries are the result of injury or harm to competition.

COMMENT

Per se offenses are presumed to restrict competition unreasonably because they are generally believed to lead to higher prices and reduced output.

Private plaintiffs, however, must have standing to bring their cases and must show that they have suffered antitrust injury.

The basic rule for antitrust injury comes from *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc*., 429 U.S. at 489, which held that a private plaintiff seeking injunctive relief under Section 4 of the Clayton Act must show a threat of injury "of the type the antitrust laws were designed to prevent and that flows from that which makes defendants' acts unlawful." Injury to businesses from competition itself (which plaintiffs suffered) is not antitrust injury.

The need to prove injury from the anticompetitive aspect of the conduct applies to per se and non per se cases alike. Resale price maintenance is a good example of a *per se* violation wherein private plaintiffs' burdens could effectively turn the case into a rule of reason case. Resale price maintenance agreements are likely to cause competitive harm when they facilitate a cartel or cartel-like behavior. The vertical price-fixing prevents retailers from passing on lower prices to consumers and therefore reduces the manufacturer's incentive to cheat on a manufacturer-level cartel. Richard A. Posner, *Antitrust Law* 172-173 (2d ed., The University of Chicago Press 2001) (1976). However, resale price maintenance may be used in situations not conducive to cartels. It can enhance competition; e.g., by providing a means for a producer to enhance service competition among its distributors and thereby to offer better interbrand competition. As Professor Lester Telser demonstrated nearly half a century ago, manufacturers can use resale price maintenance to stimulate non-price competition among retailers. Lester Telser, *Why Should Manufacturers Want Fair Trade?,* 3 J.L. & Econ. 86 (1960).

If the defendant has used resale price maintenance to compete rather than to cartelize, there has been no market harm, no supracompetitive overcharge, and no antitrust injury.

These observations could, of course, ultimately affect whether courts will further erode the per se rule against resale price maintenance.

CHAPTER VIII. MARKET DEFINITION

INTRODUCTION

In most types of antitrust cases, including monopolization and attempted monopolization cases, merger cases, and most single firm non-*per se* conduct cases, courts have required plaintiffs to define relevant markets.[50]

When market definition is properly done, parties and courts confront directly the constraints under which firms operate in attempting to exercise alleged market power.[51] Firms are more or less constrained by the actions of customers and rivals, and it is the principal function of the market definition exercise to have the parties consider and evaluate the extent to which these constraints are present.

To be sure, it is also the case that markets are defined often to fix the boundaries within which market shares can be determined. These shares are then viewed as suggesting, with more or less accuracy, the ability of a firm to exercise market power, which can be a way of indicating its ability to be free of market imposed constraints. The purpose of determining market shares is to explore the extent to which a firm operates with fewer or greater constraints; and it is for this reason that market shares are considered relevant for firm behavior.

PRINCIPLE VIII-1: Market definition should undertake to identify the products that constrain the exercise of market power by the firm or firms whose conduct is being examined.

COMMENT

The exercise of defining relevant markets should emphasize the critical question to be asked, which is the extent to which firms are effectively constrained by external factors. Because these constraints generally come in different varieties and strengths, one should not expect there to be a single bright-line answer to a market definition question. In many cases, there may be various lines or boundaries that could be set, and the relevant issue is then how alternative market boundaries can be used to identify the actual constraints that firms encounter. One ought to resist the temptation to define "markets" as businessmen or industry observers use the term. While one should never ignore what people in the business think, they are not using "market" as an antitrust term of art, and often use "markets" as a way of categorizing products rather than in terms of constraints on a particular firm.

Constraints may be of different significance depending on the type of competitive harm that is alleged. For example, a theory of collusion among several relatively small firms might require consideration of all firms that could replace some of the lost output, while if the alleged harm is one of unilateral effects in a differentiated products market, identification of fringe competitors (and a delineation of a market to include or exclude them) might be less essential.

---

50. In some other horizontal coordination cases, courts and agencies have felt comfortable dispensing with market definition or market power analysis, particularly where the conduct at issue involved direct or "naked" restraints on price or output. *See, e.g., NCAA v. Board of Regents*, 468 U.S. 85 (1984); *FTC v. Indiana Fed'n of Dentists*, 476 U.S. 447 (1986); *Polygram Holding, Inc.*, FTC Docket No. 9298 (2003); *but see California Dental Ass'n v. FTC*, 526 U.S. 756 (1999).

51. It is never a good idea to assume without analysis that the appropriate market is the area of business in which the plaintiff operates. Although this might be appropriate if it were the plaintiff whose market power were in question, it is not appropriate when the defendant operates in other areas that may constrain its actions and prices in the area of the plaintiff. For example, in a case brought by the St. Louis Convention Center against the NFL involving the move of the Los Angeles Rams to St. Louis, the plaintiff alleged a market for stadiums built to NFL standards. *St. Louis Convention & Visitors Comm'n v. National Football League*, 46 F. Supp. 2d 1058 (E.D. Mo. 1997), *aff'd*, 154 F.3d 851 (8th Cir. 1998). That would be appropriate if one were examining the options open to the NFL as a buyer, but it is far too narrow when considering the alternatives open to stadium builders who can turn their resources to other things.

PRINCIPLE VIII-2: Properly identifying constraints on market power depends on whether the concern about market power is prospective or retrospective, which determines what prices should be employed in defining and analyzing effects in the relevant market.

COMMENT

In Section 2 actions and Section 1 rule of reason actions, a threshold issue is whether the defendant already possesses market or monopoly power, and market definition is used in such cases largely to help answer this threshold question. The retrospective market power inquiry in such cases can fall into the so-called "*Cellophane* trap"[52] by assessing constraints on market power after it already has been exercised and failing to recognize that such constraints became operative only after significant market power had been exercised by raising price well above the competitive level. In such cases, these supracompetitive prices should not be used as the basis for a relevant market analysis that looks for substitute products at prevailing price levels. This will avoid defining the market too broadly and understating the defendant's market power.

The *Cellophane* trap does not arise, however, in cases involving a strictly prospective market power inquiry. Market definition in such cases is used to help determine whether proposed or ongoing conduct could lead to the exercise, or enhanced exercise, of market power, for example as a result of a proposed merger. Some Sherman Act cases also involve a prospective market power inquiry, for example a challenge to a practice recently adopted by the defendant that may create or enhance market power, where such an effect has not yet been achieved.

The *Cellophane* trap can arise in a merger case if the merger has been consummated, and it can arise even with proposed mergers. The reason is that the competitive harm threatened by the merger may be the prevention of price decreases that otherwise would occur when market power currently is being exercised. An important scenario in which that could be the case involves an industry experiencing ongoing pricing coordination. The theory of competitive harm in such a case could be that the lessening of competition resulting from the proposed merger would prevent the weakening or collapse of the ongoing pricing coordination.[53] If so, the relevant price level at which to assess constraints is the level to which prices might fall.

PRINCIPLE VIII-3: Courts should be receptive to evidence of supply constraints as well as to evidence of demand constraints.

COMMENT

Because competitive constraints can be present on both the demand and supply sides of the market, courts should be willing to receive evidence of both supply and demand side factors. In earlier literature, the approach was to examine cross elasticities of demand and supply, which reflect the extent to which demand and supply respond to a price change.[54] *See, e.g.,* Carl Kaysen and Donald F. Turner*, Antitrust Policy*, 1959, pp. 27-28. More recently, the Merger Guidelines published since 1982 have applied a somewhat different approach. In section 1.0 the current *Horizontal Merger Guidelines* state:

> Market definition focuses solely on demand substitution factors-i.e., possible consumer responses. Supply substitution factors-i.e., possible production

---

52. *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377 (1956). Du Pont was the only manufacturer of transparent flexible wrapping materials, and had raised the price of that product to the point where other (non-transparent) flexible wrapping materials constrained further price increases. In defining the relevant market as "all flexible wrapping materials" the Court fell into the trap of evaluating constraints on market power after it already had been fully exercised. Rather, the Court should have asked to what extent du Pont had been able to raise price above competitive levels because it was the only manufacturers of transparent flexible wrapping materials.
53. In section 1.11, the *Horizontal Merger Guidelines* address the *Cellophane* trap in the hypothetical monopolist test as follows: "[T]he Agency will use prevailing prices of the products of the merging firms and possible substitutes for such products, unless premerger circumstances are strongly suggestive of coordinated interaction, in which case the Agency will use a price more reflective of the competitive price.
54. In *Greyhound v. IBM*, 559 F.2d 488 (9th Cir 1977), the plaintiff alleged a market consisting only of leased computers, with sold computers excluded. (Computer leasing was the business that Greyhound was in.) The Court of Appeals overturned a directed verdict in IBM's favor at least partly on the ground that a jury could reasonably have found such a market. This approach, however, overlooked the obvious point that any seller of computers could have turned to leasing them with a stroke of the pen.

responses-are considered elsewhere in the Guidelines in the identification of firms that participate in the relevant market and the analysis of entry.

Under the current Guidelines, supply side constraints are not evaluated under the rubric of defining the relevant market, but rather primarily under the rubric of "identification of firms that participate in the relevant market." Under the Guidelines, some incumbent competitors in the relevant market "participate through supply response." These firms may possess assets that could be shifted or extended into production and sale of a relevant product, or perhaps they could be acquired and put into production within one year and without incurring significant sunk costs. Both the Guidelines' approach and the more traditional approach may be employed by the parties in their proof, or by the court in its consideration of constraints on the exercise of market power'

PRINCIPLE VIII-4: If anticompetitive effects can be proven or predicted with sufficient certainty, it should not be necessary in an antitrust (merger or conduct) case to prove a product and geographic market, or market share in a relevant market. It is nonetheless ordinarily important to identify the area of competition affected by the merger or conduct, so that the competitive constraints by all relevant products and firms can be identified and analyzed.

COMMENT

This Principle states the law under Sherman Act Section 1 and FTC Act Section 5, jurisprudence, as reflected in *FTC v. Indiana Fed'n of Dentists*, 476 U.S. 447 (1986), and *NCAA v. Board of Regents*, 468 U.S. 85 (1984). The Principle also should be valid in merger cases. Clayton 7's requirement that competition be lessened in a "line of business" and "section of the country" does not necessarily require the plaintiff to prove a structural (rather than a direct-effects) case. It would be anomalous, in light of criticisms of the structure-conduct-performance paradigm, to insist on proof of market structure in all cases. Nonetheless, this Principle should be applied cautiously, recognizing the need to prove (likely or actual) anticompetitive effects with sufficient certainty in the absence of proof of market definition.

Following *Indiana Fed'n of Dentists and NCAA*, many Section 1 cases have approved reliance on direct proof of anticompetitive effects in lieu of relevant market analysis. *E.g., Todd v. Exxon Corp.*, 275 F.3d 191, 206 (2d Cir. 2001) ("If a plaintiff can show that a defendant's conduct exerted an actual adverse effect on competition, this is a strong indicator of market power. In fact, this arguably is more direct evidence of market power than calculations of elusive market share figures."); *Toys R Us v. FTC*, 221 F.3d 928, 937 (7th Cir. 2000) (One "way [] of proving market power . . . is through direct evidence of anticompetitive effects"). A few courts actually have relied on direct evidence of market or monopoly power in reaching decisions. *E.g., Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 477, 468-71 and n.15 (1992) (relying on "direct evidence" that Kodak "raise[d] price and dr[o]ve out competition" to establish Kodak's market power); *Re/Max Int'l, Inc. v. Realty One, Inc.*, 173 F.3d 995, 1016-19 (6th Cir. 1999) (reversing summary judgment based on structural analysis and instead relying on direct evidence of monopoly power).

Of course, merger cases raise rather different issues from Section 1 cases, because there can be no direct proof of anticompetitive effects from conduct that has not occurred, as is the situation in the vast majority of merger cases. To date, no court has endorsed the dispensing of market delineation in merger cases, and controlling, albeit somewhat elderly, Supreme Court precedent still appears to mandate market delineation. Nonetheless, economists have developed methods for assessing unilateral effects in merger cases without delineating markets, and requiring delineation of markets in such cases can entail drawing artificial lines where none exist or are needed. Thus, even in merger cases, courts should be receptive to evidence showing direct evidence of anticompetitive effects as a supplement to, or even in lieu of, market definition.

APPENDIX A: WG3 PARTICIPANTS & OBSERVERS

Joseph M. Alioto
Alioto Law Firm
Participant

Kevin J. Arquit
Simpson, Thacher & Bartlett
Steering Committee Member

Jonathan B. Baker
Washington College of Law
American University
Participant

Tyler A. Baker
Fenwick & West LLP
Participant

Richard G. Braman
The Sedona Conference
ex-officio Steering Committee
Member
Observer

Joe S. Cecil, Ph.D., J.D.
Federal Judicial Center
Observer

Wayne Dale Collins
Shearman & Sterling LLP
Participant

Dr. William S. Comanor
University of California,
Los Angeles & Santa Barbara
Participant

Lloyd Constantine
Constantine & Cannon
Steering Committee Member

Douglas Dobson
Bates White LLC
Participant

Richard J. Favretto
Mayer, Brown, Rowe & Maw LLP
Participant

Dr. Franklin M. Fisher
Department of Economics E52-359
Massachusetts Institute of Technology
Participant

Professor Eleanor Fox
New York University School of Law
Steering Committee Member

Michael J. Freed
Much, Shelist, Freed, Denenberg,
Ament & Robenstein, P.C.
Participant

Peter Freeman
Ernst & Young, LLP
Participant

Professor David J. Gifford
University of Minnesota Law School
Participant

Professor George A. Hay
Cornell Law School
Steering Committee Member

Robert L. Hubbard
New York Office of the Attorney General
Observer

Jean Janes
Much, Shelist, Freed, Denenberg,
Ament & Rubenstein, P.C.
Participant

Charles E. Koob
Simpson, Thacher & Bartlett
Steering Committee Member

William Kovacic
Office of General Counsel
Federal Trade Commission
Observer

Richard Liebeskind
Pillsbury Winthrop LLP
Participant

Kenneth Logan
Simpson, Thacher & Bartlett
Participant

Ann G. Rappleye
International Paper Company
Participant

J. Thomas Rosch
Latham & Watkins LLP
Participant

Douglas E. Rosenthal
Constantine & Cannon
Participant

Daniel Rubinfeld
U. Calif. Berkeley, School of Law
Participant

Jeffrey Shinder
Constantine & Cannon
Participant

Daniel R. Shulman
Gray, Plant Mooty Mooty & Bennett, P.A.
Steering Committee Chair

Lee H. Simowitz
Baker & Hostetler, LLP
Participant

The Hon. Vaughn R. Walker
United States District Court for the
Northern District of California
Observer

Gregory J. Werden
U.S. Department of Justice
Observer

APPENDIX B: THE SEDONA CONFERENCE WORKING GROUP SERIES & WGS℠ MEMBERSHIP PROGRAM

The Sedona Conference Working Group Series ("WGS℠") represents the evolution of The Sedona Conference® from a forum for advanced dialogue to an open think-tank confronting some of the most challenging issues faced by our legal system today.

The WGS℠ begins with the same high caliber of participants as our regular season conferences. The total, active group, however, is limited to 30-35 instead of 60. Further, in lieu of finished papers being posted on the website in advance of the Conference, thought pieces and other ideas are exchanged ahead of time, and the Working Group meeting becomes the opportunity to create a set of recommendations, guidelines or other position piece designed to be of immediate benefit to the bench and bar, and to move the law forward in a reasoned and just way. Working Group output, when complete, is then put through a peer review process, including where possible critique at one of our regular season conferences, hopefully resulting in authoritative, meaningful and balanced final papers for publication and distribution.

The first Working Group was convened in October 2002, and was dedicated to the development of guidelines for electronic document retention and production. The impact of its first (draft) publication—*The Sedona Principles; Best Practices Recommendations and Principles Addressing Electronic Document Production* (March 2003 version)—was immediate and substantial. *The Principles* was cited in the Advisory Committee on Civil Rules Discovery Subcommittee Report on Electronic Discovery less than a month after the publication of the "public comment" draft, and was cited in a seminal e-discovery decision of the SDNY less than a month after that. As noted in the June 2003 issue of Pike & Fischer's *Digital Discovery and E-Evidence, "The Principles*...influence is already becoming evident."

The WGS℠ Membership Program was established to provide a vehicle to allow any interested jurist, attorney, academic or consultant to participate in Working Group activities. Membership provides access to advance drafts of Working Group output with the opportunity for early input, and to a Bulletin Board where reference materials are posted and current news and other matters of interest can be discussed. Members may also indicate their willingness to volunteer for special Project Team assignment, and a Member's Roster is included in Working Group publications. The annual cost of membership is only $295, and includes access to the Member's Only area for one Working Group; additional Working Groups can be joined for $100/Group.

We currently have active Working Groups in the areas of 1) electronic document retention and production; 2) protective orders, confidentiality, and public access; 3) the role of economics in antitrust; 4) the intersection of the patent and antitrust laws; (5) *Markman* hearings and claim construction; (6) international e-information disclosure and management issues; and (7) Sedona Canada: electronic document retention and production in Canada. *See* the "Working Group Series" area of our website for further details on our Working Group Series and the Membership Program.