COURT-APPOINTED NEUTRAL ECONOMIC EXPERTS

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ABSTRACT

Complex civil litigation routinely includes expert economic testimony. However, it may be hard for a jury to determine at trial which expert economist is more credible, and it may be hard for the judge to determine at the *Daubert* hearing whether the methodology upon which a given expert economist relies is intellectually rigorous enough to produce results that constitute admissible testimony. One solution rarely employed is for the court to appoint its own neutral economic expert under Rule 706 of the Federal Rules of Evidence when a lawsuit contains a claim for damages that will require rigorous analysis of data. Based on my recent experience as Judge Richard Posner's courtappointed economic expert on damages in patent infringement litigation, I explain how the wider use of Rule 706 would assist the judge and jury and would facilitate the prompt settlement of intellectual property, antitrust, securities, contract, business tort, and other complex disputes. The benefits to courts and litigants would surely exceed the costs.

7EL: A11; A12; D02; D73; K13; K21; K41; L40

I. INTRODUCTION

Complex civil litigation routinely includes expert economic testimony. However, determining which expert economist is more credible may confound a lay jury. It may even confound the judge when ruling on the admissibility of expert economic testimony during the *Daubert* hearing. One solution rarely employed is for the court to appoint its own neutral economic expert under Rule 706 of the Federal Rules of Evidence when a lawsuit contains a claim for damages that will require rigorous analysis of data. Based on my recent experience as Judge Richard Posner's court-appointed neutral economic expert on damages in patent infringement litigation,

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¹ Daubert v. Merrill Dow Pharm., Inc., 509 U.S. 579 (1993).

² Fed. R. Evid. 706.

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I explain in this article how the wider use of Rule 706 would assist the judge and jury and would facilitate the prompt settlement of intellectual property, antitrust, securities, contract, business tort, and other complex disputes.³ The benefits to courts and litigants would surely exceed the costs.

Before allowing an expert to testify before the jury, a trial judge must determine (among other things) in a *Daubert* hearing "that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." Although the judge may cross-examine the expert during the *Daubert* hearing to make this determination, his decision to admit or exclude part or all of the expert's testimony may prove difficult to the extent it requires the judge to have specialized knowledge of the expert's field. It is true that, if each side has an expert, the party opposing expert *A* will use expert *B*, written authorities, expert *A*'s own writings and prior testimony, and factual evidence of various kinds to show that *A* has not satisfied *Daubert*'s requirements for admissibility. Out of an abundance of caution, however, the judge may be tempted to admit the expert's testimony in the face of *Daubert* challenges and wait for cross-examination at trial to expose the alleged errors in the expert's testimony.

Justice Stephen Breyer and Judge Posner believe that an effective way for the trial judge to determine the admissibility of expert testimony before cross-examination at trial is for the judge to appoint his own neutral expert pursuant to Rule 706.⁵ I agree and in this article examine the benefits that would result from wider use of court-appointed economic experts pursuant to Rule 706. My insights draw from my experience in 2012 and 2013 as the nominee of Judge Posner (sitting by designation as a trial judge in the Northern District of Illinois) to be his neutral economic expert on damages in two patent litigations—*Apple v. Motorola*⁶ and *Brandeis University v. East Side Oven*⁷—and my actual service as his neutral expert in the latter case.

³ In March 2013, for example, Judge John Gleeson of the Eastern District of New York nominated a neutral economic expert to advise on "economic issues that may arise in connection with . . . final approval of a [\$7.25 billion] proposed settlement" of an antitrust class action against Visa and MasterCard. Order, *In re* Payment Card Interchange Fee & Merchant Discount Antitrust Litig., No. 01:05-MD-1720-JG-JO, 2012 WL 3932046 (E.D.N.Y. Mar. 19, 2013), ECF No. 1908.

⁴ Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137, 152 (1999). In Judge Posner's words, the judge must determine whether the expert is "knowledgeable in the relevant technical field and that in forming the expert opinion to which he wants to testify he used the same analytical methods that he uses in his ordinary, which is to say non-litigation, work." RICHARD A. POSNER, REFLECTIONS ON JUDGING ch. 9 (forthcoming fall 2013, Harvard Univ. Press).

⁵ See General Elec. Co. v. Joiner, 522 U.S. 136, 149 (1997) (Breyer, J., concurring); POSNER, supra note 4, ch. 9; Richard A. Posner, The Law and Economics of the Economic Expert Witness, 13 J. ECON. PERSP. 91, 96, 98 (1999).

⁶ Apple Inc. v. Motorola, Inc., 869 F. Supp. 2d 901 (N.D. Ill. 2012) (Posner, J.).

Brandeis Univ. v. East Side Ovens Inc., Nos. 1:12-cv-01508, 1:12-cv-01509, 1:12-cv-01510, 1:12-cv-01511, 1:12-cv-01512, 1:12-cv-01513 (N.D. Ill. 2013) (Posner, J.).

In Part II of this article, I explain how Rule 706 works in both theory and practice. In Part III, I explain how the wider use of court-appointed neutral economic experts would promote the efficient administration of justice. In addition to advising the judge on the admissibility of the parties' opposing economic experts, the court's neutral economic expert can provide testimony that will enable the jurors to better understand the contradictory testimony of opposing experts. A neutral economic expert on damages (or other remedies) is categorically different from a neutral scientific expert on liability questions, and for this reason a court's use of a neutral economic expert generates special value. The need to determine proper monetary relief using sophisticated economic analysis of data arises in a high percentage of complex civil cases involving business disputes.⁸ In this respect, a court's appointment of a neutral economic expert recognizes at a very practical level the complementarity between law and economics. In a lawsuit both disciplines help the court to determine what monetary relief would be most consistent with the applicable law. In Part IV, I conclude by offering several conjectures on the use of neutral economic experts.

II. THE EXPERIENCE WITH NEUTRAL EXPERTS IN COMPLEX LITIGATION

Rule 706 provides the court broad discretion to appoint an expert witness either "on its own motion or on the motion of any party." Specifically, Rule 706 provides that "the court may order the parties to show cause why expert witnesses should not be appointed and may ask the parties to submit nominations." The court may appoint any expert that the parties agree on or one of its own choosing, but the court may appoint only someone who consents to act as a neutral expert. Rule 706 codified the common law right of courts to appoint neutral experts to testify.

The considerations that led the Advisory Committee to the Judicial Conference to craft Rule 706's system of neutral court-appointed experts include "[t]he practice of shopping for experts, the venality of some experts, and the reluctance of many reputable experts to involve themselves in litigation." The Advisory Committee further noted that, "[w]hile experience indicates that actual appointment is a relatively infrequent occurrence, the

⁸ Indeed, Rule 53 of the Federal Rules of Civil Procedures authorizes a judge to appoint a special master and specifically envisions that one occasion for doing so would be the computation of damages: "Unless a statute provides otherwise, a court may appoint a master only to . . . hold trial proceedings and make or recommend findings of fact on issues to be decided without a jury if appointment is warranted by . . . the need to perform an accounting or resolve a difficult computation of damages." FED. R. CIV. P. 53(1)(B)(ii).

⁹ Fed. R. Evid. 706(a)

¹⁰ Id

¹¹ Id., Advisory Committee Notes.

assumption may be made that the availability of the procedure in itself decreases the need for resorting to it." ¹²

In practice, district courts have rarely exercised their power to appoint neutral expert witnesses under Rule 706. Much of the reasoning for such reluctance concerns alleged shortcomings of using a court-appointed neutral expert, which I examine in more detail below.

A. The Reluctance to Appoint Neutral Experts

The reluctance of some judges to appoint neutral experts arises from procedural and policy considerations. A central concern of judges and litigants, among other alleged shortcomings of using a court-appointed neutral expert, is that such appointments weaken the adversarial system. Consequently, recourse to Rule 706 is rarely used.

1. Does the Appointment Require "Rare and Compelling Circumstances"?

Nowhere does Rule 706 say that judges should confine their use of neutral experts to extraordinary situations. Nevertheless, courts have appointed expert witnesses under Rule 706 infrequently, ¹³ and the Federal Circuit has observed that courts "have remarked that Rule 706 should be invoked only in rare and compelling circumstances." ¹⁴ Similarly, the U.S. district courts for the Southern and Eastern Districts of New York have called the appointment of a neutral expert "an extraordinary activity that is appropriate only in rare instances." ¹⁵

Neither Rule 706 nor cases interpreting it set forth standards for applying the rule. The district court for the Eastern District of California, however, noted in *Gorton v. Todd*¹⁶ various concerns that courts should consider when applying Rule 706:

- (1) Whether expert testimony is necessary or significantly useful for the trier of fact to comprehend a material issue in a case.
- (2) Whether the moving party has produced some evidence, admissible or otherwise, that demonstrates a serious dispute that could be resolved or understood through expert testimony.

¹² Id. For deeper analysis of the history of Rule 706 and the common law doctrine that preceded it, see Karen Butler Reisinger, Note, Court-Appointed Expert Panels: A Comparison of Two Models, 32 IND. L. REV. 225, 228-33 (1998).

Monolithic Power Sys, Inc. v. O₂ Micro Int'l Ltd., 558 F.3d 1341, 1346 (Fed. Cir. 2009) (citing 4 Jack B. Weinstein & Margaret A. Berger, Weinstein's Federal Evidence § 706.02[2] (2d ed. 2005); 29 Charles A. Wright, Arthur Miller & Kenneth W. Graham, Jr., Federal Practice and Procedure § 6304 (2d ed. 2002)).

¹⁴ *Id.* at 1348.

¹⁵ In re Joint E. & S. Dist. Asbestos Litig., 830 F. Supp. 686, 693 (E. & S.D.N.Y. 1993) (citing Joe S. Cecil. & Thomas E. Willging, Court-Appointed Experts: Defining the Role of Experts Appointed Under Federal Rule of Evidence 706, at 4-5 (Fed. Judicial Ctr. 1993)).

¹⁶ 793 F. Supp. 2d 1171 (E.D. Cal. 2011).

- (3) Whether certain circumstances or conditions of a party limit the effectiveness of the adversary process to result in accurate fact finding.
- (4) Whether the legal basis of plaintiff's claim entitles him to special consideration by the courts.¹⁷

The court in *Gorton* explained that the most important question to consider in deciding whether to appoint a neutral expert witness is whether such appointment will promote accurate fact-finding.¹⁸ The application of Rule 706 is rare because, in the court's view, the adversarial system is sufficient to promote accurate fact-finding.¹⁹

Joe Cecil and Thomas Willging reached similar conclusions in their 1993 study on why courts rarely appoint experts under Rule 706. They argued that the two principal reasons for decisions not to appoint an expert were the infrequency of cases requiring extraordinary expert assistance and the reluctance of judges to encroach upon the adversarial process. The judges who responded to a survey that Cecil and Willging administered indicated that such expert witnesses were used primarily in "rare and unusually demanding" cases—mostly patent infringement cases, as well as some product liability and antitrust violation cases. Cecil and Willging also explained that judges resort to Rule 706 only in rare cases, where the traditional adversarial system has failed to promote accurate fact-finding. Other hurdles to appointing an expert witness under Rule 706 include the difficulty in recognizing the need for an expert in time without delaying the trial 22 and problems with compensating expert witnesses. 23

2. Alleged Shortcomings of Court-Appointed Neutral Experts

An oft-cited shortcoming of using a court-appointed neutral expert is the risk of judicial influence on jury deliberation. Some commentators have argued that court-appointed expert witnesses threaten the Seventh Amendment right to a jury trial because juries will be unduly persuaded by court-appointed experts and unduly unaffected by experts hired by the parties. ²⁴

An additional concern related to the risk of undue judicial influence is the idea that no witness, including a court-appointed expert, is truly neutral. The fear behind using court-appointed experts is that his or her conclusions would receive undue weight "because a fact finder would consider the

¹⁷ Id. at 1185.

¹⁸ Id. at 1179.

¹⁹ *Id.* at 1182.

²⁰ CECIL & WILLGING, supra note 15, at 18.

²¹ *Id*.

²² Id. at 25.

²³ Id. at 22.

²⁴ See Tahirih V. Lee, Court-Appointed Experts and Judicial Reluctance: A Proposal to Amend Rule 706 of the Federal Rules of Evidence, 6 YALE L. & POL'Y REV. 480, 494 (1988).

court's appointee more credible than the parties' 'hired guns.'"²⁵ The Advisory Committee observed in its notes to Rule 706 that "court appointed experts acquire an aura of infallibility to which they are not entitled."²⁶ Nevertheless, the Advisory Committee explained that "[t]he ever-present possibility that the judge may appoint an expert in a given case must inevitably exert a sobering effect on the expert witness of a party and upon the person utilizing his services."²⁷ The key response for preventing this sort of undue judicial influence is to ensure that the jury understands that it is the ultimate fact finder, and that judges cannot reassign this function to a court-appointed expert.

Another explanation for why judges rarely appoint neutral experts is the perception that such appointments may interfere with the adversarial process. For the judge to use a court-appointed neutral expert would make the case more like an inquisitorial proceeding. The adversarial process is defended as being more effective in uncovering the truth. The American Bar Association explains that a neutral arbiter without partisan advocacy must take on the role of the judge, the defendant's advocate, and the plaintiff's advocate. The difficulties of taking on multiple roles justify the adversarial process.

In addition, some judges have raised concerns about a lack of judicial resources for identifying a suitable expert and securing compensation for such an expert. In Cecil's and Willging's study, judges often cited the difficulty in finding unbiased experts with the knowledge demanded in litigation in complex fields.³⁰ Once an expert witness is selected, the judges will need to supervise the expert's billing practices because the parties pay for the court-appointed expert's services. Cecil and Willging note that lawyers find it "'hard to justify [additional court-appointed expert fees] to their clients when the client is paying for expert testimony already,' particularly when the court-appointed expert may 'hurt the client's case.'"³¹

B. The Breyer-Posner Call for Neutral Experts

Since the 1990s, Justice Breyer and Judge Posner have endorsed the use of neutral experts under Rule 706 to assist judges and juries in fields in which

²⁵ John P. McCahey & Jonathan M. Proman, Federal Rule of Evidence 706: Court-Appointed Experts, A.B.A. SEC. LIT. TRIAL EVID. COMM. (June 30, 2011), available at http://apps. americanbar.org/litigation/committees/trialevidence/articles/summer2011-rule-706-court-appointed-experts.html.

²⁶ FED. R. EVID. 706, Advisory Committee Notes.

²⁷ *Id*.

²⁸ See, e.g., Mathias Dewatripont & Jean Tirole, Advocates, 107 J. Pol. Econ. 1, 25-26 (1999).

²⁹ Professional Responsibility: Report of the Joint Conference, 44 A.B.A. J. 1159, 1160 (1958).

³⁰ CECIL & WILLGING, supra note 15, at 21-22.

³¹ *Id.* at 22.

they lack training or expertise. In the Supreme Court's 1997 decision in *General Electric Co. v. Joiner*,³² Justice Breyer encouraged the use of neutral experts as a way to "overcome the inherent difficulty of making determinations about complicated scientific, or otherwise technical, evidence." Even though "cases presenting significant science-related issues have increased in number," he noted, "*Daubert*'s gatekeeping requirement will not prove inordinately difficult to implement" when using a neutral expert. Appointing a neutral expert (or a special master) "will help secure . . . the ascertainment of truth and the just determination of proceedings."

Judge Posner has advocated the use of Rule 706 since at least 1994, when in *Indianapolis Colts, Inc. v. Metropolitan Baltimore Football Club Limited Partnership*,³⁶ the Seventh Circuit decided an appeal in a trademark infringement case that the Indianapolis Colts and the National Football League had brought against the Canadian Football League's team in Baltimore. Judge Posner observed that "the judicial constraints on tendentious expert testimony are inherently weak because judges (and even more so juries . . .) lack training or experience in the relevant fields of expert knowledge."³⁷ He therefore recommended "asking each party's hired expert to designate a third, a neutral expert who would be appointed by the court to conduct the necessary studies."³⁸

In *High Fructose Corn Syrup Antitrust Litigation*, direct purchasers of high fructose corn syrup (HFCS) brought a class action against manufacturers of HFCS, alleging a price-fixing conspiracy.³⁹ On appeal, the Seventh Circuit, in an opinion in 2002 by Judge Posner, considered the statistical evidence that the parties' economic expert witnesses submitted concerning factors influencing the price of HCFS. Judge Posner recommended that on remand "the district judge . . . appoint his own expert witness, rather than leave himself and the jury completely at the mercy of the parties' warring experts."⁴⁰ Judge Posner further explained:

The neutral expert will testify (as can, of course, the party-designated experts) and the judge and jury can repose a degree of confidence in his testimony that it could not repose in that of a party's witness. The judge and jurors may not understand the neutral expert perfectly but at least they will know that he has no axe to grind, and so, to a degree anyway, they will be able to take his testimony on faith. 41

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<sup>32</sup> 522 U.S. 136 (1997).
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³³ *Id.* at 149.

³⁴ *Id.* at 149-50.

³⁵ *Id.* at 150.

^{36 34} F.3d 410 (7th Cir. 1994).

³⁷ *Id.* at 415.

³⁸ *Id*.

^{39 295} F.3d 651 (7th Cir. 2002).

⁴⁰ *Id.* at 665.

⁴¹ *Id*.

On remand, the district judge appointed a neutral economic expert specializing in industrial organization. 42

In *DeKoven v. Plaza Associates*, the Seventh Circuit in 2010 affirmed the dismissal of class actions alleging confusing dunning letters. ⁴³ The district court found that survey evidence put forth by the plaintiffs' expert was flawed, and the court entered summary judgment for the defendant. When the Seventh Circuit decided the appeal, Judge Posner wrote for the court that "suits under the Fair Debt Collection Practices Act have repeatedly come to grief because of flaws in the surveys conducted by the plaintiffs' expert." He therefore recommended that district judges "consider exercising the clearly authorized but rarely exercised option of appointing their own expert to conduct a survey in FDCPA cases . . . to improve judicial understanding of survey methodology."

C. The Experience of Using Neutral Economic Experts

Of the neutral experts that courts have appointed under Rule 706, few have been economists. 46 It appears as of March 2013 that, apart from the patent infringement cases in which Judge Posner has sat by designation and Judge Gleeson's review of a \$7.5 billion-dollar settlement proposal in an antitrust class action against Visa and MasterCard, 47 only five other cases have publicly reported the appointment and use of a neutral economic expert.

In *Oracle America, Inc. v. Google, Inc.*, Oracle alleged that Google had infringed its patent and copyrights relating to application programming interface package specifications used in mobile computing software. ⁴⁸ In November 2011, Judge William Alsup appointed a neutral expert under Rule 706 to calculate damages after the parties submitted damages estimates ranging from zero to \$6.1 billion dollars. Specifically, Oracle's damage claims ranged from \$1.4 billion to \$6.1 billion, and Google's alternative damage estimates ranged from zero to \$100 million. ⁴⁹ "In light of the

⁴² Id. (recommending the appointment of a neutral expert on remand in In re High Fructose Corn Syrup Antitrust Litigation, 293 F. Supp. 2d 854 (C.D. Ill. 2003)); see also Memorandum from the A.B.A. Antitrust Sec., Court-Appointed Economic Experts in Antitrust Cases, at 5 (Apr. 21, 2006) (on file with author).

^{43 599} F.3d 578 (7th Cir. 2010).

⁴⁴ *Id.* at 582.

⁴⁵ *Id.* at 583; *see also* Khan v. Fatima, 680 F.3d 781, 788 (7th Cir. 2012) ("We urge that the proceedings on remand be conducted expeditiously and we suggest that the judge to whom the case is assigned appoint a child psychologist See Fed. R. Evid. 706.").

⁴⁶ Cecil and Willging showed that almost two-thirds of appointments are for "medical experts appointed in personal injury cases, engineering experts appointed in patent and trade secret cases, and accounting experts appointed in commercial cases." CECIL & WILLGING, supra note 15, at 9.

⁴⁷ See note 3 supra.

⁴⁸ No. C 10-03561 WHA, 2011 WL 4479305 (N.D. Cal. Sept. 26, 2011).

⁴⁹ Oracle Am., Inc. v. Google Inc., No. C 10-03561 WHA, 2011 U.S. Dist. LEXIS 129766, at *6-9, (N.D. Cal. Nov. 9, 2011) (memorandum opinion regarding Rule 706 economic expert).

parties' extremely divergent views on damages and the unusual complexity of the damages aspect of this case," Judge Alsup said, "an independent economic expert was needed to aid the jury." The court instructed the neutral expert to "prepare an expert report and sit for deposition by stated deadlines." In addition, "each party would be able to examine [the neutral expert] at trial as though he were an adverse expert witness." The parties also would have the opportunity to respond to the neutral expert's critiques at trial. 53

In New York v. Kraft General Foods, Inc., the Attorney General of New York challenged Kraft's acquisition of Nabisco. The court appointed as its independent expert the late Professor Alfred Kahn of Cornell University, with the defendant's consent and over the plaintiff's objection, to assist the court in assessing the relevant product market and the competitive consequences of the acquisition. The court found Professor Kahn's testimony "credible and . . . supported by substantial evidence." After a liability trial during which the court heard the testimony of Kraft's fact witnesses, Professor Kahn's assessment, other testimony, and the parties' legal contentions, the district court concluded that the plaintiff had not shown "by a preponderance of the evidence" that Kraft's acquisition of Nabisco was likely to diminish competition in the relevant product market.

In *Board of Education v. CNA Insurance Co.*, the Board of Education of the Yonkers city school district sued its liability insurer for breach of a contract provision requiring the insurer to pay the board's costs of defending a lawsuit. After the court granted summary judgment and declared that coverage existed, it appointed on its own motion a former U.S. magistrate judge to serve as both a neutral expert under Rule 706 and a special master under Rule 53. The court instructed him to address the amount of attorney fees and costs incurred during the litigation. The court explained that its court-appointed expert and special master was necessary because the complexity of determining the value of attorney services and defense costs, as

⁵⁰ *Id.* at *8.

⁵¹ *Id.* at *11.

⁵² *Id.* at *12.

⁵³ Id

⁵⁴ 926 F. Supp. 321 (S.D.N.Y 1995).

⁵⁵ Id. at 325. The court asked each party for a list of acceptable experts and chose Professor Kahn, whom the plaintiff had listed. Id. at n.4.

⁵⁶ *Id.* at 341, 352.

⁵⁷ Id. at 366. Tad Lipsky has observed that the appointment of Professor Carl Kaysen as Judge Charles Wyzanski's law clerk in the famous monopolization case of United States v. United Shoe Mach. Corp., 110 F. Supp. 295 (D. Mass. 1953), aff'd per curiam, 347 U.S. 521 (1954), resembles the appointment of a neutral economic expert pursuant to Rule 706. See Abbott B. Lipsky, Jr., Antitrust Economics—Making Progress, Avoiding Regression, 12 GEO. MASON L. REV. 163, 175 (2003).

⁵⁸ 113 F.R.D. 654 (S.D.N.Y. 1987).

⁵⁹ *Id.* at 654.

well as the volume of evidence to be considered, were "matters too intricate for an otherwise unaided jury." The court instructed the neutral expert to "gather[] and analyz[e] the facts and data from the parties and witnesses, tak[e] their testimony and reporting thereon, and testify[] to his findings and conclusions at trial."

In *Pharmaceutical Industry Average Wholesale Price Litigation*, class plaintiffs alleged that pharmaceutical companies had engaged in unfair and deceptive trade practices by inflating the average wholesale price of certain drugs, and that these inflated prices caused damages to Medicare, third-party payers, and patients making percentage co-payments. ⁶² Judge Patti Saris appointed a neutral economic expert to assist the court in assessing the economic questions regarding average wholesale prices.

In Natchitoches Parish Hospital Service District v. Tyco International, Ltd., direct purchasers of sharps containers brought a class action against Tyco, alleging that it entered into anticompetitive exclusionary agreements with purchases of sharps containers, and anticompetitive exclusive dealing arrangements with group purchasing organizations. The court appointed a neutral economic expert to assist in the Daubert hearing by analyzing the party experts' testimony on issues relating to class certification, liability, and damages.

In short, the handful of federal judges who have appointed neutral economic experts under Rule 706 have used them to analyze questions concerning damages, liability, and procedure.

III. THE TRIAL JUDGE'S POWER TO APPOINT NEUTRAL EXPERTS UNDER RULE 706

Rule 706 of the Federal Rules of Evidence empowers a trial judge to appoint his own expert witnesses. Three housekeeping questions arise: What is the appointment process? What are (or can be) the neutral expert's duties? Who bears the cost of the neutral expert? How a judge answers these seemingly administrative questions can significantly affect the resolution of a lawsuit.

A. Appointment

Rule 706(a) contains general language about appointment of the court's expert witness:

On a party's motion or on its own, the court may order the parties to show cause why expert witnesses should not be appointed and may ask the parties to submit nominations.

⁶⁰ *Id.* at 655.

⁶¹ *Id*.

^{62 491} F. Supp. 2d 20, 33 (D. Mass. 2007).

⁶³ No. 05-12024 PBS, 2009 WL 3053855, at *1 (D. Mass. Sept. 21, 2009).

The court may appoint any expert that the parties agree on and any of its own choosing. But the court may only appoint someone who consents to act. ⁶⁴

This language is broad and impractical. It appears that parties rarely ask a judge to appoint a neutral expert. One can imagine a party having a very strong case and realizing that endorsement by a neutral expert may carry great weight with the jury (or the judge if it is a bench trial). However, it seems equally or even more likely that a party who already has retained or intends to retain its own expert witness to address a specific issue would not also seek appointment of a neutral expert to address the same issue. And, when a court does want to appoint a neutral expert on its own motion, it may get little help from the parties in nominating one. So, in practice, Rule 706(a) is most likely to be used only if the judge appoints a neutral expert on his own motion and either expends the effort to find that expert himself or enters an order forcing the parties to find one meeting the judge's criteria.

1. The Need for Early Appointment

When the judge appoints the neutral economic expert is critical. Doing so early in the case signals to the litigants the kinds of experts they should choose to hire and the level of intellectual rigor the court expects of the parties' experts. Doing so late in the case invites mischief and delay. The parties will have already selected their respective experts, and each side will fight to nominate a "neutral" economic expert who more resembles its own expert than the other side's expert.

The impact of the timing of appointment is evident from my disparate experiences in Judge Posner's two patent infringement cases in 2012 and 2013. In both cases—Apple v. Motorola and, later, Brandeis University v. East Side Oven—Judge Posner nominated me to be the court's neutral expert on patent damages. In the first case, Judge Posner asked the parties to propose a mutually acceptable nominee. They could not identify anyone. So Judge Posner nominated me on February 14, 2012, two months after the case had been transferred from Milwaukee to Chicago and reassigned to him, but more than thirteen months after the litigation had commenced. Three days after my nomination, Apple objected on grounds of prejudice: "Apple believes that it would be inappropriate for the Court to appoint a neutral expert who has expressed policy views that conflict with Apple's position in this litigation." In a five-page letter, Apple's counsel wrote to Judge Posner:

Apple respectfully objects to the appointment of Gregory Sidak as a neutral damages expert in this matter on the grounds that Mr. Sidak fails to meet the two most basic

⁶⁴ FED. R. EVID. 706(a).

⁶⁵ Letter from Robert D. Fram, Covington & Burling LLP, to The Honorable Richard A. Posner, at 4 (Feb. 17, 2012) (on file with author).

requirements of a "neutral" expert: (1) that he be, in fact, neutral; and (2) that he appear to the jury to be neutral. Mr. Sidak does not meet these requirements for two reasons.

First, Mr. Sidak has already taken public positions on disputed factual issues underlying Apple's argument that Motorola is obligated to license its standard-essential patents on fair, reasonable, and non-discriminatory ("FRAND") terms. Apple is therefore concerned that Mr. Sidak may not approach Apple's defenses to Motorola's damages claims from a neutral standpoint, as his role as a neutral expert would require.

Second, Mr. Sidak has co-authored articles with Motorola's damages and/or FRAND expert, Gregory Leonard, including at least one paper advocating on policy grounds a view contrary to Apple's (and the Supreme Court's) position on the proper measure of patent damages.66

Nearly a month passed, and the parties still could not identify a mutually agreeable neutral economic expert to nominate to Judge Posner. Finally, Judge Posner threatened them with a voir dire hearing to explain their failure to agree:

I have decided not to appoint Greg Sidak as an expert. He is eminently qualified and would I am confident give a completely unbiased evaluation of the damages claims, but in view of his previous publications including coauthorship with a party expert I think it better to find someone else.

I want the party experts to get together and nominate two experts to be court-appointed damages experts in this case. I will not accept a statement that the parties are unable to agree on a neutral expert. I find it very difficult to believe that there is no competent expert on patent damages who is unbiased and would be willing to testify as a court-appointed expert. As in labor law, party experts asked to nominate a neutral expert have a duty to negotiate in good faith. If the party experts report that they are unable to agree on whom to nominate, I will voir dire the experts and the parties' lawyers to determine the grounds for the failure to agree.

The nominations are due by Friday, March 16. In the event the parties make no nominations, the party experts and the lead counsel for each party shall appear for voir dire at 10:00 a.m. on Monday, March 19, in a courtroom to be announced.⁶⁷

Diogenes may have wandered the streets of Athens with his lamp in search of an honest man, but adverse parties cannot be expected to prefer a truly neutral expert—particularly late in the litigation when their cases, including economic theories and reports, are already fully developed. Each side wants to win. Indeed, it seems fair to assume that they would agree on a given nominee only if each party thought that the other party had made a mistake

⁶⁶ *Id.* at 1.

⁶⁷ Order of March 9, 2012, Apple Inc. v. Motorola Inc., 1:11-cv-08540 (N.D. Ill. Mar. 9, 2012) (Posner, J.). Malcolm Wheeler has described to me an approach that worked well in the U.S. District Court for the District of Kansas. The district judge ordered each party to submit a slate of proposed neutral experts. If any experts appeared on both slates, the court would choose one of them.

in agreeing. It is an odd rule that requires a Nash equilibrium of mutual mistake to work.

Even if the judge can succeed, as Judge Posner did, in forcing recalcitrant parties to nominate a mutually acceptable neutral expert, precious time is lost. It is impractical for the judge to amend the procedural schedule and push back the date for the Daubert hearing, other pretrial motions, and the trial. So the parties, who never wanted a neutral expert in the first place, will have succeeded in reducing the neutral expert's effectiveness by shortening the amount of time he has to analyze the reports of the parties' opposing expert witnesses. In Apple v. Motorola, the neutral expert on damages whom Judge Posner ultimately appointed never filed a report. The case ended at the Daubert hearing, when Judge Posner ruled inadmissible the damage testimony of both Apple's and Motorola's expert witnesses on the companies' various claims and counterclaims. 68 Without any admissible expert evidence on damages, Judge Posner saw no reason to hold a trial and therefore dismissed the case with prejudice. In effect, Apple (or Apple and Motorola jointly) successfully thwarted Judge Posner's ability to receive in a timely manner the informed opinion of the neutral expert on damages that Rule 706 clearly empowered the court to appoint.

Judge Posner's experience in *Brandeis University v. East Side Ovens* was entirely different. He again nominated me as his neutral economic expert on damages, but this time he did so early in the litigation. None of the parties objected to my nomination, and I was able to submit a 120-page report in time for the *Daubert* hearing.

In short, requiring the nominations very early in the case makes it more likely that the parties' own experts will not yet have had time to develop and harden their positions to the point where they can know with certainty what they hope the neutral expert will say. Furthermore, the court can increase the likelihood of agreement by increasing the size of the slates the parties are required to submit if they cannot agree within a very short period.

2. Attributes to Seek or Avoid in a Neutral Economic Expert

Plainly, someone chosen to be the court's neutral expert should be recognized for his or her substantive expertise, judgment, and integrity. Beyond these prerequisites, what additional qualities make the best court-appointed neutral economic expert?

a. Adviser to the Judge before Trial

The neutral economic expert ultimately must have a proven ability to work quickly and communicate his analysis and conclusions clearly. He must distill his economic opinions to a form that is useful to the judge. And the

Order of May 22, 2012, Apple Inc. v. Motorola Inc., 1:11-cv-08540, 2012 WL 1959560 (N. D. Ill. May 22, 2012) (Posner, J.) [hereinafter Apple v. Motorola *Daubert Order*].

expert must be decisive. If the neutral economic expert qualifies his conclusion in the equivocal tones that characterize so much writing in scholarly journals (perhaps because professors fear that being decisive will appear brash, superficial, or close-minded to their academic peers), the judge may long, as did Harry Truman, for a one-armed economist. ⁶⁹ The court's neutral economic expert cannot assume away the pragmatic fact that the adversary process requires many binary decisions.

One possibility is that the court would use its neutral economic expert solely for *Daubert* purposes. In other words, the neutral expert would never testify before the jury. Consideration of the neutral expert's opinion for *Daubert* purposes may require more process than was undertaken in *Brandeis*. The neutral expert's opinion on the admissibility of the party experts is itself expert evidence subject to the requirements of Rule 702 of the Federal Rules of Evidence. For the judge to consider the neutral expert's opinion, the parties must be afforded the opportunity to review his report, depose him, and challenge him if they desire. Most of this scrutiny would have to be undertaken before the *Daubert* challenges to the parties' experts, though the court could consider *Daubert* challenges to the neutral expert at the same hearing as the challenges to the party experts.

To be most helpful to the judge at the *Daubert* hearing, a neutral economic expert must be able to couch his analysis and conclusions succinctly within the legal framework for deciding the admissibility of evidence. Despite the widespread acceptance of "law and economics" as an intellectual discipline in American universities since the 1970s, I observe that, in the context of expert testimony in adversarial proceedings, practicing lawyers have learned more about the strands of economic theory relevant to their cases than testifying economists have learned about the strands of legal reasoning and the legal institutions relevant to their testimony. Surprisingly few testifying economists, for example, manifest a sophisticated understanding of civil procedure, federal jurisdiction, or the law of evidence. A court-appointed neutral economic expert should be fluent in both economics and law. The court's neutral economic expert creates value in the administration of justice precisely if, and because, he can perform a kind of market intermediation between what is said (or left unsaid) in the parties' expert testimony and what the judge must decide as a matter of law.

b. Expositor to the Jury at Trial

When the court's neutral economic expert is educating the jury rather than, or in addition to, advising the judge on the admissibility of the parties' expert economic testimony, he must bring additional skills to the task. He no

President Truman asked, "Give me a one-handed economist. All my economists say, 'on the one hand . . . on the other.'" See, e.g., The One-Handed Economist: Paul Krugman and the Controversial Art of Popularizing Economics, Economist, Nov. 13, 2003.

longer is addressing an audience of one. He cannot assume that the jury will know any law or any economics. His direct testimony at trial—most likely presented in narrative form, rather than question-and-answer form with the judge—is a tutorial for the jury that explains in nontechnical terms the nature and significance of the questions of economic fact that the jury must resolve regarding damages (and perhaps certain liability issues). With respect to the questions on which the judge has ruled that the parties' expert economists may testify at trial, the court's neutral economic expert will then give the jury his own assessment of where the weight of the evidence lies.

Using a neutral expert, rather than the parties' experts, to explain the relevant economic principles in a complex case to the jury can reduce the incidence of disputes over how to frame the issue. It may also cause the jury to focus on more specific issues in the particular case. Rule 706 does not require that the neutral expert opine on the ultimate economic issue or issues; rather, the court can specify what it wants the neutral expert to do to help the jury. The neutral expert could, for example, give a primer on economic terms and principles on which the parties' own experts agree, but do so in a less loaded way than the plaintiff's expert—that is, the first retained expert to testify—might do. The neutral expert then could state in jury-friendly terms what he sees the two opposing retained experts' respective positions to be and could identify the factual questions on which he thinks the jury should focus its attention. In addition, the neutral expert could testify about what factual errors he found in each retained expert's report. Or he could testify about what alternative economic theories none of the retained experts considered and that he thinks the jury should know about and consider. The court and jury could use these and perhaps other helpful approaches, which would incur a far smaller cost than, in general, the cost to obtain a strong opinion from the neutral expert on the ultimate issues.

3. Reducing Search Costs for Finding Neutral Economic Experts

Over time, institutions evolve for supplying highly specialized participants in complex civil litigation. It is likely that the wider use of court-appointed economic experts under Rule 706 would foster such an institution. One analogy is the relatively small and exclusive club of lawyers who serve as arbitrators in international commercial arbitrations and investor-state arbitrations. They manifest impartiality, substantive knowledge, and judgment. International dispute settlement organizations routinely maintain directories of arbitrators, practitioners, and in some cases specialized experts. The International Centre for Settlement of Investment Disputes (ICSID), for example, maintains an independent and neutral panel of arbitrators from which a disputing party may choose to designate arbitrators to an arbitral tribunal.⁷⁰ The panel is

 $^{^{70}}$ International Centre for Settlement of Investment Disputes (ICSID) Convention $\S\,1,$ art. 3.

populated by a limited number of qualified designees of the ICSID member states and the chairman of the administrative council. Alternatively, some international arbitration organizations maintain extensive databases of neutral arbitrators, mediators, and experts. The World Intellectual Property Organization (WIPO) and the London Court of International Arbitration (LCIA) have non-public databases of dispute settlement practitioners and substantive experts from which a party can select an arbitrator. Similarly, the International Chamber of Commerce (ICC) uses a database from which the International Court of Arbitration generates a list of potential arbitrators upon each request for arbitration.

It would be possible to establish a similar directory of candidates for appointment as neutral economic experts under Rule 706. The Federal Judicial Center, which has produced the *Reference Manual on Scientific Evidence*, would be the natural organization to maintain such a directory and to establish the criteria for the listing of candidates for appointment. Reducing search costs in this way would make it more appealing for a judge to experiment with using a court-appointed neutral economic expert. In *Brandeis*, Judge Posner found his neutral scientific expert on liability issues through the Court Appointed Scientific Experts (CASE) project of the American Academy for the Advancement of Science.

⁷¹ Id. § 4, art. 13. The ICSID Convention requires qualified designees to be persons of "high moral character and recognized competence in the fields of law, commerce, industry or finance, who may be relied upon to exercise independent judgment." Id. § 4, art. 14.

Neutrals, WIPO, http://www.wipo.int/amc/en/neutrals/ (last visited Feb. 15, 2013); Frequently Asked Questions, LCIA, http://www.lcia.org//Frequently_Asked_Questions.aspx (last visited Feb. 15, 2013).

Rules of ICC as Appointing Authority, art. 3(1) (2004), available at http://www.iccwbo.org/products-and-services/arbitration-and-adr/appointing-authority/rules-of-icc-as-appointing-authority/.

⁷⁴ In Europe, the Rules of Procedure of the Court of Justice of the European Union (CJEU) and the General Court (GC) provide for the possibility of court-appointed neutral experts. Rules of Procedure of the CJEU, Arts. 64(2)(d), 70; Rules of Procedure of the GC, Arts. 65 (d), 70(1). The Rules of Procedure do not prescribe the method or criteria of appointment, and the European Courts very rarely appoint neutral experts. See Eric Barbier de la Serre & Anne-Lise Sibony, Expert Evidence before the EC Courts 45 COMMON MARKET L. Rev. 941, 949 (2008) (reporting 25 cases, including but not limited to competition law cases). With respect to competition law cases in the European Union (EU) in particular, one reason for the rarity of the appointment of economic experts by the EU courts is that the courts mostly intervene in the context of public enforcement of competition law by reviewing decisions of the European Commission. Hence, the EU courts would not appoint a neutral economic expert to second-guess the Commission's own expert economic analysis. Member states are traditionally divided into those that use expert witnesses (appointed by the parties) and those that use neutral experts (appointed by the courts).

⁷⁵ See American Association for the Advancement of Science, Court Appointed Scientific Experts, http://www.aaas.org/spp/case/case.htm.

4. Reviewing the Judge's Appointment for Abuse of Discretion

It is unlikely that an appellate court would find a judge's reliance on a neutral expert to be reversible error. In Walker v. American Home Shield Long Term Disability Plan, a person suffering from fibromyalgia sued the administrator of an Employee Retirement Income Security Act (ERISA) plan, alleging wrongful termination of long-term disability benefits. 76 The district court found that the medical testimony on fibromyalgia was not "particularly clear," and the court therefore appointed an independent expert to assist in evaluating the contradictory evidence about the disease.⁷⁷ The plan administrator appealed the appointment on the grounds that the neutral expert's testimony was unnecessary "because the record was sufficiently developed and the plan administrator made no error of Law."78 The Ninth Circuit held that the district court did not abuse its discretion in appointing the neutral medical expert "to assist the court in evaluating contradictory evidence about an elusive disease of unknown cause."79 The Ninth Circuit reasoned that "[t]he district court's statement that the medical testimony was not 'particularly clear' suggests that the court found the evidence concerning fibromyalgia to be confusing and conflicting."80 That situation "presented the district court an appropriate occasion to appoint an independent expert[.]"81

The Courts of Appeals can review a district court's appointment of a neutral expert for abuse of discretion. However, so long as the district court appoints and uses a neutral expert in accordance with Rule 706, it is unlikely that the appellate court would reverse a decision because of the district court's appointment of a particular neutral expert. In Monolithic Power Systems, Inc. v. O2 Micro International Ltd., Monolithic sued for a declaratory judgment that a patent was invalid, not infringed, and unenforceable, and the patent owner, O₂ Micro, counterclaimed for infringement.⁸² The district court ordered both parties to agree upon a candidate for a neutral technical expert. After multiple disagreements, the parties agreed upon one expert, whom the court appointed to testify "on the electrical engineering aspects' of the case."83 During trial, the judge "instructed the jury that [the neutral expert] was 'an independent witness retained by the parties jointly at the court's direction to assist in explaining the technology at issue in this case." The neutral expert's testimony was consistent with that of Monolithic's expert, and the jury delivered a verdict in Monolithic's favor.

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    <sup>76</sup> 180 F.3d 1065 (9th Cir. 1999).
    <sup>77</sup> Id. at 1068.
    <sup>78</sup> Id. at 1071.
    <sup>79</sup> Id.
    <sup>80</sup> Id.
    <sup>81</sup> Id.
    <sup>82</sup> 558 F.3d 1341 (2009).
    <sup>83</sup> Id. at 1345 (quoting hearing transcript, at 35 l. 22 (Oct. 27, 2006)).
    <sup>84</sup> Id. at 1346 (quoting trial transcript, at 96 l. 21-24 (Apr. 30, 2007)).
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On appeal, O₂ Micro argued that the district court's appointment of the neutral expert "unduly burdened [O₂ Micro's] Seventh Amendment right to a trial by jury."85 The Federal Circuit disagreed and, in an opinion by Judge Randall Rader, found "no denial or encumbrance of O2 Micro's jury demand or Seventh Amendment rights."86 Rather, the Federal Circuit had found that the district court "properly administered the standards set by Rule 706."87 The district judge "allowed the parties to show cause why an expert witness should not be appointed;" "instructed the parties to nominate candidates and confer upon a mutually agreeable witness;" "provided detailed written instructions to [the neutral expert] regarding his duties;" "ordered [the neutral expert] to make himself available for depositions and for examination at trial;" "instructed the parties to share [the neutral expert's] reasonable fees and expenses;" and "did not limit in any way the parties' ability to call their own experts, and allowed these experts to attack, support, or supplement the testimony" of the neutral expert. 88 Moreover, the Federal Circuit ruled that the district judge did not abuse his discretion by disclosing to the jury the neutral expert's status as an independent expert. The Federal Circuit cited the district court's instructions to the jury as an appropriate exercise of discretion under Rule 706:

You should not give any greater weight to [the neutral expert's] opinion testimony than to the testimony of any other witness simply because the court ordered the parties to retain an independent witness. In evaluating his opinion, you should carefully assess the nature of and basis for [the neutral expert's] opinion just as you would do with any other witness' opinion.⁸⁹

Concluding that the district court had "properly" exercised its authority to appoint a neutral expert, the Federal Circuit held that it "perceive[d] no abuse of discretion in this case where the district court was confronted by what it viewed as an unusually complex case and what appeared to be starkly conflicting expert testimony." ⁹⁰

In Students of California School for the Blind v. Honig, the Ninth Circuit affirmed the district court's use of a neutral expert to evaluate whether reports concerning a building site satisfied earthquake safety rules. ⁹¹ In particular, because "the judge allowed both parties to thoroughly cross-examine its appointed expert[,] . . . the district court's appointment of a neutral expert was proper." ⁹² The defendant contended that the district court had

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85 Id. at 1347.
86 Id.
87 Id.
88 Id.
89 Id. at 1348.
90 Id.
91 736 F.2d 538 (9th Cir. 1984).
92 Id. at 549.
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abused its discretion by treating the court-appointed expert as a special master, in that the court "relied upon him so heavily." (Rule 53 authorizes a court to appoint a special master under exceptional circumstances. ⁹⁴) The Ninth Circuit rejected this argument because the district judge had expressly appointed the neutral expert under Rule 706. ⁹⁵ The defendant also challenged the appointment on the grounds that the neutral expert was unqualified. The Ninth Circuit rejected this argument as well, noting that, under Rule 706, "the court is free to appoint an expert of its own choosing without the consent of either party." Moreover, whether the neutral expert is qualified is a matter that "rests within the sound discretion of the trial judge."

In *United States v. Bonds*, the Sixth Circuit affirmed the district court's reliance on the testimony of a court-appointed expert to rule a party's expert testimony admissible. ⁹⁸ The defendants filed a motion to suppress the party expert's DNA evidence, criticizing the method of declaring DNA matches that the Federal Bureau of Investigation (FBI) uses. The magistrate judge conducted a hearing to determine whether the FBI's methodology used in the testimony about the DNA evidence was based on principles accepted in the scientific community. During the hearing, the parties called their expert witnesses, and the court called a court-appointed witness under Rule 706. At the conclusion of the hearing, the magistrate judge issued recommendations denying the defendants' motion to suppress. Agreeing with the magistrate judge, the district court adopted the neutral expert's recommendations and held that the FBI's expert testimony concerning DNA evidence was admissible under Rule 702.

In reviewing the district court's admission of the FBI expert's DNA testimony, the Sixth Circuit noted that the court had stated in the *Daubert* hearing that a judge assessing the admissibility of expert scientific testimony under Rule 702 should also consider other applicable rules, including Rule 706. The Sixth Circuit affirmed the district court's admission of the FBI's expert DNA testimony under Rule 702 and under the other rules of evidence, including Rule 706. The Sixth Circuit observed that the magistrate had appointed a neutral expert witness and had relied "on the testimony of [the neutral expert] as well as that of the parties' experts to conclude that the DNA testimony was admissible." The Sixth Circuit concluded that "[t]he

⁹³ Id.

⁹⁴ Id. (citing FED. R. CIV. P. 53 ("A reference to a master shall be the exception and not the rule.")).

⁹⁵ *Id.* at 549.

⁹⁶ *Id*.

⁹⁷ *Id*.

^{98 12} F.3d 540 (6th Cir. 1993).

⁹⁹ Id. at 566.

¹⁰⁰ Id. at 567.

court's appointment of its own expert witness counsels in favor of affirming the admission of the DNA testimony." ¹⁰¹

These four cases suggest that the Courts of Appeals will defer to a trial judge's selection of and reliance on a neutral expert under Rule 706.

B. Instructions

A trial judge has broad discretion in defining the role of a court-appointed neutral expert. Section b of Rule 706 offers few specifics about what the expert shall do:

The court must inform the expert of the expert's duties. The court may do so in writing and have a copy filed with the clerk or may do so orally at a conference in which the parties have an opportunity to participate. The expert:

- (1) must advise the parties of any findings the expert makes;
- (2) may be deposed by any party;
- (3) may be called to testify by the court or any party; and
- (4) may be cross-examined by any party, including the party that called the expert. 102

Rule 706 is silent on whether the court-appointed neutral expert shall submit a written report. It is also silent on whether the expert's findings shall be confined to questions to be resolved before trial, questions to be resolved by the jury at trial, questions in equitable claims to be resolved by the court at trial, or some combination of these three.

In particular, Rule 706 does not say whether the court-appointed neutral expert will play any role in the *Daubert* hearing. Yet the neutral expert's findings may be at least as helpful to the judge on the question of admissibility of the testimony of the parties' expert witnesses as those findings are to the jury on the question of how much weight to give to the testimony of the parties' experts. The neutral expert's findings are therefore more helpful if reported to the court before the *Daubert* hearing. In addition, as a practical matter, the neutral economic expert cannot wait until after the court has ruled on *Daubert* motions to commence his work. There would be too much for the neutral expert to accomplish in the limited time remaining until trial.

On a related note, if the parties depose the neutral expert pursuant to section b(2) of Rule 706, they should do so before the *Daubert* hearing. During his deposition, the neutral expert can further explain the reasons for the opinions expressed in his written report. Thus, deposing the expert before the *Daubert* hearing would make it easier for the judge to place explicit weight on the neutral economic expert's report in assessing the admissibility of the opposing experts' testimony. The judge could even allow the opposing

¹⁰¹ *Id*.

¹⁰² Fed. R. Evid. 706(b).

experts to amend their testimony after the neutral expert's deposition, so that they increase the reliability of such testimony before the *Daubert* hearing.

Judge Posner's instructions to me as the court-appointed neutral economic expert on damages in *Brandeis University v. East Side Ovens* directed me to "serve as a neutral, independent expert beholden to neither party," and to "assist the court and the jury by providing expert analysis and opinions concerning damages sought by Brandeis for patent infringement, should the jury find infringement." For the purposes of my report and my potential testimony (at deposition, at the *Daubert* hearing, and at trial), I of course assumed liability—that the patents in suit had been found to be valid and infringed. Judge Posner's instructions further solicited my "advice on whether the opinions formed by the parties' damages experts are the result of responsible research and analysis." Such advice would be relevant to the weight that the jury should give to the various opinions of the parties' damage experts, but it might also inform the *Daubert* motions that Judge Posner might be asked to consider.

Judge Posner's instructions to me did not expressly request my opinion on the admissibility of the opposing economic experts' reports on damages. ¹⁰⁵

Pursuant to Fed. R. Evid. 706(b), I hereby instruct J. Gregory Sidak, the court-appointed damages expert (nominated by the court with no objection from the parties), as follows:

- (1) You will serve as a neutral, independent expert beholden to neither party, and will assist the court and the jury by providing expert analysis and opinions concerning damages sought by Brandeis for patent infringement, should the jury find infringement.
- (2) The parties will provide me with materials to forward to you that you may find helpful when forming your opinions. You may also request additional materials directly from the parties and conduct your own research.
- (3) I may ask your advice on whether the opinions formed by the parties' damages experts are the result of responsible research and analysis. You may, if you wish, confer with the parties' damages experts, in the presence of their lawyers if the parties so desire. You will not directly participate in any *Daubert* proceedings relating to the parties' experts, and will not be subject to a *Daubert* challenge yourself.
- (4) You shall treat all materials that you receive in connection with this matter as confidential, and will destroy all materials related to this matter at its conclusion. You are subject to the confidentiality provisions of the stipulated protective order submitted to the court on March 26, 2012.
- (5) Apart from management details, I will meet with you, or confer by phone with you, only in the presence of the parties' lawyers and, if they wish, some or all of the party experts.
- (6) You shall submit by January 1, 2013 a short written report explaining your findings with regard to the subject of your expert inquiry.

¹⁰³ Instructions to Court-Appointed Damages Expert (FED. R. EVID. 706(b)), at 1, Brandeis Univ. v. East Side Ovens Inc., 1:12-cv-01508 (N.D. Ill. Apr. 13, 2012) (Posner, J.).

¹⁰⁴ *Id.* at 2.

Judge Posner's order instructing me as the court-appointed neutral expert on damages in Brandeis University reads as follows:

On the other hand, he did not instruct me to refrain from offering my opinion on the subject. Judge Posner's instructions stated only that I, as his neutral expert on damages, "[would] not directly participate in any *Daubert* proceedings relating to the parties' experts," although I myself could be subject to a *Daubert* challenge. In my mind, this wording in Judge Posner's instructions allowed the possibility that he might find some form of indirect participation in the *Daubert* proceeding to be useful.

Not knowing what form (if any) such indirect participation might take, and being restricted in my ability to communicate directly with Judge Posner pursuant to his instructions to me, I took the liberty of expediting the completion and filing of my report before the *Daubert* hearing, and I framed my economic analysis at times in terms of the more demanding evidentiary requirements of admissibility, in case Judge Posner chose to consider my criticisms of the damage reports of the parties' expert economic witnesses

Instructions to Court-Appointed Damages Expert (FED. R. EVID. 706(b)), *supra* note 103. Judge Posner subsequently amended his instructions to provide that I could face a *Daubert* challenge and a lengthier deposition. In relevant part, Judge Posner's amending order provided:

Order of April 28, 2012, Brandeis Univ. v. East Side Ovens Inc., 1:12-cv-01508 (N.D. Ill. Apr. 28, 2012) (Posner, J.).

⁽⁷⁾ You shall sit for a deposition in January 2013 to last no more than 8 hours, in one day, or if you prefer in two consecutive days. I will preside at the deposition.

⁽⁸⁾ You will testify at the trial. I will introduce you as an expert selected by me and beholden to neither party. You will explain to the jury in simple language and in narrative form your opinion with regard to the damages issues. The parties may cross-examine you. The trial(s) will take place in March 2013. I will tell you well in advance on which day (or days) you will be needed.

⁽⁹⁾ You may reach me by email if questions come up, if you require additional materials, or if you encounter any difficulties in accomplishing your assigned tasks. You may contact me via my law clerks, whose email addresses are [...]. You should copy the following attorneys for the parties on any emails other than those relating to management details and similarly non-substantive matters: For the plaintiffs, [...]. For the defendants, [...].

⁽¹⁰⁾ You will be compensated for the time you devote to the case at the hourly rate that we've discussed, plus expenses that you incur. You will submit timesheets to me, and each side will pay 50 percent of your bill, the defendants to divide their half among themselves as they see fit.

^{3.} The parties may submit a *Daubert* motion if they believe that Prof. Sidak's damages report is based on insufficient data or is not the product of reliable methods and principles reliably applied to the issue. I will inform Prof. Sidak of this possibility.

^{4.} Should the defendants convince me that Prof. Sidak's report raises sufficient issues unique to each defendant to render four hours of deposition time insufficient to adequately address their concerns, they may propose alternate schedules for the deposition of Prof. Sidak. I will not consider any such motions until after Prof. Sidak's report is submitted.

¹⁰⁶ Id.

relevant to his consideration of the *Daubert* motions concerning their testimony. I do not know whether Judge Posner considered my report in connection with the *Daubert* motions, as his order did not mention my report.

This ambiguity concerning the role of the court-appointed neutral economic expert in the Daubert hearing in Brandeis University v. East Side Ovens leads me to recommend that a judge appoint a neutral economic expert as soon as possible after the filing of the lawsuit and make explicit that the court-appointed neutral economic expert shall file his report and be deposed before the Daubert hearing and have whatever role the judge deems useful in that hearing. The neutral economic expert should be empowered to bring opposing counsel and their economic expert witnesses to an early conference on the economic evidence to be presented in the case. The neutral economic expert can expressly instruct the parties what guidelines shall apply to the neutral economic expert's assessment of the admissibility of expert economic testimony ultimately proffered by the parties. These guidelines could be ones adopted by the federal circuit in question, or they could be the judge's own guidelines, or they could merely be the neutral economic expert's guidelines. The binding authority of such guidelines would thus differ depending on who issues them.

The guidelines would provide a checklist for the parties' expert testimony on such matters as an expert's summarization of (1) all assumptions used; (2) his efforts to ensure independent verification of the reliability of facts received from counsel, the party retaining the expert, or third parties; (3) the reasons for not undertaking particular kinds of empirical analysis relating to essential questions pertaining to liability or damages; (4) the methods used to test the robustness of the expert's findings, and the results of such testing; and similar questions. Such guidelines, explained in person by the court-appointed neutral economic expert early in the litigation, would greatly reduce the subsequent cost to the parties and the court of making, opposing, and deciding Daubert motions. Both sides would have notice of the minimal standards of intellectual rigor expected of admissible expert testimony. The testifying expert economist on each side would prepare his report in a manner that would make it easier for the court and the neutral economic expert to compare and evaluate the competing findings. An additional benefit would be that the court-appointed neutral economic expert's report evaluating the parties' competing expert witnesses would be shorter and less costly and could be produced in a shorter period of time. It is entirely plausible that this procedure could reduce the cost of the neutral economic expert's report by half or more, an efficiency gain that would benefit the parties and the court.

Moreover, it bears repeating that courts might discover over time that the most efficacious use of Rule 706 is at the *Daubert* hearing rather than at trial. Courts therefore might gravitate toward a process in which the sole or primary purpose of the court-appointed economic expert is to provide a

report, and testimony if desired, on the *Daubert* requirements and whether the parties' economic experts satisfy those requirements.

C. Compensation

Rule 706 provides that the court-appointed expert "is entitled to a reasonable compensation, as set by the court," which shall be paid "by the parties in the proportion and at the time that the court directs." In Brandeis University, a team of economists working full-time for about one month assisted me in evaluating all arguments, assumptions, and calculations contained in the damage report of the plaintiffs' expert and the two respective rebuttal reports on damages of the two remaining defendants in the case. I also conducted econometric analysis, of a nature not undertaken by any of the parties' three expert witnesses, to test empirically the plausibility of certain causal arguments upon which the plaintiffs' expert witness relied in valuing the patents in suit and hence calculating damages for their infringement. My report was 120 double-spaced pages in length, excluding appendices for qualifications and materials relied upon. In terms of its size, scope, and analytical rigor, my report for Judge Posner was comparable to a report that I would typically submit as a party's expert witness on damages in a litigation or commercial arbitration.

My invoices to Judge Posner indicated my professional fees, calculated at my customary hourly rate and the customary hourly rates of my staff. However, I discounted my invoices to reflect the fact that this engagement was a learning experience for Judge Posner, the parties, their expert witnesses on damages, and me. Judge Posner forwarded each of my invoices to the parties and the order that it be paid by wire transfer within one week.

IV. NEUTRAL ECONOMIC EXPERTS AND THE EFFICIENT ADMINISTRATION OF JUSTICE

A court-appointed neutral economic expert can create value in two respects. He can educate the jury at trial, and he can aid the judge in disposing of a case sooner, on procedural motions, than the judge could in the absence of the neutral expert's opinion. The neutral economic expert's rigorous evaluation of the admissibility of the parties' expert evidence on damages may obviate a trial on liability. In short, the use of a court-appointed neutral economic expert will enable and encourage more lawsuits to settle or be dismissed at the *Daubert* hearing.

¹⁰⁷ FED. R. EVID. 706(c).

¹⁰⁸ Id. 706(c)(2). In civil cases, the one exception to this sharing of costs is when the plaintiff has sued the federal government for an uncompensated taking of private property. Id.

A. Does a Neutral Economic Expert Consume More of the Judge's Time?

Judge Posner has recognized one of the costs of using a court-appointed neutral expert. Such an expert "may mean more work for the judge." Not only does "finding, interviewing, and appointing" the neutral expert take time, but the neutral expert does not have a lawyer to "to shepherd and protect" him. Consequently, either the judge must assume that role or the court must find another lawyer to represent the neutral expert pro bono. However, the latter would be time-consuming, and it may make the jury confused or suspicious if the court-appointed neutral expert appears to need the protection of his own lawyer.

Instead of retaining a lawver to conduct direct examination of the neutral expert, the judge can, as Judge Posner recommends, "have the neutral narrate his testimony, with perhaps an occasional question by the judge to keep the neutral on track or clarify a point for the jury." This approach also requires more of the judge's time. Judge Posner observes that, without the judge's protection of the neutral expert, "the parties' lawyers, wanting to control the case, may through aggressive deposing of the neutral experts, or other tactics such as cross-examination of the neutral expert at trials, improperly undermine those experts' credibility with the jury." 113 Judge Posner's solution, reflected in his instructions to me in Brandeis University, 114 is for the judge to preside at the deposition of his court-appointed neutral expert, which again is time-consuming for the judge. The costs that Judge Posner describes are less likely to arise (or are likely to arise to a lesser degree) with respect to neutral economic experts because, as I noted in the introduction, they are present in most complex litigation to determine or rebut damages and are therefore likely to be relatively experienced in facing the rigors of cross-examination.

B. The Neutral Economic Expert's Ability to Help the Judge Perform His Gatekeeper Duty Concerning the Admissibility of Expert Testimony

If the appointment of a neutral economic expert created only more work for the judge and more expense for the parties, there would be no point in the judge's using this power under Rule 706. But there are significant benefits to be derived from the use of a neutral economic expert. One benefit relates to

¹⁰⁹ Samuel R. Gross, Expert Evidence, 1991 WISC. L. REV. 1113, 1203-04.

Posner, supra note 4, ch. 9.

¹¹¹ *Id*.

¹¹² *Id*.

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¹¹⁴ Instructions to Court-Appointed Damages Expert (FED. R. EVID. 706(b)), supra note 103.

evaluating the admissibility of—as opposed to the weight due—the parties' expert economic testimony. Such testimony will invariably include testimony on damages. However, as I will discuss later, there may be additional questions of liability or procedure for which neutral expert economic testimony could benefit the judge in a particular kind of case.

The Federal Rules of Evidence and the Supreme Court's decisions in *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, ¹¹⁵ *General Electric Co. v. Joiner*, ¹⁶ and *Kumho Tire Co., Ltd. v. Carmichael* ¹⁷ establish the American jurisprudence on the admissibility of expert testimony. In general, all "relevant" evidence on damages is admissible. ¹⁸ Relevant evidence "has any tendency to make a fact more or less probable than it would be without the evidence" and "is of consequence in determining the action. ¹⁹ Rule 702 provides specific requirements for an expert witness' testimony to be admissible: "(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." ¹²⁰

The Court explained in Daubert that an expert's testimony satisfies Rule 702 if it is based on "scientific knowledge" "scientific" referring to "the methods and procedures of science," and "knowledge" referring to "any body of known facts" or "ideas inferred from such facts or accepted as truths on good grounds." 122 Daubert also established the standards of relevancy and reliability for scientific evidence. 123 To discharge its gatekeeper duty, a federal trial judge must conduct, pursuant to Federal Rule of Evidence 104(a), "a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid, and of whether that reasoning or methodology properly can be applied to the facts in issue." Specifically, *Daubert* established four criteria to be considered by courts in determining the scientific reliability of an expert witness's methodology: (1) whether the methodology has been and can be tested, 125 (2) whether "the theory or technique has been subjected to peer review and publication,"¹²⁶ (3) the particular "known or potential rate of error" of the methodology and whether the methodology uses "standards controlling the

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<sup>115</sup> 509 U.S. 579 (1993).
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^{116 522} U.S. 136 (1997).

¹¹⁷ 526 U.S. 137 (1999).

¹¹⁸ Fed. R. Evid. 402.

¹¹⁹ Id. 401. See generally Richard A. Posner, An Economic Approach to the Law of Evidence, 51 STAN. L. REV. 1477 (1999).

¹²⁰ Fed. R. Evid. 702.

¹²¹ Daubert, 509 U.S. at 590 (quoting Fed. R. Evid. 702).

 $^{^{122}}$ Id. (quoting Webster's Third New International Dictionary 1252 (1986)).

¹²³ *Id.* at 594-95.

¹²⁴ Id. at 592-93.

¹²⁵ Id. at 593.

¹²⁶ Id.

technique's operation," ¹²⁷ and (4) whether the methodology has been "general[ly] accepted" by the scientific community. ¹²⁸

In *Joiner*, the Supreme Court established an "abuse of discretion" standard for appellate review of a district court's *Daubert* decision on the admissibility of expert testimony. ¹²⁹ The Court also concluded that it is within the district court's discretion to assess the reliability of the conclusions drawn—and not only the methodology used—by the expert. ¹³⁰ The Court specified that

nothing in either *Daubert* or the Federal Rules of Evidence 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.¹³¹

In particular, an expert's testimony needs to tie the damage calculation methodology to the facts of the case. 132

Justice Breyer wrote in *Kumho* that *Daubert* "made clear that its list of factors was meant to be helpful, not definitive." What matters for the admissibility of expert testimony is "intellectual rigor." Quoting *Kumho*, Justice Breyer later explained in the *Reference Manual on Scientific Evidence* that "[t]he purpose of *Daubert*'s gatekeeping requirement 'is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." 135

In addition to Rule 702, Rule 403 of the Federal Rules of Evidence authorizes the trial judge to exclude evidence if its "probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury[.]" Expert economic testimony that does

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127 Id. at 594.
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¹²⁸ Id.

¹²⁹ Joiner, 522 U.S. at 141-43.

¹³⁰ *Id.* at 146-47.

¹³¹ Id. at 146.

^{See, e.g., Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc., Nos. 2011-1218, 2011-1238, slip op. at 39-42 (Fed. Cir. Mar. 26, 2013); Whitserve, LLC v. Computer Packages, Inc., 694 F.3d 10, 31 (Fed. Cir. 2012); Uniloc USA, Inc. v. Microsoft Corp., 632 F.3d 1292 (Fed. Cir. 2011); ResQNet.com, Inc. v. Lansa, Inc., 594 F.3d 860, 863 (Fed. Cir. 2010); Wordtech Systems, Inc. v. Integrated Networks Solutions, Inc., 609 F.3d 1308, 1319 (Fed. Cir. 2010); i4i v. Microsoft Corp., 598 F.3d 831 (Fed. Cir. 2010); Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301 (Fed. Cir. 2009); Concord Boat Corp. v. Brunswick Corp., 207 F.3d 1039 (8th Cir. 2000) (excluding the expert economic testimony of Professor Robert Hall of the Hoover Institution at Stanford University for relying on the Cournot oligopoly model without sufficiently tying the method to the facts of the case).}

¹³³ Kumho Tire, 526 U.S. at 151.

¹³⁴ Id. at 152.

¹³⁵ Stephen Breyer, *Introduction, in Reference Manual on Scientific Evidence 1*, 6 (2d ed., Fed. Judicial Ctr. 2000) (quoting *Kumho*, 526 U.S. at 152).

¹³⁶ Fed. R. Evid. 403.

not satisfy basic standards of intellectual rigor could easily fall within this general exception to admissibility. The probative value of analysis that is not intellectually rigorous is low or nonexistent, such that the danger of an expert witness misleading a lay jury with this unreliable testimony is consequently high. In short, expert witness testimony is admissible to aid the finder of fact in setting damages (or on questions of liability) if and only if it is relevant, is judged reliable under the gatekeeping requirements of *Daubert*, and is intellectually rigorous.

In that regard, the benefits of a court-appointed economic expert extend beyond the *Daubert* hearing and to the jury trial if the case reaches that stage. The jury may find it difficult to choose between the opposing experts' testimony on grounds other than superficial factors, such as charm and articulateness. The neutral economic expert mitigates this problem in two ways. First, at the Daubert hearing, the expert can help the judge exclude evidence that lacks probative value, thereby precluding the possibility of a jury's erroneously choosing unreliable testimony because of superficial factors. A minimum threshold of scientific reliability and relevance is thus more likely to be met, regardless of the juries' susceptibility to superficial factors. Second, in the jury trial, the neutral expert can help inform the jury's decision. The neutral expert helps the judge instruct the jury as to the weight to assign each expert's testimony. A neutral expert also could (1) provide the court with questions to ask the parties' experts before the jury, (2) give the court opinions on special interrogatories to pose to the jury, (3) give the court opinions on the form of special verdicts, (4) testify separately, out of the hearing of the jury, on issues applicable to claims for equitable relief that the court, not the jury, must decide, when the plaintiff asserts both legal and equitable claims.

A court's appointment of a neutral economic expert on damages can increase the informational efficiency of litigation by better informing the parties of the expectations-weighted value of the plaintiff's claims and therefore the realistic bargaining range between the parties. The neutral economic expert has specialized knowledge (relative to most lawyers and judges) of how expert reports are written and what omitted analysis may imply. For that reason, it would make sense to allow the neutral expert to submit a limited number of written interrogatories to the parties' experts to ask questions that may not have been asked in their depositions.

C. Gains from Intermediation: How Court-Appointed Neutral Economic Experts Can Reduce Litigation Costs and Speed the Resolution of Disputes

The use of a neutral economic expert could reduce litigation costs by increasing the probability of either early settlement or early dismissal, which would reduce the time and resources a judge devotes to each case. Knowing that, future litigants would gravitate toward a more sophisticated use of

expert testimony on damages and limit the size of their damage claims to magnitudes that would withstand the scrutiny of the court's neutral expert.

1. The Inefficiency of Current Incentives to Postpone the Use of Expert Economic Analysis in Litigation

The plaintiff has a first-mover advantage with respect to economic analysis of liability and damages because the plaintiff controls the beginning of litigation. Unless litigation is highly time-sensitive, a shrewd plaintiff can retain a consulting economic expert to outline all of the essential evidence necessary for liability and damages before the filing of a complaint. A plaintiff may think that it is a strategic disadvantage to show its cards so early in litigation. But the purpose of litigation is not to maximize the value of outcomes for plaintiffs; it is to determine what monetary relief would be most consistent with the applicable laws, and to do so as quickly and efficiently as possible so that the dispute can be resolved. If expert economic testimony is feasible for a plaintiff to proffer at the preliminary injunction stage of a major litigation, it is no less feasible for the plaintiff to instill its complaint with insights drawn from expert economic advice. Conversely, a defendant may believe that it should wait before retaining a consulting economist and a testifying expert economist (the former may metamorphose into the latter) because the lawsuit may not survive a motion to dismiss (or some other kind of procedural motion). So the tendency is to retain an economist after outside counsel have already etched in stone their theory for defending the case, and then to keep the economist on a short leash, both substantively (possibly for discovery reasons) and financially.

This postponed use of expert economic consulting and testimony is counterproductive. It treats economic evidence as an afterthought, particularly on matters of damages or other financial remedies. If litigants retained economists earlier and gave them the substantive and budgetary latitude to commence analysis of damages as soon as possible, the parties would know sooner what the expectations-weighted value of the lawsuit is. This information would facilitate earlier settlement of the litigation. The court's early appointment of its own neutral economic expert on damages can help align the incentives of litigants to invest in the timely production and analysis of economic evidence that can hasten resolution of their dispute.

2. The Gains from Intermediation Relative to the Cost of the Neutral Economic Expert

A standard concept of the efficiency of a market is the extent to which it narrows the bid-ask spread. If one views litigation as the continuation of negotiation by other means, then one can also view a court-appointed neutral economic expert—particularly one testifying on damages—as a device for intermediation. Daniel Spulber has insightfully argued in his work on market microstructure that "[f]irms are formed when the gains from intermediated

exchange exceed the gains from direct exchange."¹³⁷ Similarly, a court will create value by appointing its own neutral economic expert when the intermediation gains from introducing expert economic testimony exceed the gains from reliance solely on the direct exchange of the parties' opposing expert economic testimony.

The cost of a court-appointed neutral economic expert on damages is low relative to at least three pertinent benchmarks: (1) the total expenditures by the parties on the litigation, (2) the amount by which the neutral economic expert's report and deposition testimony can close the spread between the opposing damage estimates of the parties' economic experts, and (3) the marginal cost to the parties of advancing from the *Daubert* hearing to a complete trial, which the neutral economic expert's report and deposition testimony may obviate.

Compared with the total expenditures by the parties on the litigation, the cost of the neutral expert is low. Although the neutral expert's report may require some original research, the report's primary purpose is to analyze and evaluate the parties' expert reports. Consequently, the neutral expert has a narrowly defined mandate, and his report should cost less to produce than any of the expert reports on damages presented at trial. Because each side typically will bear only half the cost of the neutral expert's report and because the neutral expert's report will almost always be less costly to produce than an expert report produced by the parties to the case, it is reasonable to expect that the neutral expert's report will cost the plaintiff one quarter to one half the cost of its own damages report. For the defendant, the neutral expert's report should cost one half the cost of its own report (because the defendant's rebuttal report typically will cost less than the plaintiff's damages report). It is unlikely that the cost of the neutral expert's report would exceed 10 percent of the parties' combined expenditures on their outside law firms.

The amount by which the neutral economic expert's report and subsequent deposition testimony can close the bid-ask spread between the damage estimates of the parties could dwarf the cost of the neutral expert's report. Initially, the presence of a neutral expert will create an incentive for each party's expert to generate less extreme damages estimates. Then, the neutral economic expert's testimony signals to the parties how the judge (by his selection of a given neutral expert) or jury (by its consideration of the neutral expert's trial testimony) will likely weigh the parties' opposing damage reports for purposes of admissibility or findings of fact. The neutral expert's testimony thus decreases the spread between the opposing parties' expected values of the final judgment. This forced convergence of expectations will decrease the spread between the plaintiff's willingness to accept and the

¹³⁷ DANIEL F. SPULBER, MARKET MICROSTRUCTURE: INTERMEDIARIES AND THE THEORY OF THE FIRM ix (Cambridge Univ. Press 1999) (emphasis in original suppressed).

defendant's willingness to offer in a settlement, which will increase the probability of settlement and decrease the expected costs of the litigation.

Finally, the cost of a neutral economic expert's report is small relative to the marginal cost to the parties of advancing from the *Daubert* hearing to trial, which the neutral economic expert's report and deposition testimony will have a significant probability of obviating. The neutral expert will assist the judge, as gatekeeper, to identify questionable methods or incorrect analysis in the reports and testimony of the parties' expert economists. Although the opposing counsel might identify these shortcomings in cross-examination, proceeding to trial will come at a great expense to all parties. When the neutral expert's report can reduce the chance of unreliable or unhelpful reports being presented at trial, the costs of litigation will fall. In addition, the mere presence of a neutral expert should signal to the parties' opposing experts the need to present a more rigorous report than would otherwise be necessary.

3. The Analogy to Baseball Arbitration

The court's neutral economic expert on damages can and should do more than simply split the difference between the parties. It requires no special expertise to divide a number by two. In contrast, the neutral expert must be willing, and must be credibly perceived by the parties as being willing, to recommend to the judge and jury a damage amount lying anywhere along the bargaining range between the parties, depending on what the facts lead the neutral expert to conclude. In this respect, the court's neutral economic expert on damages bears some resemblance to an arbitrator in "baseball arbitration"—or, final-offer arbitration—in which the arbitrator is constrained to pick the final salary offer of either the baseball player or the team owner, but may not pick any intermediate amount.

Baseball arbitration has the effect of generating more credible estimates by altering the incentives of experts for either side to generate extreme values for their clients. When a judge or jury must determine damages over a range established by opposing expert reports, there is an incentive for either side to produce extreme values. The jury's ultimate damage award then can be seen as a random draw over the range between the opposing values. In his *Daubert* order in *Apple v. Motorola*, Judge Posner drew attention to the problem of opposing experts' testifying to damage figures that differ by orders of magnitude. Apple's and Motorola's damage experts presented damage estimates that differed by a factor of 140. A difference so large "is a warning sign. Either one of the experts is way off base, or the estimation of a reasonable royalty is guesswork remote from the application of expert knowledge to a manageable issue within the scope of knowledge." A large

¹³⁹ *Id*.

¹³⁸ Apple v. Motorola *Daubert* Order, *supra* note 68, at 6.

difference between the opposing experts' damage estimates suggests that one expert (or both) did not use methods that they would use outside the litigation context.

Extreme damage values may change the perceived credibility of a damage expert's report (and thus alter the distribution function for the random draw), but a lay judge or jury may have difficulty determining what sorts of values are extreme and which expert's opinion is more or less credible. An extreme value will change the boundaries of the space over which a draw is made and may not have a significant negative effect in the distribution of the random draw. Therefore, the incentives to generate an extreme value may be greater than the incentives to produce a more plausible value. When the opposing experts present extreme values, the bargaining range will be greater and the likelihood of settlement will be smaller.

In baseball arbitration, two factors make a settlement much more likely. First, because the arbitrator may choose only one of the presented values (and not some intermediate point), credibility will take a greater role in determining which value is chosen. Second, because baseball performance and the compensation of comparable players are observable, the arbitrator can assess how reasonable the competing claims actually are. Because credibility plays a more important role in baseball arbitration than in the damages portion of a trial (assuming that the arbitrator chooses the value perceived to be closer to what the arbitrator considers to be the player's "true" value), parties will have an incentive to generate a report slightly more credible than the opposing party. The draw will not be random, so enlarging the difference between the proposed values may not improve one's expected outcome. The Nash equilibrium of the game should be for each party to generate a proposed salary equal to the true value of the player. In many cases, upon observing the proposed salary by the other side, the parties may be able to reach an agreement based upon an educated guess of the arbitrator's likely decision.

A court-appointed neutral economic expert in civil litigation will have a similar effect because he has a comparative advantage (relative to the judge, the jury, and parties' lawyers) in assessing the validity of the opposing assumptions and methodologies and the overall credibility of the opposing reports. When a judge or jury is unable to evaluate complex economic analysis, the neutral expert can assess each report and make a recommendation to the judge or jury. Therefore the marginal effect on the credibility of a party's damages expert of moving from a more plausible damages estimate to a more extreme value will be greater than it would be absent a neutral expert. ¹⁴⁰ All else equal, the presence of a neutral expert should result in a

¹⁴⁰ This analysis may suggest an unflattering interpretation of the role of a party's expert witness on damages. Implicit in the argument is a calculation by each party's expert that determines the optimal amount of damages for his client. Some may regard this calculation

smaller spread between the parties' opposing damages estimates. Once the neutral expert submits his report, the parties will receive a strong signal as to how the judge or jury will interpret the opposing reports, and the bargaining range will narrow further. As the bargaining range narrows, settlement will become even more likely.

Because the parties in baseball arbitration have an incentive to generate salary proposals close to the expected outcome, the bargaining range will be smaller and settlement is much more likely than in situations where incentives exist to generate extreme valuations. In practice, baseball arbitration cases are often settled before the hearing takes place. During the 2010-11 offseason, 163 players were eligible for arbitration; only three hearings determined a player's salary. A court-appointed neutral economic expert on damages can similarly increase the parties' incentives to settle.

In addition, with a neutral expert, the likely damages awarded will be closer to the actual amount of compensable injury. The finder of fact needs to determine the actual amount of compensable harm. The report of each party's expert witness on damages will signal what that amount is. As more signals are generated with the participation of the court's neutral economic expert, the damage award will converge to the actual amount of compensable harm.

In short, the use of court-appointed neutral economic experts will promote more predictable outcomes at trial, more likely settlements, and over time more efficient claims for compensation in general. These benefits will dwarf the (social) cost of using neutral experts.

V. CONCLUSIONS AND CONJECTURES

Complex civil litigation often involves monetary remedies that must be quantified. The parties to the suit typically hire their own economic experts to calculate damages, but problems arise when opposing damages estimates differ by orders of magnitude, or when a jury assumes opposing experts to be biased. The judge can appoint a neutral economic expert so as to close the spread between damages estimates and assuage a skeptical jury. The neutral

as evidence that the party's expert witness on damages is a hired gun with malleable ethics. However, if one considers that lawyers have the ability to shop between experts and that economists have very different interpretations of even basic concepts, a lawyer should have the ability to find an economist who honestly and sincerely will generate a damages estimation close to the client's optimal amount. See Posner, The Law and Economics of the Economic Expert Witness, supra note 5, at 93-95 (arguing that repeat play, reputation effects, academic publication, close scrutiny of expert work product, and evidentiary standards enforce a degree of integrity on the part of the expert witness and mitigate the risks of "hired guns" in expert testimony).

¹⁴¹ Cot's Baseball Contracts, League Info, 2011 Arbitration Eligibles, available at http://www.baseballprospectus.com/compensation/cots/league-info/2011-arbitration-eligibles/.

economic expert must have sophisticated fluency in both economics and law—a requirement that a directory of neutral experts would facilitate—and the ability to communicate clearly to a jury. A neutral economic expert, in short, increases efficiency in the administration of justice.

Although Rule 706 of the Federal Rules of Evidence permits a judge to appoint his own expert witness at any time, an appointment made soon after the filing of the lawsuit expedites justice, for example, by allowing the neutral expert's testimony to influence the *Daubert* hearing and assist the judge in his role as gatekeeper—to dismiss cases when appropriate. Early appointment also aligns the incentives of litigants to determine the expectations-weighted value of the lawsuit, which in turn increases the likelihood that the parties can settle. If a case does go to trial, then the neutral expert helps the judge instruct the jury on the weight to give each expert's damage testimony. In contrast to those benefits, the cost of using the neutral economic expert is miniscule. That cost is also trivial relative to the total cost of a lawsuit.

The use of court-appointed neutral economic experts invites various conjectures. First, the U.S. Courts of Appeals could quickly make the appointment of such experts routine. When remanding a case to the district court, the appellate court as a matter of course could direct the trial judge to appoint a neutral economic expert on damages. Perhaps some circuits would enthusiastically embrace court-appointed neutral economic experts and others would resist. A given circuit could thereby choose the extent to which it wanted to infuse greater economic rigor and neutrality into the determination of damages, as well as the analysis of questions of liability or procedure that economic analysis could illuminate. This kind of variation across circuits could induce a new version of forum shopping. Over time, it would be possible to study whether cases in circuits that used neutral economic experts were settled with greater frequency or litigated to conclusion more quickly than in circuits that did not use neutral economic experts. One could also study whether parties were increasingly filing motions to transfer to or from circuits adopting the widespread use of neutral economic experts.

Second, any motion for a preliminary injunction raises an inherently economic question: is the harm alleged irreparable? From an economic perspective, one can offer at least three different interpretations of irreparable harm. His irreparable if one cannot confidently measure it. However, it is hard to swallow that the sophisticated empirical economic methods available today are incapable of measuring harm. It is easy for a plaintiff simply to claim that the harm cannot be measured. The court's neutral economic expert would confirm or deny such a claim. Second, harm is irreparable to the extent that it exceeds the value of the defendant's assets. Third, harm is irreparable to the extent that it generates deadweight loss in

¹⁴² See J. Gregory Sidak, Is Harm Ever Irreparable?, Inaugural Address for the Ronald Coase Professorship of Law and Economics, Tilburg University (Sept. 16, 2011).

Table 1. Potential uses for a court-appointed neutral economic expert in various types of commercial litigation

Dispute	Economic Questions	
Patent infringement	Commercial success (validity)Reasonable royaltiesLost profitsFRAND terms	 Public interest analysis for injunctive relief Punitive damages (willful infringement)
Antitrust	 Relevant markets Market power Monopolization and vertical restraints Monopsony Price fixing and horizontal agreements Bundling 	 Loyalty rebates Exclusionary practices Raising rivals' cost Refusals to deal Efficiencies Consumer-welfare effects
Securities	Earnings manipulation and inadequate disclosureForeign exchange transactions	 Materiality Security price formation Loss causation
Labor and employment	 Discrimination in compensation and compensation structures Uncompensated labor and earnings loss 	 Post-employment covenants Wage and hour penalties Disparate impact Trade secret misappropriation
Merger control and review	Relevant marketsEfficienciesUnilateral and coordinated effectsConsumer-welfare impact	 Entry conditions Tunney Act review Modification of consent decrees
Contract and tort disputes	Royalties, pricingExpectation damagesRestitution damages	Consequential damagesUnfair competitionDefamation and disparagement
Copyright infringement	 Lost profits Price erosion Profit disgorgement	Reasonable royaltiesCorrective advertising
Trademark infringement	Diminished trademark valueIncreased costsDelayed profits	 Defendants' profits Unjust enrichment Diminished goodwill
Class actions	Class certification	• Attorneys' fees
Government takings	• Just compensation	
Regulated industries	Rate designRatemaking	 Cost recovery Regulatory takings

economic efficiency. Even though parties typically do not retain economic experts to testify in support of or against the issuance of a preliminary injunction, the judge can nonetheless appoint a neutral expert to help decide whether a preliminary injunction is warranted because the harm alleged is irreparable.

A third conjecture is that a court-appointed neutral economic expert could also assist a judge after trial. When deliberating on a post-trial motion for judgment *non obstante veredicto* (JNOV) under Rule 50(b), ¹⁴³ the judge could request the opinion of the neutral economic expert on whether no reasonable jury, applying correct economic reasoning, could have awarded the amount of the damage verdict for the compensable harm for which the jury found liability. Similarly, the judge could request the neutral expert's opinion when ruling on a motion for *remittitur*.

Fourth, private parties could draft standard language in commercial contracts to specify, in addition to their choice of jurisdiction and applicable law, that in the event of litigation over the contract the parties would ask the court to appoint a neutral economic expert on damages. An arbitration clause could contain a similar provision.

Fifth, the scope of economic expertise in litigation is not limited to the quantification of damages. It covers procedural questions, such as class certification, as well as questions of liability in any field of law involving economics, such as antitrust, mergers and acquisitions, employment discrimination, environmental law, securities, and intellectual property, to name only a few. Table 1 classifies the most common forms of economic analysis that experts undertake in commercial litigation. Although this article has focused on the use of a court-appointed neutral economic expert to evaluate damages, a neutral economic expert could elucidate any of these topics.

Finally, the apparent need for "patent reform" or "class action reform" or "tort reform" or "securities litigation reform" and the like would diminish if expert witnesses on damages routinely faced the scrutiny of a court-appointed neutral economic expert. These areas of law are said to have runaway jury verdicts for damages. If neutral economic testimony were available at the *Daubert* motion and at trial, these verdicts would be smaller. The federal courts *already* possess this power under the Federal Rules of Evidence, and individual circuits or district courts could issue their own rules for the use of neutral economic experts. Congress need not enact controversial legislation, and it need not appropriate additional funds to the Judiciary, since Rule 706 makes the parties internalize this cost of the court's resolution of their dispute.

¹⁴³ Fed. R. Civ. Proc. 50(b).