MODELING THE EFFECT OF ONE-WAY FEE SHIFTING ON DISCOVERY ABUSE IN PRIVATE ANTITRUST LITIGATION

WILLIAM H. WAGENER*

Private antitrust litigation has been encouraged by the grant of attorney's fees and treble damage awards to successful antitrust plaintiffs, but such pro-plaintiff provisions can prove to be costly because of the potential for abuse that these provisions create. In this Note, William H. Wagener focuses on the particular effects of granting an award of attorney's fees to successful plaintiffs, also known as "oneway fee shifting." Relying on modern economic analysis of litigation, he argues that the existence of one-way fee shifting in private antitrust litigation often eliminates a defendant's ability to retaliate to overbroad and burdensome discovery requests by an antitrust plaintiff. Fee shifting, along with substantial increases in discovery costs and weak judicial safeguards against discovery abuse, creates a structure under which an opportunistic plaintiff can extract sizable settlements far greater than the expected award at verdict, regardless of the strength of the plaintiff's antitrust claim. Wagener argues that while promoting private enforcement of antitrust law is desirable, some reforms may be needed to deter such abuses in antitrust litigation. He concludes that nuisance litigation can be significantly reduced without unduly prejudicing legitimate antitrust claims through either eliminating or modifying the fee-shifting provisions in private antitrust litigation, or by instituting higher pleading standards for antitrust lawsuits than what the rules of civil procedure currently provide.

From its inception, the grant of attorneys' fees and treble damages to successful plaintiffs in private antitrust lawsuits has been thought to encourage such suits, enhancing the deterrent effect of antitrust law through the empowerment of "private attorneys general." The overall wisdom of supplementing scarce government resources in antitrust is relatively clear, but these pro-plaintiff provisions are not costless. While previous analyses have focused on the impact of treble damages on the incentive to bring nuisance suits,² this

^{*} B.S.J., 1997, Northwestern University; J.D., 2003, New York University School of Law. I thank Larry White for his invaluable advice in drafting this Note, and Barry Adler for insisting that I learn game theory as his research assistant. Special thanks go to Lawrence Lederman and the law firm Milbank, Tweed, Hadley & McCloy LLP for funding a fellowship in business law at NYU, in fulfillment of which this Note was written.

¹ See William J. Baumol & Janusz A. Ordover, Use of Antitrust to Subvert Competition, 28 J.L. & Econ. 247, 252-53 (1985) (noting use of treble damages as incentive to antitrust plaintiffs with low probabilities of victory); Edward D. Cavanagh, Attorneys' Fees in Antitrust Litigation: Making the System Fairer, 57 Fordham L. Rev. 51, 58 (1988) (noting lack of federal funding to detect all antitrust violations).

² See, e.g., Edward D. Cavanagh, Detrebling Antitrust Damages: An Idea Whose Time Has Come?, 61 Tul. L. Rev. 777, 809 (1987) (noting that "[t]he lure of treble damages

Note assesses the impact of "one-way fee shifting" in private antitrust suits on plaintiffs' abilities to threaten to engage in abusive discovery to obtain settlement of a virtually baseless claim—the sort of privateering often decried as "frivolous litigation" by commentators.⁴

This Note applies modern economic analysis of litigation strategy to demonstrate that one-way fee shifting often eliminates a defendant's ability to retaliate against an excessively broad discovery request—a heretofore undocumented effect that distorts settlement amounts upward.⁵ It shows that fee shifting, ever-spiraling discovery costs, and weak judicial safeguards against discovery abuse, result in a structure whereby an opportunistic plaintiff alleging a frivolous antitrust claim can extract a sizable settlement that exceeds the expected value of the plaintiff's award at verdict. Finally, this Note offers procedural and substantive suggestions on how to reduce the incidence of abusive private antitrust litigation.

Part I discusses the nature, magnitude, and timing of litigation costs that can be imposed in an antitrust suit by manipulating procedural rules. Part II provides an overview of the economic literature on litigation strategy and settlement. Part III develops a game-theoretic model of private antitrust litigation and demonstrates the feasibility of extracting settlements by threatening to bring frivolous antitrust suits. Part IV discusses the policy implications of the model and suggests how to reduce discovery abuse in antitrust litigation.

Ι

LITIGATION COSTS IN PRIVATE ANTITRUST SUITS

Individuals or firms filing an antitrust lawsuit may utilize any one of the numerous theories of liability accepted by the courts over the

may encourage the filing of baseless suits which otherwise might not have been filed" and often converts tort or contract claims into antitrust actions).

³ Awarding litigation costs to a successful plaintiff is often called "one-way fee shifting," as distinguished from the "American rule" where each party bears its own litigation costs or the "English rule" where the losing party pays for both parties' legal fees. See Ronald Braeutigam et al., An Economic Analysis of Alternative Fee Shifting Systems, 47 Law & Contemp. Probs. 173, 173-74 (1984). The term "fee shifting" is used interchangeably with "cost shifting" in this Note.

⁴ See Robert G. Bone, Modeling Frivolous Suits, 145 U. Pa. L. Rev. 519, 520 (1997) (noting "widespread belief that frivolous litigation is out of control").

⁵ Cooter and Rubinfeld hinted at this effect by noting that cost-shifting rules generally eliminate the incentive to impose high discovery costs to enhance one's bargaining power in settlement talks, but they did not explore the effect that one-way fee shifting might have on settlements and nuisance litigation. See Robert D. Cooter & Daniel L. Rubinfeld, An Economic Model of Legal Discovery, 23 J. Legal Stud. 435, 452-54 (1994).

past hundred years.⁶ Given the sweeping language of the Sherman and Clayton Acts⁷ and the necessarily vague rulings pronounced by courts interpreting the statutes, a clever customer or competitor of a larger firm may be able to manipulate the history of the firm's behavior in the market to construct a facially plausible theory of wrongdoing—whether or not the firm's business practices are, in fact, anticompetitive.⁸ Once a claim has survived a motion to dismiss,⁹ a plaintiff often can credibly threaten to impose significant costs on the defendant through wide-reaching discovery.

A. Descriptive Statistics of Private Antitrust Actions

Private actions are by far the predominant form of antitrust litigation, historically outnumbering governmental actions by at least five to one.¹⁰ Very few antitrust cases make it to trial; the vast majority are disposed of after at least some pretrial action by the court.¹¹

- ⁶ For example, a direct competitor may allege predatory pricing, see, e.g., Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209 (1993); or customers may allege an unlawful refusal to deal, see, e.g., Image Tech. Servs. v. Eastman Kodak Co., 125 F.3d 1195 (9th Cir. 1997); unlawful "tying" of products, see, e.g., Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2 (1984); or "leveraging" market power into another market, see, e.g., Berkey Photo, Inc. v. Eastman Kodak Co., 603 F.2d 263, 275 (2d Cir. 1979), cert. denied, 444 U.S. 1093 (1980); among other theories.
- ⁷ See, e.g., 15 U.S.C. § 1 (2000) (stating that "[e]very contract, combination . . . or conspiracy, in restraint of [interstate commerce] . . . is hereby declared to be illegal"). Although the language of the Sherman Act cited above linguistically is broad enough to prohibit "every conceivable contract or combination which could be made concerning trade or commerce," Standard Oil Co. v. United States, 221 U.S. 1, 60 (1911), Congress has tacitly approved of most judicial constructions of the antitrust laws following *Standard Oil*'s application of common-law principles to determine which contracts are unlawful. See, e.g., United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377, 386-87 (1956) (commenting on judicial development of "Rule of Reason" in antitrust cases).
- ⁸ Fears of adverse antitrust judgments stemming from judicial error or novel theories of liability can stifle aggressive but procompetitive business practices. See Baumol & Ordover, supra note 1, at 254 ("The potential defendant who cannot judge in advance... whether its behavior will afterward be deemed illegal is particularly vulnerable to guerrilla warfare and intimidation into the sort of gentlemanly competitive behavior that is the antithesis of true competition."). If plaintiffs can extract sizable settlements by filing frivolous lawsuits capable of surviving motions to dismiss, potential defendants will avoid engaging in any behavior that possibly could be construed as anticompetitive, further dampening these firms' incentives to compete aggressively.
 - ⁹ See infra notes 20-22 (noting minimal pleading requirements in antitrust cases).
- ¹⁰ See Admin. Office of the U.S. Courts, Judicial Business of the United States Courts: 2002 Annual Report of the Director, at 153-55 tbl.C-4, http://www.uscourts.gov/judbususc/judbus.html [hereinafter Judicial Business] (noting only 17 antitrust cases filed in district courts by United States in year ending September 30, 2002, versus 822 "other" antitrust cases, almost 50:1 ratio); Steven C. Salop & Lawrence J. White, Economic Analysis of Private Antitrust Litigation, 74 Geo. L.J. 1001, 1002 (1986) (presenting statistics indicating ratio was approximately 5:1 until 1965, after which ratio has varied between 9:1 and 21:1).
- ¹¹ See Judicial Business, supra note 10, at tbl.C-4 (showing that no government antitrust cases went to trial during period studied; only 3.3% of private antitrust suits went to

Although recent data do not distinguish dismissals from settlements, due to the confidential nature of settlements, ¹² earlier estimates found that a sizable majority of such "terminated" lawsuits were actually settled. ¹³

As noted earlier, antitrust plaintiffs have historically alleged a wide variety of theories of liability. Customers commonly sue suppliers for horizontal price-fixing, vertical price-fixing, dealer termination, refusals to deal, price discrimination, tying/exclusive dealing, and general conspiracy/restraint of trade/monopolization; in cases studied in the 1980s, refusals to deal and horizontal price-fixing were the most prevalent.¹⁴ Competitors' suits frequently alleged conspiracies in restraint of trade, refusals to deal, horizontal price-fixing, predatory pricing, and tying/exclusive dealing.¹⁵

B. The Pleading Stage

Section 4 of the Clayton Act grants any individual or entity standing to sue any defendant that allegedly has harmed the plaintiff in its "business or property" by any acts forbidden by the antitrust

trial). The other private antitrust suits were terminated prior to any court action (129 of 822), or after at least some pretrial intervention by the court (666 of 822). Id.

¹² See Linda R. Stanley & Don L. Coursey, Empirical Evidence on the Selection Hypothesis and the Decision to Litigate or Settle, 19 J. Legal Stud. 145, 146 (1990) (noting difficulty of analysis of actual settlement rates due to unavailability or confidentiality of data).

¹³ See Salop & White, supra note 10, at 1010-12 & tbls.8-9 (estimating between 70% and 88% of cases were settled). Although the data were sparse, respondents to a 1984 survey reported an average settlement of \$676,000, and that the average antitrust litigation cost each side \$200,000 to \$250,000. Id. at 1012, 1016. These estimates represent an average of plaintiffs' and defendants' costs for which data were available. But as noted in Part III.B.2, plaintiffs have the ability to impose asymmetrically high legal costs on defendants. In addition, the importance of electronic discovery, and thus legal costs, has skyrocketed since 1983. See infra notes 43-46 and accompanying text.

¹⁴ See Salop & White, supra note 10, at 1007-08 tbls.5-6. Of course, the relative attractiveness of these causes of action has likely changed given the evolution of case law over the past twenty years that generally has shrunk defendants' liability, at least on motions for summary judgment. See, e.g., Patrick Bolton et al., Predatory Pricing: Strategic Theory and Legal Policy, 88 Geo. L.J. 2239, 2241 (2000) (noting low level of judicial enforcement of predatory pricing law since Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209 (1993)); David L. Meyer, The Seventh Circuit's High Fructose Corn Syrup Decision—Sweet for Plaintiffs, Sticky for Defendants, Antitrust (Am. Bar Ass'n, Section of Antitrust), Fall 2002, at 67 (characterizing summary judgment doctrine in conspiracy cases as pro-defendant in the wake of Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp., 475 U.S. 574 (1986) and Monsanto Corp. v. Spray-Rite Serv. Corp., 465 U.S. 752 (1984)). Despite this judicial skepticism of such claims, plaintiffs are frequently able to survive motions to dismiss. See Bolton et al., supra, at 2258-60 (noting that, of 39 reported post-Brooke predatory pricing cases, only seven were dismissed at the pleading stage).

¹⁵ See Salop & White, supra note 10, at 1007-08 tbls.5-6; see also supra note 6 and accompanying text.

laws,¹⁶ so long as the asserted injury is of "the type the antitrust laws were intended to prevent and that flows from that which makes defendants' acts unlawful."¹⁷ The Act creates a private right of action for customers who are forced to pay higher prices for purchased goods as a result of a violation of the antitrust laws by the seller,¹⁸ or competitors injured by such a violation.¹⁹

The plaintiff's complaint need not allege that such an antitrust violation has occurred with any greater specificity than normally required to initiate a lawsuit in federal court.²⁰ As such, the plaintiff must only assert a "short and plain statement of the claim showing that the pleader is entitled to relief"; antitrust pleadings require very little in the way of specific factual assertions to survive a motion to dismiss.²¹ In filing the claim, the plaintiff may make assertions based either on facts or on her presently unsubstantiated belief that such assertions reasonably are likely to have evidentiary support after discovery.²² The sole limitation on the plaintiff's assertions is that the pleading cannot be intended to harass and the asserted claims cannot be frivolous.²³

Given the negligible amount of hard evidence required to draft a justiciable complaint, initiating a lawsuit is a relatively inexpensive proposition for an antitrust plaintiff, who may seek damages equal to

^{16 15} U.S.C. § 15 (2000).

¹⁷ Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc., 429 U.S. 477, 489 (1977).

¹⁸ See Associated Gen. Contractors v. Cal. State Council of Carpenters, 459 U.S. 519, 537-45 (1983) (establishing test for standing in private antitrust suits); Ill. Brick Co. v. Illinois, 431 U.S. 720, 745-46 (1977) (providing that direct purchasers of overpriced goods may bring suit).

¹⁹ For example, a competitor plaintiff can allege that the defendant's price cuts are predatory, see, e.g., Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp., 475 U.S. 574 (1986), or that a competitor has denied her access to an "essential facility," see, e.g., Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585, 599 (1985), among other theories.

²⁰ See Edward D. Cavanagh, Pleading Rules in Antitrust Cases: A Return to Fact Pleading?, 21 Rev. Litig. 1 (2002) (reviewing case law and policy before concluding that no heightened pleading requirement exists or ought to exist in antitrust); see also Leatherman v. Tarrant County Narcotics Intelligence & Coordination Unit, 507 U.S. 163, 168 (1993) (explaining that liberal system of notice pleading in Federal Rules of Civil Procedure precludes heightened pleading requirements absent allegations of fraud or mistake).

²¹ Fed. R. Civ. P. 8(a)(2); see also Henry J. Reske, Tinkering with Procedure: Federal Committee Backs Automatic Disclosure, Restrained Rule 11, 78 A.B.A. J., Sept. 1992, at 20 (quoting ABA Antitrust Section chair as stating that typical antitrust complaints have only "one or two paragraphs... that charge the defendants over a period of 35 years have conspired to monopolize a product market worldwide").

²² See Fed. R. Civ. P. 11(b)(3).

²³ See Fed. R. Civ. P. 11(b)(1)-(2); Model Rules of Prof'l Conduct R. 3.1 (2002). Defining what makes a suit "frivolous" is a difficult task. See Bone, supra note 4, at 529-33 (arguing that suits are frivolous only if plaintiff conducts no pretrial investigation or knows facts establishing defendant's non liability); see also infra note 70.

three times the amount of the alleged harm ("treble damages"), plus the costs of bringing the lawsuit, including reasonable attorneys' fees.²⁴ Unlike other situations where a single plaintiff with a small claim will find it unprofitable to bring a suit regardless of her probability of success, the availability of treble damages and reasonable attorneys' fees empowers even a minimally injured plaintiff to prosecute a lawsuit in good faith if she believes that her probability of success is sufficiently high.²⁵

A defendant facing an expensive and/or frivolous lawsuit will likely respond with a motion to dismiss, by which a defendant can dispose of suits stating claims that, assuming all allegations made by plaintiff are proven, cannot prevail.²⁶ However, defendants face an uphill battle in arguing such a motion, given the lack of heightened pleading standards in antitrust suits and the fact that plaintiffs lack access to much relevant information.²⁷

Plaintiffs' attorneys must also ensure that they do not run afoul of procedural and ethical prohibitions against filing frivolous documents with the court,²⁸ but commentators have argued that the complex and uncertain nature of antitrust actions makes such a suit a "uniquely

²⁴ 15 U.S.C. § 15 (2000); see also Perkins v. Standard Oil Co., 474 F.2d 549, 553 (9th Cir. 1973) (explaining that attorneys' fee awards encourage private suits by insulating plaintiffs' treble-damages recovery from erosion by legal fees); Phillip E. Areeda et al., Antitrust Law 273 (2d ed. 2000) (noting that treble damages encourages private detection and prosecution of subtle violations). For a discussion of how attorneys' fees are calculated, see generally Daniel H. White, Annotation, Allowance of Attorneys' Fees Under § 4 of Clayton Act (15 U.S.C.A. § 15), Authorizing Award of "Reasonable Attorney's Fee" As Part of Costs Recoverable in Private Antitrust Treble-Damage Suit, 21 A.L.R. Fed. 750 (1974).

 $^{^{25}}$ See generally infra Part III & Appendix for a discussion of when a plaintiff can obtain a settlement of an antitrust claim.

²⁶ Fed. R. Civ. P. 12(b)(6); see also, e.g., Conley v. Gibson, 355 U.S. 41, 45-46 (1957) (defendant seeking dismissal must show "beyond doubt that the plaintiff can prove no set of facts in support of his claim"); Ibarra v. United States, 120 F.3d 472, 474 (4th Cir. 1997) (noting that well-pleaded material allegations of plaintiff's complaint are taken as being true for purposes of evaluating motion to dismiss).

²⁷ See, e.g., Hosp. Bldg. Co. v. Trs. of Rex Hosp., 425 U.S. 738, 746 (1976) ("[I]n antitrust cases, where 'the proof is largely in the hands of the alleged conspirators,' dismissals prior to . . . discovery should be granted very sparingly." (citation omitted)); Hammes v. AAMCO Transmissions, Inc., 33 F.3d 774, 778 (7th Cir. 1994) (noting that *Leatherman v. Tarrant County Intelligence & Coordination Unit*, 507 U.S. 163 (1993) foreclosed movement toward heightened pleading standards in antitrust).

²⁸ See Fed. R. Civ. P. 11(b); Model Rules of Prof. Conduct 3.1 (2002). Determining ex ante whether a lawsuit will be sanctioned is often difficult, since distinguishing frivolous lawsuits that never should have been brought from meritorious but losing suits is an inexact science for judges. See Charles M. Yablon, The Good, the Bad, and the Frivolous Case: An Essay on Probability and Rule 11, 44 UCLA L. Rev. 65, 67 (1996) (arguing that most cases sanctioned under Rule 11 are brought by lawyers who reasonably believed that suits had low but nonzero chance of success "as every probability theorist and horseplayer knows, sometimes it pays to bet on the long shots").

inappropriate candidate for generous use of Rule 11 sanctions."²⁹ Given the theoretical complexity and fact-intensive nature of antitrust suits, and the lack of reliable information available to judges regarding a suit's frivolity (especially before a record is developed), it seems unlikely that Rule 11 will significantly chill the filing of either meritorious or frivolous antitrust lawsuits. A competently drafted complaint therefore will assert facts or statements of belief sufficient to constitute a justiciable prima facie case, while steering clear of prohibitions against filing frivolous claims and thus capable of surviving both a motion to dismiss and a motion to impose sanctions under Rule 11.

C. Threats to Impose Costs in the Discovery Stage

Strategically minded plaintiffs recognize that defendants risk incurring onerous discovery costs if an antitrust case progresses beyond the pleading stage.³⁰ Once a plaintiff has made a facially plausible allegation of anticompetitive behavior, a defendant may be forced to respond to wide-ranging interrogatories, produce documents, and prepare for and defend depositions—each of which will certainly involve significant attorneys' fees, even if the discovery requests are defeated solely using motion practice.³¹ Although it is possible for a portion or all of the costs of discovery to be shifted to the plaintiff,³² a defendant will still suffer from lost productivity as all

²⁹ Daniel E. Lazaroff, Rule 11 and Federal Antitrust Litigation, 67 Tul. L. Rev. 1033, 1043 (1993). The tumultuous history of antitrust's economic underpinnings and the frequent rethinking of standards of liability further counsels against cavalier use of Rule 11. Id. at 1043-50.

³⁰ See, e.g., Northrup Corp. v. McDonnell Douglas Corp., 751 F.2d 395, 407 (D.C. Cir. 1984) ("Massive discovery requests are unfortunately now part of the standard tactical maneuvering of parties immersed in the adversarial process."); Memorandum from Paul V. Niemeyer, Chair, Advisory Committee on Civil Rules, to Honorable Anthony J. Scirica, Chair, Committee on Rules of Practice and Procedure 4 (May 11, 1999), http://www.uscourts.gov/rules/archive/1999/repcivil.pdf (reporting that discovery accounts for up to 90% of litigation costs when discovery is actively employed); see also 3 Antitrust Counseling and Litigation Techniques 22-11 (Julian O. von Kalinowski ed., 2002) (noting that it is "usual for antitrust discovery to be exceedingly lengthy, complex and expensive"); Robert D. Cooter & Daniel L. Rubinfeld, Reforming the New Discovery Rules, 84 Geo. L.J. 61, 66 (1995) (stating that attorneys for firms in large antitrust cases often complain of "overdiscovery," sometimes used "to exert economic pressure on a competitor").

³¹ See Fed. R. Civ. P. 26(a) (listing mandatory disclosures occurring prior to making formal discovery requests); Fed. R. Civ. P. 26(f) (requiring parties to meet to discuss scheduling and scope of discovery); Fed. R. Civ. P. 16 (permitting judge to schedule pretrial conferences to discuss narrowing of issues, discourage wasteful pretrial activities and delay, facilitate settlement of case, and impose sanctions if party fails to comply or participates in bad faith).

³² See Fed. R. Civ. P. 26(c) (permitting judge to issue order to protect party from "undue burden or expense" in discovery).

documents potentially relevant to the litigation must be retained,³³ its electronic and physical records will be searched,³⁴ and its executives and other key employees will be deposed or otherwise inconvenienced. In most types of litigation in which the recipient of a discovery request bears the cost of producing the documents, a defendant can threaten to retaliate against a plaintiff's overbroad request with costly discovery requests of his own, or offer to limit discovery requests if the same courtesy is shown him.³⁵ However, the plaintiff's ability to structure an antitrust complaint can limit the plaintiff's exposure to such a counterattack,³⁶ and the fee-shifting provisions of the Clayton Act often make it impossible for defendants to counter a plaintiff's broad discovery requests.³⁷

1. Imposition of Discovery Costs on the Producing Party

The discovery process is designed to allow litigants to obtain information from other parties that otherwise would be unavailable. This process enables the parties to evaluate their chances at trial, which may increase the chance of a settlement, and to present an accurate, factually grounded case at trial. A brief overview of the discovery process serves to illustrate the ways in which parties answering discovery requests incur costs and to highlight the methods by which a litigant can impose excessively high discovery costs on his adversary.

First, each party can serve twenty-five or more interrogatories, the recipient of which has up to thirty days in which to serve its answers and/or objections under oath.³⁸ Given that the response to an

³³ See, e.g., Danis v. USN Communications, Inc., 53 Fed. R. Serv. 3d (West) 828, 871 (N.D. Ill. 2000) (noting that litigant has duty to preserve what it knows or believes to be relevant to action, reasonably likely to lead to discovery of admissible evidence, reasonably likely to be requested during discovery, and/or subject of pending discovery request).

³⁴ In addition to the stereotypical search of file cabinets for official contracts, handwritten notes and memoranda, discovery requests can also induce an extensive and costly review of electronic files. See Antitrust Counseling and Litigation Techniques, supra note 30, § 22.02(2)(a) (advising antitrust litigators to search laptops, home PCs, and hand-held computers as well as workplace hard drives, floppy disks, ZIP disks, and servers for relevant e-mails and other documents).

³⁵ See Frank H. Easterbrook, Comment, Discovery as Abuse, 69 B.U. L. Rev. 635, 635 (1989) (noting similarity of discovery tactics and cooperation among enemy soldiers during World War I trench warfare).

³⁶ For example, a customer suing a supplier could be asked to produce evidence of its prior purchases and its documents relating to the price and availability of the good from alternative sources, but the scope of such information will be almost certainly less extensive than the relevant information in the supplier's possession.

³⁷ See infra Part III.B.2.

³⁸ Fed. R. Civ. P. 33(a)-(b).

interrogatory may constitute a sworn admission usable at trial³⁹ and must constitute a response made with the full knowledge of the defendant corporation⁴⁰—not simply the person responsible for answering the interrogatory—plaintiffs can ask broad questions whose answers could prejudice the defendant or restrict its options at trial, meaning that defendants must engage in significant background research before providing answers.⁴¹ Of course, counsel for the defendant may object to overly broad questions or may simply produce truckloads of boxes of business records under certain circumstances.⁴²

Second, document requests, whereby the requesting party gains the ability to inspect and copy any relevant documents,⁴³ are also a potentially costly form of discovery, especially when electronic records are involved.⁴⁴ In a complex lawsuit like an antitrust case, the recipient of a broad discovery request will be forced to search corporate files and produce documents in a consistent and organized form.⁴⁵

³⁹ See Fed. R. Evid. 801(d)(2) (statement admissible if given by individual authorized by party to speak on given subject).

⁴⁰ See Fed. R. Civ. P. 33(a) (interrogatory responses "shall furnish such information as is available to the *party*" (emphasis added)); see also, e.g., In re Folding Carton Antitrust Litig., 76 F.R.D. 417, 419 (N.D. Ill. 1977) ("The rules require that the corporation select an officer or employee to gather and obtain from books, records, other officers or employees, or other sources, the information necessary to answer the interrogatories and sign them on behalf of the corporation not himself.").

⁴¹ See, e.g., In re Folding Carton Antitrust Litig., 76 F.R.D. at 418 (compelling defendant to answer interrogatory asking for information on meetings and conversations during which market data was discussed with competitors); see also Antitrust Counseling and Litigation Techniques, supra note 30, §22.02(1)(c) ("[A] party's contention as to the relevant geographic and product markets, and the bases for those contentions, may be most readily ascertained through interrogatories.").

⁴² See Fed. R. Civ. P. 33(d) (permitting production of unsorted documents in response to interrogatory if response requires summary or analysis of business records that serving party could conduct as easily as responding party). But see Antitrust Counseling and Litigation Techniques, supra note 30, § 22.02(1)(e)(ii) (urging caution in invoking 33(d) due to potential admission of such documents into evidence).

⁴³ Fed. R. Civ. P. 34(a).

⁴⁴ See, e.g., Rowe Entm't, Inc. v. William Morris Agency, Inc., 205 F.R.D. 421, 425 (S.D.N.Y. 2002) (estimating cost of up to \$9.75 million to produce e-mails on backup tapes); In re Brand Name Prescription Drugs Antitrust Litig., No. 94 C 897, 1995 U.S. Dist. LEXIS 8281, at *2 (N.D. Ill. June 13, 1995) (ordering compilation and review of thirty million pages of e-mail at cost of \$50,000 to \$70,000; Corinne L. Giacobbe, Note, Allocating Discovery Costs in the Computer Age: Deciding Who Should Bear the Costs of Discovery of Electronically Stored Data, 57 Wash. & Lee L. Rev. 257, 259 (2000) (noting that electronic discovery is "an extremely technical and exceedingly expensive process"); Geanne Rosenberg, Electronic Discovery Proves Effective Legal Weapon, J. Rec. (Okla. City), Apr. 21, 1997, available at 1997 WL 14390671 (discussing \$3 million cost of electronic discovery borne by producing party).

⁴⁵ See Fed. R. Civ. P. 34(b) (stating that documents must be produced "as they are kept in the usual course of business or [shall be organized and labeled] . . . to correspond with the categories in the request"); Antitrust Counseling and Litigation Techniques, supra note

Making things worse, firms whose electronic records frequently are backed up often retain exponentially more documents than they would if the records were retained in paper form, thereby resulting in even higher discovery costs.⁴⁶

Third, a plaintiff may orally depose employees of the defendant, including senior management and/or directors, upon reasonable notice to those individuals.⁴⁷ Preparing for and testifying at a deposition are mentally draining and time consuming for the deponent,⁴⁸ and distract the deponent from his or her ordinary business duties. Unless the potential deponent literally has nothing to contribute to the proceeding, federal courts typically permit the deposition to proceed despite its potential for harassment.⁴⁹

2. Shifting the Cost of Discovery to the Requesting Party

The trial court has broad discretion to fashion protective orders in response to discovery requests imposing an "undue burden or expense" on the producing party, including the ability to compel the requesting party to pay some or all the costs of producing the requested documents. 50 In theory, courts may also consider the bene-

^{30, § 22.02(2)(}c) (noting that broad discovery requests in large cases often produce "a mountain of material," much of which is irrelevant or virtually worthless).

⁴⁶ See Giacobbe, supra note 44, at 262-65 (finding that high cost of electronic discovery often is due to large amounts of data retained, difficulty of restoring backups made using inefficient or obsolete technology, and need for specialized tools to restore deleted files from hard drives or backup tapes). The relevance of older backup tapes will depend on the type of claim; an allegation of an unlawful dealer termination would merit less intrusive discovery than would a claim of a multiyear conspiracy to monopolize or collude.

⁴⁷ Fed. R. Civ. P. 30(a)-(b).

⁴⁸ See, e.g., DF Activities Corp. v. Brown, 851 F.2d 920, 923 (7th Cir. 1988) ("[B]eing deposed is scarcely less unpleasant than being cross-examined—indeed, often it is more unpleasant, because the examining lawyer is not inhibited by the presence of a judge or jury who might resent hectoring tactics. The transcripts of depositions are often very ugly documents.").

⁴⁹ In recognition of the potentially abusive nature of "apex depositions" of high-ranking corporate officials, some states impose a higher threshold for deposing such officials than exists for ordinary deponents. See generally Jennifer Wiers, Note, *In re Alcatel*—Just Another Weapon for Discovery Reform, 53 Baylor L. Rev. 269 (2001) (discussing impact of Texas decision requiring "unique or superior personal knowledge" before high-ranking executive may be deposed in state court). But cf. Speadmark, Inc. v. Federated Dep't Stores, Inc., 176 F.R.D. 116, 118 (S.D.N.Y. 1997) (commenting that order barring litigant in federal court from taking deposition of high-ranking corporate official is "most extraordinary relief").

⁵⁰ See Fed. R. Civ. P. 26(c) ("[T]he court... may make any order which justice requires to protect a party or person from annoyance, embarrassment, oppression, or undue burden or expense..."); see also, e.g., Sanders v. Levy, 558 F.2d 636, 649 (2d Cir. 1977) (en banc) (noting that Rules 26 and 34 permit shifting costs of computer programming to requesting party), rev'd on other grounds sub nom. Oppenheimer Fund, Inc. v. Sanders, 437 U.S. 340 (1978).

fits accruing to the party producing the documents (given that the process likely reveals information useful to the prosecution or defense of its own case), the relative difficulty of compiling the information by the parties, and the total magnitude of the cost involved.⁵¹ In practice, however, judges often find it difficult to distinguish "abusive" discovery requests meriting imposition of litigation sanctions or disciplinary measures from legitimate requests resulting in "dry holes."⁵² Such experience suggests that judges either will be hesitant to shift discovery costs, or that the likelihood of such an order will be difficult to predict ex ante.⁵³

Although the federal rules permit a responding party to avoid many costs of discovery when producing paper files, courts are unlikely to shift the costs of converting electronic files from a proprietary form into one usable by the requesting party.⁵⁴ The courts that

⁵¹ See, e.g., *Oppenheimer Fund*, 437 U.S. at 356-64 (noting that courts determining whether to shift discovery costs examine who benefits from information, who can analyze information at lowest cost, and whether burden is "undue"); In re Coordinated Pretrial Proceedings in Petroleum Prods. Antitrust Litig., 669 F.2d 620, 623 (10th Cir. 1982) (shifting cost of responding to subpoena *duces tecum* to requesting party, from firm not part of lawsuit, due to lack of benefit to producing party); In re Brand Name Prescription Drugs Antitrust Litig., No. 94 C 897, 1995 U.S. Dist. LEXIS 8281, at *4 (N.D. Ill. June 13, 1995) (asserting that courts may weigh cost, relative burdens to parties, and benefit to responding party when shifting costs).

⁵² See Easterbrook, supra note 35, at 638-39 (arguing that judges cannot determine ex ante whether request is justified because claims presented and facts sought are under control of parties, noting, therefore, that "[t]he portions of the Rules of Civil Procedure calling on judges to trim back excessive demands, therefore, have been, and are doomed to be, hollow"). Cooter and Rubinfeld consider a party's discovery request abusive when it requests information where the cost of compliance is greater than the increase in expected value of the requester's claim. See Cooter & Rubinfeld, supra note 5, at 451-52. But see Edward H. Cooper, Discovery Cost Allocation: Comment on Cooter and Rubinfeld, 23 J. Legal Stud. 465, 466 (1994) ("[M]uch untoward discovery results from ineptness, not some darker motive.").

⁵³ See, e.g., Cooter & Rubinfeld, supra note 5, at 456-58 (noting that current law leaves judges "poorly placed" to ascertain whether request is abusive). Cooter and Rubinfeld propose a two-part cost-shifting rule to aid judges in better suppressing excessive discovery whereby the requesting party pays for discovery beyond a "reasonable" level of cost. Id.

⁵⁴ See Oppenheimer Fund, 437 U.S. at 356-57 (noting that Rule 33(c) permits interrogatory respondent simply to produce boxes of unsorted business records if burden of deriving or ascertaining answer is same for each party); In re Brand Name Prescription Drugs Antitrust Litig., 1995 U.S. Dist. LEXIS 8281, at *6-*7 (requesting party should not bear burdensome costs of program needed to retrieve producing party's electronic files because producing party chose to use electronic record-keeping); Giacobbe, supra note 44, at 269-70 (stating that courts are "extremely hesitant" to use cost-shifting power). But see Anti-Monopoly, Inc. v. Hasbro, Inc., 94 CIV.2120 (LLM) (AJP), 1995 WL 649934, at *3 (S.D.N.Y. Nov. 3, 1995) (refusing to order producing party to bear cost of recreating electronic documents already printed out where electronic document no longer exists); Torrington Co. v. United States, 786 F. Supp. 1027, 1029-30 (Ct. Int'l Trade 1992) (producing party not required to recreate electronic document after producing microfilm of same data in print form).

have shifted electronic discovery costs have used ambiguous reasoning in their decisions, leaving a potential defendant with little prelitigation guidance regarding her chances of successfully obtaining such an order.⁵⁵ Anecdotal evidence suggests that defendants unable to shift the costs of complying with requests for electronic documents feel pressured to settle lawsuits to avoid the discovery costs.⁵⁶

3. Asymmetry of Discovery Costs in Antitrust Cases

The credibility of a plaintiff's threat to file wide-ranging discovery requests in an attempt to extract a settlement logically hinges on the defendant's ability to impose similar costs on the plaintiff.⁵⁷ The conventional wisdom argues that if the defendant is able to impose large litigation costs on a plaintiff, a cash-poor litigant may be unable to bear the cost of prosecuting the case.⁵⁸ Even when both parties are of equally sound finances, each side will be hesitant to seek far-reaching discovery due to the costs of responding to an equally broad counterrequest from the other party.⁵⁹ As demonstrated in Part III.B.2, however, the common wisdom is wrong when it comes to private antitrust lawsuits—the existence of one-way fee shifting means that plaintiffs often can issue burdensome requests while the defendant has no incentive to reciprocate.

Thus, the strategic plaintiff will evaluate her own exposure to costly discovery requests before drafting a broad discovery request. Either side may inquire as to any information "reasonably calculated to lead to the discovery of admissible evidence," 60 and courts typically

⁵⁵ Giacobbe, supra note 44, at 269-70; see also Easterbrook, supra note 35, at 643 (noting that discovery rules make "everything relevant and nothing dispositive," leading to "endless search for . . . well, for something that may turn out to be useful, once lawyers learn what the tribunal thinks important" (omission in original)).

⁵⁶ See Giacobbe, supra note 44, at 267-68 (noting "increasing frequency" of forcing defendants to settle rather than expend enormous sums of money early in the litigation process); Lawrence Aragon, E-mail is Not Beyond the Law: Court Rulings Spotlight Electronic Data Policies, PC Week, Oct. 6, 1997, at 111 (citing anecdote of \$500,000 to \$750,000 tape recovery bill inducing settlement).

⁵⁷ When both parties are rational, a threat to impose costs on both parties in a later stage unless a bribe is paid up-front generally is not credible. However, when litigation costs are incurred at separate times or if the defendant's costs are disproportionately large, a plaintiff can credibly threaten to bring a suit where his expected verdict is less than his litigation costs. See infra Part II.B. Similarly, under one-way fee shifting, the defendant often cannot credibly threaten to impose large costs on plaintiff in response to a burdensome request by plaintiff. See infra Part III.B.

⁵⁸ See Antitrust Counseling and Litigation Techniques, supra note 30, § 22.02(2)(c) (noting that large amounts of documents can take months to produce and analyze, advantaging strong defendant being sued by financially weak plaintiff).

⁵⁹ See id. ("[S]ervice of an omnibus document request is generally promptly reciprocated.").

⁶⁰ Fed. R. Civ. P. 26(b)(1).

permit antitrust discovery to range further (and costs to run higher) than in most other cases.⁶¹ Although discovery may range beyond the allegations raised in the pleadings,⁶² a plaintiff seeking to force a settlement can structure her complaint to minimize the relevance of documents in her possession.⁶³ Although the antitrust defendant may be able to file a justiciable counterclaim against the plaintiff sufficient to expose the plaintiff to costly discovery (on an intellectual property issue,⁶⁴ for example), the plaintiff's ability to narrow the scope of relevant facts by carefully tailoring her theory of liability gives her a tactical advantage in defining the parties' exposure to discovery costs.⁶⁵

II ECONOMIC MODELS OF LITIGATION AND SETTLEMENT

Modeling the litigation process helps explain the methods by which parties can manipulate the legal system to achieve ends unrelated to the efficient and just adjudication of disputes. Such analyses are useful in developing procedural rules for litigation and in allocating the costs of legal fees to promote desirable normative goals—speedy, inexpensive, accurate, predictable, and final resolution of disputes on terms equally available to all interested parties.

⁶¹ See, e.g., New Park Entm't, L.L.C. v. Elec. Factory Concerts, Inc., No. 98-775, 2000 U.S. Dist. LEXIS 531 at *11 (E.D. Pa. Jan. 13, 2000) (discovery is permitted "most broadly" in antitrust cases with little regard to cost because improper business conduct "is generally covert and [proof of wrongdoing] must be gleaned from records, conduct, and business relationships." (quoting, respectively, U.S. v. Int'l Bus. Mach., Co., 66 F.R.D. 186, 189 (S.D.N.Y. 1974) and Callahan v. A.E.V. Inc., 947 F. Supp. 175, 179 (W.D. Pa. 1996))); FTC v. Lukens Steel Co., 444 F. Supp. 803, 805 (D.D.C. 1977) ("The discovery rules should normally be liberally construed . . . in antitrust cases."). But see Carlson Cos. v. Sperry & Hutchinson Co., 374 F. Supp. 1080, 1088 (D. Minn. 1974) (denying defendant's request for information regarding plaintiff's unrelated business divisions due to information's marginal relevance, weighed against hardship caused producing party).

⁶² See, e.g., Mar. Cinema Serv. Corp. v. Movies En Route, Inc., 60 F.R.D. 587, 589 (S.D.N.Y. 1973) (noting that antitrust discovery is "extremely broad" and interrogatories must be answered unless "clearly unreasonable or improper").

⁶³ Certain theories of antitrust liability limit the relevance of information in the plaintiff's possession. For instance, a customer alleging that a supplier conspired to monopolize a market will have very little relevant information, whereas a dealer alleging that a supplier's termination was wrongful likely possesses a significant amount of discoverable evidence. But see Barry Kellman, Private Antitrust Litigation 548 (1985) (noting that defendants will examine plaintiffs' business or property to establish fact and magnitude of alleged antitrust injury).

⁶⁴ See generally James Gould & James Langenfeld, Antitrust and Intellectual Property: Landing on Patent Avenue in the Game of Monopoly, 37 IDEA 449 (1997) (discussing interplay between antitrust and patent infringement claims and counterclaims).

⁶⁵ See Easterbrook, supra note 35, at 643 (noting advantage of small litigant against large litigant in terms of discovery cost, encouraging discovery abuse by smaller party).

Over the past thirty years, several economic models of the litigation process have been developed.⁶⁶ These models generally assume that risk-neutral parties make decisions about litigation strategy designed to maximize their overall wealth or utility.⁶⁷ Early models of litigation focused on situations where the plaintiff's case has positive expected value (PEV)—where the plaintiff's expected judgment is greater than her litigation costs.⁶⁸ Later models relaxed this assumption to examine negative expected value (NEV) suits-where the plaintiff's expected judgment is less than the plaintiff's litigation cost.⁶⁹ Following in the line of the NEV models, this Note presumes the existence of litigants willing to bring "frivolous" antitrust claims, in the sense that they are brought with the intent to extract a settlement by exploiting litigation costs without regard to the merits of the lawsuit, or where a good-faith lawsuit's probability of success is so low as to make it highly uneconomical but for the availability of a settlement.⁷⁰ Models explaining why plaintiffs file and why defendants

⁶⁶ Formal modeling of litigation first arose in the early 1970s in such articles as John P. Gould, The Economics of Legal Conflicts, 2 J. Legal Stud. 279 (1973); William M. Landes, An Economic Analysis of the Courts, 14 J.L. & Econ. 61 (1971); and Richard A. Posner, An Economic Approach to Legal Procedure and Judicial Administration, 2 J. Legal Stud. 399 (1973).

⁶⁷ See Chris Guthrie, Framing Frivolous Litigation: A Psychological Theory, 67 U. Chi. L. Rev. 163, 170-71 (2000) (providing overview of history and methodology of economic litigation models). Money is, of course, not the sole determinant of a party's utility; psychological biases or concern about a party's reputation as a tough litigator might motivate a decision.

⁶⁸ See, e.g., Lucian Arye Bebchuk, Litigation and Settlement Under Imperfect Information, 15 RAND J. Econ. 404, 406 (1984) (limiting model to PEV suits only); Barry Nalebuff, Credible Pretrial Negotiation, 18 RAND J. Econ. 198, 199-200 (1987) (presenting model in which defendant responds to plaintiff's offer only if expected court award covers court costs); Jennifer F. Reinganum & Louis L. Wilde, Settlement, Litigation, and the Allocation of Litigation Costs, 17 RAND J. Econ. 557, 559 (1986) (excluding nuisance suits from model). Early work on fee-shifting provisions also focused only on PEV lawsuits. See Steven Shavell, Suit, Settlement and Trial: A Theoretical Analysis Under Alternative Methods for the Allocation of Legal Costs, 11 J. Legal Stud. 55, 58-62 (1982) (demonstrating plaintiff decisions to bring suit under alternative fee-shifting regimes).

⁶⁹ See Bone, supra note 4, at 534-77 (providing overview and critique of PEV and NEV models of litigation).

⁷⁰ Of course, precisely defining what makes a lawsuit "frivolous" is subject to dispute— a task that this Note makes no pretensions of undertaking. For example, a lawsuit could be certain to succeed on the merits but be extremely costly to litigate to verdict, or a suit could make a good-faith argument to change a well-established but unjust law. Even though both suits would "waste" judicial resources if tried to a verdict because the legal costs of the parties exceed the expected judgment award, norms of due process and social justice militate against imposing sanctions or denying such plaintiffs a forum. See Arthur R. Miller, The Pretrial Rush to Judgment: Are the "Litigation Explosion," "Liability Crisis," and Efficiency Clichés Eroding Our Day in Court and Jury Trial Commitments?, 78 N.Y.U. L. Rev. 982, 1007-08 (2003) (noting that Rule 11 sanctions have been disproportionately sought and imposed on civil rights plaintiffs).

settle NEV lawsuits fall into two categories: asymmetric information and asymmetric cost.⁷¹

A. Asymmetric Information Models

One class of models explains frivolous litigation by focusing on asymmetric information—where only one party knows facts dispositive of the lawsuit.⁷² "Slip and fall" lawsuits where only the plaintiff knows whether her injury truly resulted from a slippery floor are explained well by the informed-plaintiff model: The defendant must incur discovery and possibly trial costs to ascertain whether the suit is meritorious. In such situations, a defendant may choose either to settle all cases in the belief that most are legitimate to save litigation costs, or only to offer settlements in some cases if he believes that most suits lack merit.⁷³ In contrast, informed-defendant lawsuits include medical malpractice claims in which only the doctor knows whether he made any mistakes in treating a patient until discovery is conducted and expert witnesses are hired by the plaintiff.⁷⁴ In such situations, a defendant's settlement strategy will differ depending on

⁷¹ See Guthrie, supra note 67, at 170-75 (providing overview of "rational actor" literature modeling NEV suit settlement). The well-known Priest and Klein "divergent expectations" line of models answers a slightly different question—namely, why cases go to trial, given that litigation is costly—by positing that both parties in a case that goes to trial are overly optimistic about their prospects. See generally Thomas J. Miceli, Settlement Strategies, 27 J. Legal Stud. 473 (1998); George L. Priest & Benjamin Klein, The Selection of Disputes for Litigation, 13 J. Legal Stud. 1 (1984); Joel Waldfogel, Reconciling Asymmetric Information and Divergent Expectations Theories of Litigation, 41 J.L. & Econ. 451 (1998). An alternative explanation draws upon experimental psychology and prospect theory, finding that persons tend to be risk-seeking when faced with a low-probability gain and risk-averse when faced with a low-probability loss. See Guthrie, supra note 67, at 181-85. On this view, plaintiffs filing NEV suits have leverage over defendants, making settlement of such suits even more likely—and the size of settlements larger—than implied by standard economic models with risk-neutral litigants.

⁷² See, e.g., Bone, supra note 4, at 542-53 (introducing "informed-plaintiff" and "informed-defendant" models). See generally Lucian Arye Bebchuk, Suing Solely to Extract a Settlement Offer, 17 J. Legal Stud. 437 (1988) (developing "informed-plaintiff" model); Avery Katz, The Effect of Frivolous Suits on the Settlement of Litigation, 10 Int'l Rev. L. & Econ. 3 (1990) (same).

⁷³ See Bone, supra note 4, at 542-50 (giving overview of informed-plaintiff models).

⁷⁴ Defendants are also "informed" in many civil rights, antitrust, and securities cases, see id. at 550, precisely the situations in which one-way fee-shifting provisions often apply. See, e.g., 42 U.S.C. § 1988(b) (2000) (allowing judicial discretion to award attorneys' fees in successful prosecutions of certain civil rights actions); Mills v. Elec. Auto-Lite Co., 396 U.S. 375, 390-97 (1970) (finding implied authority to award attorneys' fees in successful suits alleging violations of securities law governing proxy statements); cf. Daniel S. Boyce, Note, Pleading Scienter Under the Private Securities Litigation Reform Act of 1995: A Legislative Attempt at Putting Teeth into the Required State of Mind, 35 New Eng. L. Rev. 761, 761-66 (2001) (noting that PSLRA's modifications to pleading rules attempt to eliminate lawsuits making only general allegations of wrongdoing and seeking settlement).

the magnitude of the plaintiff's investigation costs, but often will result in a plaintiff proceeding to discovery in good faith when her suit is objectively meritless.⁷⁵

Private antitrust lawsuits often involve a defendant reasonably informed as to her probability of losing a suit brought by an uninformed plaintiff engaging in a "fishing expedition." As such, a plaintiff may expend resources prior to filing a lawsuit to determine whether her suit is meritorious, file a suit with knowledge of her injuries but ignorant of her chances of success at trial, or simply file the suit and see if the defendant offers a settlement. Although the defendant knows whether the plaintiff's suit lacks merit, he cannot communicate this information credibly to the plaintiff (by refusing to settle the suit), so the plaintiff often will have to undertake an independent investigation of her suit's merits or proceed with discovery, despite the defendant's protestations of innocence.

While these models do evaluate the possibility that the parties might lack sufficient information to evaluate a lawsuit's merit, they presume that each party's litigation costs are fixed. This impliedly assumes at least one of two things: that neither party gains any advantage from manipulating the cost structure of litigation if they are able to do so, or that judges are perfectly able to detect such abuse of litigation procedure. The asymmetric-cost school of models evaluates the impact of litigation costs on the parties' incentives to bring and settle frivolous suits, but also assumes that such costs are fixed.

B. Asymmetric Cost Models

Another family of models argues that litigation cost asymmetries explain the existence of frivolous litigation.⁷⁹ If a plaintiff credibly

⁷⁵ See Bone, supra note 4, at 550-63 (exploring permutations of informed-defendant models leading to different lawsuit-filing and settlement strategies).

⁷⁶ See Hosp. Bldg. Co. v. Trs. of Rex Hosp., 425 U.S. 738, 746 (1976) ("In antitrust cases... 'the proof is largely in the hands of the alleged conspirators." (citation omitted)); Bone, supra note 4, at 550 (characterizing antitrust suits as informed-defendant).

⁷⁷ See, e.g., Bone, supra note 4, at 560-63 (defining three equilibria in which plaintiffs sometimes investigate and sometimes do not, depending on pretrial investigation costs).

⁷⁸ See id. at 559-63 (noting that plaintiffs sometimes investigate merits of claim prior to filing and defendants sometimes, but not always, offer settlements, which vary based on magnitude of pretrial investigation costs).

⁷⁹ See, e.g., Lucian Arye Bebchuk, A New Theory Concerning the Credibility and Success of Threats to Sue, 25 J. Legal Stud. 1 (1996) (developing model in which timing and magnitude of litigation costs may induce defendants to settle suit even in cases in which plaintiffs' expected value of litigating case to verdict would be negative); David Rosenberg & Steven Shavell, A Model in Which Suits Are Brought for Their Nuisance Value, 5 Int'l Rev. L. & Econ. 3 (1985) (presenting model where defendants settle suits quickly rather than incur significant costs of responding to meritless lawsuits filed at near-zero cost by plaintiffs).

can threaten to pursue a trial that will prove disproportionately costly to the defendant, a defendant may be willing to settle even a suit known to be meritless by both parties to avoid the legal costs of fighting the suit.⁸⁰ The credibility of a threat to go to trial if negotiations fail is essential to settlement talks—a defendant has no incentive to pay the plaintiff not to take an action that would harm both plaintiff and defendant if the plaintiff has not bound itself to do so.⁸¹ Rosenberg and Shavell sidestep this issue by focusing on the sequential nature of costs incurred by the parties, assuming that after the plaintiff has made the first (low-cost) move, the defendant must make the next (costly) move.⁸² While recognizing that real-world litigation may involve the parties imposing significant expenses on each other during the litigation process, they argue that the party imposing the costs should be able to obtain an advantageous settlement because the other party prefers to avoid incurring such costs later in the case.⁸³

Bebchuk's model instead assumes that the parties incur litigation costs simultaneously in discrete stages over time. Although the overall litigation costs to the plaintiff may exceed the expected judgment, in later rounds some of the plaintiff's litigation costs will be sunk and she may be able to extract a settlement because of her incentives to proceed to verdict—that is, her suit being PEV—at that point.⁸⁴ If the costs of proceeding to that stage from the previous stage are outweighed by the settlement that the plaintiff can extract in that later stage, she will incur the costs to proceed to that stage; if the plaintiff can credibly proceed through each round, the defendant will find it beneficial to settle the lawsuit early on, before the parties have spent enough money to reach the later "settlement stage." Importantly, however, Bebchuk finds that in this early-round settlement, if the defendant's litigation costs exceed those of the plaintiff, the par-

⁸⁰ See Bebchuk, supra note 79, at 2 (explaining that credibility of plaintiff's threat to proceed is "critical issue" in defendant's decision whether to settle suit).

⁸¹ For example, Cold War threats to initiate a nuclear war in response to a conventional attack elsewhere in the world could be credible only if the United States or the Soviet Union lacked complete control over its nuclear arsenal, making the low probability of a mutually devastating nuclear war (that neither party would consciously initiate) sufficiently unpalatable to deter conventional attacks. See Thomas C. Schelling, The Strategy of Conflict 200 (1980) (defining brinksmanship in international relations as "the deliberate creation of a recognizable risk of war . . . that one does not completely control").

⁸² See Rosenberg & Shavell, supra note 79, at 4 (presenting sequential model in which defendant is willing to settle with plaintiff for any amount less than defense costs).

⁸³ Id. at 4-5, 10.

⁸⁴ See Bebchuk, supra note 79, at 4-5 (explaining how divisibility of lawsuit bolsters plaintiff's threat to sue even when expected value is negative).

⁸⁵ Id. at 7.

ties will settle for more than the expected judgment.⁸⁶ Thus, in situations in which litigation is highly divisible and when litigation costs fall within certain parameters, plaintiffs with either a meritorious but costly claim or a frivolous claim can obtain a significant monetary award early, rather than pursue piecemeal litigation.

These models demonstrate that asymmetry between the litigation costs of the plaintiff and the defendant can encourage the filing and settlement of lawsuits that the plaintiff would find unattractive to litigate to verdict. However, these models also presuppose that litigation costs are fixed, and therefore assume either that judges perfectly are able to deter the strategic use of civil procedure to increase other litigants' costs, or that the parties cannot engage in such behavior.

III A MODEL OF DISCOVERY ABUSE IN ANTITRUST LITIGATION

The potential for private antitrust suits to be used for extortion has long been recognized. The relatively high rate of settlements in private antitrust cases could be indicative of either a well-functioning system quickly ending disputes, or of a "blackmailer's paradise." An economic model that takes into account the cost structure of antitrust litigation can demonstrate the feasibility and hint at the potential incidence of nuisance antitrust suits. The model also sheds significant light on the impact of one-way fee shifting on the parties' incentives to engage in abusive discovery in a world in which judges lack sufficient information to deter such tactics fully—that is, a world in which litigation costs themselves are variable. For a technical treatment of the model, please refer to the Appendix to this Note.

A. Model Specifications

The litigation process is commonly modeled as comprising at least four discrete stages: a "harm" stage where actions predating the litigation process occur; a stage where a claim is asserted (or not); a pretrial bargaining stage; and finally a trial stage.⁸⁸ This Note's model

⁸⁶ See id. at 14 (calculating settlement as equaling expected judgment plus half of amount by which defendant's litigation costs exceed plaintiff's).

⁸⁷ See, e.g., Jeffrey M. Perloff & Daniel L. Rubinfeld, Settlements in Private Antitrust Litigation, in Private Antitrust Litigation: New Evidence, New Learning 149, 150 (Lawrence J. White ed., 1988) (noting general feasibility of using antitrust litigation as blackmail); Salop & White, supra note 10, at 1028-30 (same).

⁸⁸ See Robert D. Cooter & Daniel L. Rubinfeld, Economic Analysis of Legal Disputes and Their Resolution, 27 J. Econ. Lit. 1067, 1069-71 (1989) (outlining attributes of legal disputes that must be incorporated in litigation models); Shavell, supra note 68, at 56-58

assumes that actions giving rise to the claim (that set Plaintiff's probability of success and her damages) have already occurred; it does not examine the efficiency effects of antitrust litigation. The model also assumes that there is no information asymmetry as between the litigants, but it assumes that judges have only imperfect information about the costs of discovery and the relevance of discovered documents. Therefore, a judge will not issue a fee-shifting or sanctioning order immediately when abusive tactics occur. Finally, the model examines only the one-plaintiff, one-defendant situation and does not analyze the effect of settling on the parties' reputations as tough litigators or willing settlers.⁸⁹

1. Stage 1: Prefiling Negotiation

In Stage 1 of the model, the parties negotiate over whether to waive Plaintiff's right to sue; the parties are assumed to possess sufficient information at this time for both of them to estimate accurately Plaintiff's probability of success at trial and the likely judgment if her case does succeed. If Plaintiff can credibly threaten to file a lawsuit in Stage 2, engage in discovery in Stage 3, and go to trial in Stage 4, she will make such a threat at Stage 1. Defendant will then decide whether to ignore the threat or to propose a settlement favorable to Plaintiff in exchange for a waiver of Plaintiff's right to pursue whatever antitrust claims she could assert against Defendant. Plaintiff then decides whether this settlement is acceptable; if so, the game ends. If the parties cannot agree to settle the lawsuit, the game proceeds to Stage 2.90

2. Stage 2: Pleadings

In Stage 2, Plaintiff evaluates whether it is in her interest to file a complaint against Defendant. In doing so, she must consider several variables, including her probability of success if the case goes to trial, her expected judgment if she prevails at trial,⁹¹ her filing costs, and

⁽specifying multistage litigation model comparing American and English cost-allocation rules).

⁸⁹ Given the secret nature of settlement agreements, it is not clear that third parties to the suit will know about the terms of a settlement; it is thus not clear that settling now will affect strategy in a later suit brought by a new plaintiff. But cf. Cooter & Rubinfeld, supra note 88, at 1074 (noting that antitrust defendants may have more to lose than plaintiffs have to gain due to reputation and potential for subsequent lawsuits).

⁹⁰ The model assumes that if there exists a settlement amount acceptable to both Defendant and Plaintiff at this stage, a mutually acceptable settlement will occur.

 $^{^{91}}$ The expected judgment J is assumed not to vary, regardless of the parties' litigation expenditures. Although in reality J is a function of many variables, including the parties' discovery costs, the model assumes that parties will spend a minimum amount on discovery

trial costs. She also must consider the costs that both Defendant and she likely will incur in responding to one another's discovery requests. Finally, Plaintiff must consider Defendant's costs of responding to her initial complaint and Defendant's trial costs. It is assumed throughout that Plaintiff and Defendant have identical estimates of all these variables—that is, there is no asymmetric information between the parties.⁹² None of these variables is assumed to change throughout the litigation.

If Plaintiff decides to file a complaint, she incurs $F_{\rm P}$ in filing costs. Defendant must then decide whether to settle the suit, ignore the complaint, or respond to the complaint; if Defendant responds, he incurs $F_{\rm D}$ in costs. These costs represent the efforts exerted by the parties in drafting a complaint capable of surviving a motion to dismiss and in responding to such a complaint in a manner that eliminates all claims entirely lacking merit. Given the relative ease with which a complaint capable of surviving a motion to dismiss can be drafted, it is reasonable to assume that Plaintiff will not file claims that will be dismissed or that are so baseless and obviously harassing as to draw sanctions under Rule 11.95

3. Stage 3: Discovery

At Stage 3, Plaintiff and Defendant engage in discovery. As discussed in Part I.C., filing a discovery request is inexpensive while responding to a request is costly; therefore the model assumes that each party determines the discovery costs of the other party, D_P and

and only will spend more to pressure their opponent into settling. See infra note 96. As such, J is defined as the expected judgment, given discovery expenditures D_{Dmin} and D_{Pmin} . See infra app. at Definitions; cf. Braeutigam et al., supra note 3, at 178 (specifying model in which each party chooses equilibrium amount of litigation effort to optimize its expected payoff).

⁹² The asymmetric information models discussed in Part II.A., supra, help explain why suits go to trial despite the costs to both parties of doing so. This Note does not dispute the existence of asymmetric information in the real world, and the asymmetric-cost tactics described by this Note could be applied to settlement bargaining in the presence of asymmetric information. Here, because the parties can foresee the outcome of the litigation, they will settle at a relatively low cost early in the game; under asymmetric information the parties may incur wasteful litigation costs as information is exchanged.

⁹³ Plaintiff is assumed to always file a complaint in Stage 2, since her deciding not to file a complaint is effectively the same as settling for \$0 in Stage 1.

⁹⁴ Failing to respond to the complaint results in a default judgment being entered against Defendant equal to $3J + F_p$. Because settlement amounts are based on the probability-weighted judgments (3PJ), settlements are assumed to be more attractive than merely ignoring the complaint.

⁹⁵ See supra notes 26-28 and accompanying text; see also infra app. at Inequality (10c) (defining conditions in which Plaintiff has credible threat to file complaint, depending on litigation costs, probability of success, and expected verdict).

 $D_{\rm D}$, while incurring zero cost herself.⁹⁶ Plaintiff and Defendant would like to obtain sufficient information to litigate their cases at the least cost to themselves, and to pressure the other party to settle the lawsuit on favorable terms.

If the parties reach Stage 3, they will again attempt to settle the lawsuit. If talks fail, they will engage in at least enough discovery to permit them to present an effective case at trial; at minimum, Defendant will impose costs on Plaintiff defined as D_{Pmin} , and similarly Defendant will incur costs D_{Dmin} .⁹⁷ An attorney not attempting to badger his opponent into settling will engage in discovery until the marginal gain from further discovery, that is, an increase in the expected verdict, equals the marginal cost of such further discovery to the requesting party—that is, the cost of reviewing discovered documents or preparing for and attending a deposition.⁹⁸ While further discovery could yield information that would further improve the litigant's chances at trial, obtaining that information would be too

 $^{^{96}}$ Of course, in reality the requesting party's own costs increase as more and more materials are turned over to her: Depositions are attended by attorneys for both Plaintiff and Defendant, and documents must be indexed and reviewed. Especially in terms of document production, however, the costs are disproportionately borne by the producing party, making this a reasonable simplifying assumption. See supra notes 44-46 and accompanying text; see also Bruce L. Hay, Civil Discovery: Its Effects and Optimal Scope, 23 J. Legal Stud. 481, 500-01 (1994) (noting that many discovery costs are "externalized by the requesting party," yielding temptation to use discovery strategically to extract settlement). Beyond the point at which additional discovery is undesirable for the requesting party (in the model, defined as D_{min}), a party requesting documents solely to badger the other litigant (in the model, playing D_{max}) is unlikely to give the unnecessarily produced documents more than a cursory review. Thus, playing D_{max} rather than D_{min} imposes little additional cost on the requesting party. The requester's costs in discovery at point D_{min} may be assumed to be zero without reducing the model's power. See infra notes 97-100 and accompanying text.

 $^{^{97}}$ I assume that both parties are able to estimate the other party's D_{min} prior to discovery commencing. This assumption is reasonable because each side knows what information it possesses, and what sorts of requests an opposing attorney would make in good faith. While judges might be able to ascertain whether an initial discovery request is abusive, they will be less able than the parties to determine whether a less obvious later request is a reasonable follow-up to information obtained in a previous request.

⁹⁸ Cf. Braeutigam et al., supra note 3, at 178 (specifying model of expenditure at trial in which each party maximizes its expected outcome at trial, given that opponent does same). As an aside, nonstrategic plaintiffs asserting a claim carrying one-way fee shifting like a private antitrust suit will engage in more extensive discovery than would a plaintiff under the American rule. This occurs because a plaintiff's litigation costs may be shifted to the defendant if the suit is successful. See id. at 180; James W. Hughes & Edward A. Snyder, Litigation and Settlement Under the English and American Rules: Theory and Evidence, 38 J.L. & Econ. 225, 227-28 (1995) (noting that English rule causes higher litigation expenditures by reducing marginal cost of litigation expenditure). In one-way fee shifting claims, reducing the plaintiff's marginal discovery cost curve means that more discovery will be served on an antitrust defendant than would arise in ordinary litigation.

costly.⁹⁹ Thus, litigants consider only their private costs in choosing how much discovery to conduct.¹⁰⁰

The maximum costs that each party may impose on each other are determined by the information in the hands of each party relevant to the case's claims, counterclaims, and defenses, and by the likelihood of the judge's shifting discovery costs or otherwise imposing sanctions for abusive discovery;101 these maximum amounts are defined as D_{Pmax} and D_{Dmax} . Given the nature of antitrust claims, it is assumed that Plaintiff's discovery costs are lower than Defendant's. 102 As a further simplifying assumption, increasing the scope of one's discovery requests beyond D_{min} does not affect the probability of a verdict in favor of the Plaintiff.¹⁰³ If the parties have a credible threat to play D_{max} , they will make such a threat in the Stage 3 discovery negotiations, and such threats will be taken into account when calculating the settlement amounts. The dynamics of such threats and counterthreats under one-way fee shifting are significantly different from those arising under the American rule. 104 If settlement talks fail, the parties incur discovery costs and move on to Stage 4.

⁹⁹ This does not mean that a litigant automatically obtains the most useful information in the other party's possession and then moves on to the next most relevant information. See Cooper, supra note 52, at 469 (noting that later rounds of discovery may be more productive than earlier rounds due to new lines of inquiry opening). Instead, the parties request documents they believe will yield useful evidence, and then based on this information draft follow-up requests. After a few rounds of discovery, subsequent requests will exhibit diminishing returns as the most promising data sources and lines of inquiry are exhausted.

¹⁰⁰ The parties likely will still request more discovery than is socially desirable, which Cooter and Rubinfeld characterize as "informational abuse" when done knowingly. See Cooter & Rubinfeld, supra note 5, at 453. This Note assumes that such discovery is permissible, and focuses on the parties' ability to engage in "impositional abuse," in which parties threaten to make costly requests with a view to settlement. See id.

 $^{^{101}}$ See supra notes 50-56 and accompanying text. This analysis further assumes that judges do not know D_{Pmin} and D_{Dmin} ; a judge with such information would enter an order shifting costs under Rule 26, making any discovery in excess of D_{min} irrational. See Easterbrook, supra note 35, at 638-39 (noting ineffectiveness of sanctions due to informational asymmetries between judges and litigants).

¹⁰² See supra Part I.C.3.

 $^{^{103}}$ This assumption is intuitively unsettling, as broad document requests will have a greater probability of yielding a "smoking gun" document that is likely to sway the verdict. However, beyond D_{min} , the additional discovery would cost the requesting party more than it values the change in the expected judgment. While J could be defined as a function of both parties' litigation expenses, this assumption would add unnecessary complexity to the model. The adverse effects of holding J constant as discovery increases beyond D_{min} is offset by assuming that a party requesting discovery beyond D_{min} incurs zero costs. In contrast, Rubinfeld and others have proposed models that explicitly assume that one's litigation costs determine one's prospects at trial. See, e.g., Cooter & Rubinfeld, supra note 88, at 1071-75; Perloff & Rubinfeld, supra note 87, at 171-73.

¹⁰⁴ Cooter and Rubinfeld recognize that cost-shifting rules make the threat to increase the other litigant's discovery costs noncredible. See Cooter & Rubinfeld, supra note 5, at

4. Stage 4: Trial

In Stage 4, the parties again decide whether or not to settle the suit. If not, they incur a final set of costs, T_P and T_D , reflecting the parties' efforts in compiling the discovered evidence, 105 preparing trial exhibits, and generally preparing the attorneys to present arguments.¹⁰⁶ After these costs are incurred, the judge adjudicates the merits of the case and (probabilistically) presents Plaintiff with a verdict that (if Plaintiff's case succeeds) awards Plaintiff treble actual damages and compensates her fully for her legal costs.¹⁰⁷ Thus, Plaintiff does not fully bear her own costs of suit, and this reduction in Plaintiff's expected litigation costs increases as Plaintiff's probability of success at trial increases. Regardless of whether Plaintiff prevails at trial or not, litigating a case to verdict is a money-losing prospect for Defendant due to his own litigation costs, which he bears alone whether he wins or loses. The possibility that Defendant will bear Plaintiff's legal costs as well makes settlement at almost any cost attractive.

B. Solution of Game

This game is most easily solved using backward induction. Working backwards from the last stage, the players anticipate each other's moves in later rounds and plan their earlier strategies accordingly. More precisely, the game is solved by examining each stage of litigation as a subgame and asking whether there exist Nash equi-

^{453.} However, they do not note that one-way fee shifting eliminates only one party's ability to threaten impositionally abusive discovery, leaving the other party free to make such threats.

¹⁰⁵ As discussed in note 96, supra, the requesting party is assumed to incur no costs at the discovery stage. The costs of reviewing the discovered materials are instead assumed to be Stage 4 costs because nothing prevents a litigant from requesting documents in discovery without ever reviewing them until discovery is finished. While document review typically runs concurrently with the taking of discovery in real litigation, a Defendant being threatened with costly discovery must consider it possible that Plaintiff will incur no costs beyond drafting the requests when deciding whether to settle.

¹⁰⁶ Alternatively, "trial" costs could represent the costs incurred by the parties filing motions for summary judgment under Federal Rule of Civil Procedure 56. While Defendant could, in theory, file a motion for summary judgment prior to the completion of discovery, it is likely to fail because Plaintiff can argue that there exists some disputed material fact remaining to be discovered in Defendant's files. Any premature motions will be even less likely to succeed if discovery produces legitimate and useless information at the same rate.

¹⁰⁷ In reality, judges will use a variety of methods for calculating what a "reasonable" attorney's fee should be, which may or may not fully compensate Plaintiff for her expenses. See generally White, supra note 24.

¹⁰⁸ For explanations of backward induction, see, e.g., Douglas G. Baird et al., Game Theory and the Law 302 (1994); Bebchuk, supra note 79, at 6.

libria in each subgame—that is, a set of strategies where each party's strategy is optimal, given that the other party has played a given strategy. An equilibrium set of strategies is defined as "subgame perfect" if that set of strategies constitutes a Nash equilibrium in each subgame. 110

1. Stage 4 Solution

At the start of Stage 4, the parties will find it advantageous to settle for certain amounts to avoid incurring trial costs. Because both parties have already incurred filing costs F and discovery costs D, these costs are sunk and do not enter into the settlement considerations in Stage 4. Rather, a settlement will occur if both parties believe it to be more advantageous to settle than to litigate the case to verdict—and this will always be the case, given that the parties have equal estimates of the outcome of the trial and would prefer to avoid paying for a trial.

2. Stage 3 Solution

In Stage 3, each party chooses the amount of discovery costs to be imposed on the other party from the range D_{min} to D_{max} , taking into account the other party's incentives to continue with the suit or settle. While each party could, in theory, choose any amount between these values, there are only two rational strategies: play D_{min} or play D_{max} . There is no incentive for either party to play any value higher than D_{min} if both parties expect to litigate the case to verdict because any increase by Defendant increases Defendant's expected loss, and any increase by Plaintiff increases Defendant's loss without any gain to Plaintiff. On the other hand, if any advantage is gained by increasing discovery costs beyond D_{min} , such advantage continues to increase until D_{max} . 112

 $^{^{109}}$ A Nash equilibrium exists where, if Player 1 has played x^* and Player 2 has played y^* , then x^* is Player 1's best response to Player 2's selection of y^* as a strategy, and y^* is the best response to x^* . See Baird et al., supra note 108, at 21-22, 310 (1994) (defining Nash equilibria).

¹¹⁰ For an introduction to backward induction and subgame perfection tailored to a legal audience, see id. at 50-78.

¹¹¹ In the model as written, Plaintiff is indifferent between playing D_{Dmin} and D_{Dmax} if the case goes to trial. If we relax the assumption that Plaintiff incurs zero costs when increasing Defendant's discovery costs, it becomes clear that Plaintiff would never increase Defendant's costs if a trial is certain, since any such increase would cost both the Plaintiff and Defendant money with no benefit accruing to Plaintiff at trial.

¹¹² Intuitively, if Plaintiff can extract an additional \$0.50 out of Defendant by threatening to increase Defendant's litigation costs by \$1.00, she will continue to do so until it is no longer profitable for her to do so—that is, until the judge imposes sanctions at D_{Dmax} .

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The ability to apply pressure to obtain a more favorable settlement implies that the litigants would like to play D_{max} —that is, threaten to engage in abusive discovery. If Plaintiff expects Defendant to settle the lawsuit, Plaintiff has an incentive to threaten to file excessively broad discovery requests even if such requests will bring her no benefit at trial.¹¹³ Although the award of attorneys' fees to a successful Plaintiff significantly reduces Defendant's incentive to make an overbroad request, he may still make such a broad request if Plaintiff's case is sufficiently weak that Plaintiff will drop her case rather than incur large discovery costs. In other words, Defendant will have a credible threat to engage in abusive discovery himself and play D_{Pmax} only if this makes Plaintiff's threat to go to trial noncredible.114 If Defendant can thus make Plaintiff's threat to continue noncredible, no settlement will occur and Plaintiff will drop her suit. Given that both parties prefer to avoid incurring discovery costs, if a settlement is feasible, then the parties never will proceed to Stage 4 but instead will settle in Stage 3.

Of course, before Defendant is willing to pay anything, he must determine whether Plaintiff will incur any discovery costs—that is, whether Plaintiff's threat to continue to trial is credible. Clearly, Plaintiff will be willing to do so if the expected verdict or the settlement in Stage 4 is greater than her remaining costs—that is, if her suit is PEV at this time.¹¹⁵ If Plaintiff's lawsuit is or appears to be PEV, Plaintiff can extract a sizable settlement that likely exceeds her expected verdict at trial.¹¹⁶ Defendant will take the parties' likely settlement in Stage 4 into account when deciding whether to play D_{Pmax} ; he may be able to make Plaintiff's threat to continue the lawsuit noncredible if it would cost Plaintiff more in discovery costs than she would receive in settlement in Stage 4.117

¹¹³ If Defendant believes that Plaintiff's threat to go to trial is credible, Defendant will not have a credible threat to increase Plaintiff's discovery costs abusively because of the grant of attorneys' fees to successful antitrust plaintiffs.

¹¹⁴ The precise conditions for this are shown infra app. at Lemma 1 & Inequality (10b).

¹¹⁵ Note that this is distinct from asking whether the lawsuit in its totality is PEV to Plaintiff; the divisibility of litigation means that a lawsuit that is PEV at each individual stage but is NEV overall can still be credibly litigated by Plaintiff. See generally Bebchuk, supra note 79.

¹¹⁶ See infra app. at Equations (3)-(4) for a description of the settlement amount. Importantly, because Defendant's discovery costs are assumed to be higher than Plaintiff's, the parties will settle for more than Plaintiff's expected judgment amount unless Plaintiff's trial costs are significantly higher than Defendant's.

¹¹⁷ See infra app. at Lemma 1. This result parallels that contemplated by Bebchuk's multistage asymmetric-cost model. See Bebchuk, supra note 79, at 5-7 (illustrating twostage litigation model in which division bolsters plaintiff's credibility).

Thus, if Plaintiff has a credible threat to incur discovery costs and proceed to Stage 4, Defendant will realize that it is preferable for both parties to settle the suit before discovery commences and share the cost savings. Plaintiff also recognizes, given that Defendant cannot deter her from proceeding to Stage 4, that Defendant has no incentive to engage in abusive discovery, while she can threaten to impose high discovery costs with impunity. Therefore, the parties will settle prior to any discovery occurring for an amount that likely exceeds the expected judgment. As such, private antitrust litigation's one-way fee-shifting mechanism lets plaintiffs engage in abusive discovery without the fear of reprisal that discourages such behavior in "ordinary" litigation under the American rule, and it does not deter abuse of discovery by both parties, as does the English rule in many circumstances. 119

3. Solution to Stages 1 and 2

The solution to Stages 1 and 2 is straightforward because no new information or strategic decisions are introduced. The parties can readily predict the strategies and outcomes available to them in Stages 3 and 4, and therefore will tailor their decisions in Stage 2 in an effort to do better than they would in the outcomes of those later stages. If the parties predict that they will settle in Stages 3 or 4, Defendant will have no reason to incur even the minor filing costs of responding to Plaintiff's complaint, nor will Plaintiff have any incentive to bother drafting a justiciable complaint, and they will agree to settle the litigation before it even begins and avoid paying any legal fees whatsoever. Alternatively, if the lawsuit will be dropped later because Defendant can make the litigation unprofitable by engaging in discovery abuse himself, Plaintiff will decide not to file a lawsuit at all in

¹¹⁸ See supra note 116 and accompanying text.

¹¹⁹ The literature on fee shifting often notes that the English rule, where the losing party pays the winner's expenses, will not discourage frivolous litigation when defendant's costs are low and the payoff from a successful verdict is high. See, e.g., Lucian Arye Bebchuk & Howard F. Chang, An Analysis of Fee Shifting Based on the Margin of Victory: On Frivolous Suits, Meritorious Suits, and the Role of Rule 11, 25 J. Legal Stud. 371, 373 (1996). The logical extension of this observation is that parties subject to fee shifting will avoid imposing unnecessary costs on the other party, given that there is a chance that they will have to pay those legal fees. This Note shows that under one-way fee shifting only the defendant is subject to this constraint.

¹²⁰ See infra app. at Equations (6) & (8) for calculations of the settlement amounts in Stages 2 and 1, respectively. Since both parties are better off settling in Stage 1 and dividing the savings on legal fees, the parties will always settle prior to litigation. See infra app. at Proposition 1.

Stage 1 and both parties walk away without any payments or expenditures taking place.¹²¹

C. Summary and Effect of Relaxed Assumptions

Thus, given symmetric information and beliefs about litigation costs and the expected outcome at trial, the parties will agree to settle any claim in which Plaintiff has a credible threat to go to trial, without setting foot in court. This will occur whenever Defendant cannot raise Plaintiff's discovery costs to a prohibitively high level. The expected settlement, assuming that the parties equally divide the savings from avoiding litigation, will pay Plaintiff the full amount of the verdict she expects at trial weighted by her chances of winning, plus her share of the litigation costs avoided. This seems like a benign outcome until one realizes that Defendant's litigation costs are likely to be significantly higher than Plaintiff's costs due to the inability of Defendant to retaliate credibly against discovery abuse and that a portion of Plaintiff's costs will be borne by Defendant even in the settlement meaning that Plaintiff receives far greater compensation from Defendant than dictated by the merits of her case. One-way fee shifting therefore shifts settlement amounts upward in two distinct ways: by making discovery costs even more asymmetric and by increasing the expected verdict.

A simple numerical example can illustrate these findings. Let Plaintiff's and Defendant's filing costs F both equal \$10, and let their trial costs T both equal \$30. Plaintiff's case has a 10% chance of succeeding if the case goes to trial, in which case she will be able to show damages of \$100, trebled to \$300. Assume further that Plaintiff will have to spend at least \$10 (D_{Pmin}) in responding to Defendant's discovery requests to go to trial, and that Defendant must spend at least \$40 (D_{Dmin}) to compile the documents reasonably requested by Plaintiff. Finally, assume that both parties realize that a judge would find that the Plaintiff's claim is nonfrivolous on its face and would deny a motion to dismiss. In light of this, imagine that the judge will not impose sanctions on discovery until it becomes clearly abusive in light of the magnitude of the claimed damages, so let D_{Pmax} equal \$20 (the highest cost that Defendant can impose on Plaintiff before sanctions are imposed), and let D_{Dmax} equal \$80.122

¹²¹ No litigation will occur if Plaintiff's lawsuit is unprofitable at any stage of the litigation. See infra app. at Proposition 2 (proof) & Inequalities (10a)–(10c).

¹²² Calculating the precise amount of discovery that may be taken before Rule 11 sanctions are imposed is more of an art than a science, but for a small- to moderate-sized claim, it is not outrageous to believe that Defendant's discovery costs could exceed twenty-five percent of Plaintiff's claimed right to recovery without being deemed frivolous.

In such a situation, Plaintiff would receive an expected payoff of \$35 (0.1 * \$300 + 0.1 * \$50 litigation costs), while spending \$50 on the litigation (\$10 filing, \$10 discovery, and \$30 trial costs), so her suit has a negative expected value overall if it were litigated to verdict. Nonetheless, she has a credible threat to proceed from Stage 1 to Stage 2 to Stage 3 to Stage 4—and so Defendant will have the incentive to settle the case. Realizing how costly it will be for Defendant to fight the case in court, given Plaintiff's unchecked ability to engage in abusive discovery, the parties will settle for \$70 prior to Plaintiff filing a complaint—twice as much as Plaintiff expected to receive if she litigated the case to verdict! Ica In contrast, under the ordinary American rule, the value of Plaintiff's claim at verdict drops to \$30, and Defendant regains the ability to counter abusive discovery by Plaintiff with abusive requests of his own. Because both parties now have the ability to threaten excessive discovery, they will settle for only \$60.125

It is important to note that the assumptions in this model represent the most cost-effective method of extracting settlements if none of the underlying rules are changed. For example, if the parties have divergent expectations (different estimates of J or P), then some plaintiffs will be deterred from bringing nuisance actions against defendants who would otherwise settle, 126 while other defendants will refuse to settle a suit when it is in their best interest.¹²⁷ Having different estimates of a claim's prima facie validity might cause the parties to incur filing fees as they file complaints and motions to dismiss. Similarly, if the parties do not know each other's discovery costs, then the parties may not find out whether a settlement will be desirable until at least the filing costs and possibly some discovery costs have been incurred. Even plaintiffs lacking credible threats to pursue their NEV suits may file a complaint, seeking to find out if the parties' discovery costs make their suits sufficiently credible to merit a settlement. Although these informational asymmetries ensure that some settlement-seeking suits are never filed, other suits will require expen-

¹²³ That is, Inequalities (10a)-(10c) from the Appendix, infra, are all satisfied: Under (10a), Plaintiff's expected verdict (\$35) is greater than her trial costs (\$30); under (10b), her expected settlement in Stage 4 (\$35) is greater than the maximum discovery costs Defendant may impose upon her (\$20); and under (10c), her expected settlement in Stage 2 (\$70) is greater than her filing costs (\$10).

¹²⁴ The settlement amount is calculated using app. Equation (8), infra, with the Plaintiff's cost of discovery, D_{Pmin} equalling \$10.

¹²⁵ See infra app. at Proposition 3 & Equation (13).

¹²⁶ Plaintiff may believe that she does not have a credible threat to proceed with an NEV suit, while Defendant believes that she does.

 $^{^{127}}$ If maximum discovery costs are not sufficiently asymmetric, a Defendant may choose to litigate a costly lawsuit rather than settle if his estimates of J and P are significantly lower than Plaintiff's.

diture of litigation costs by both parties before a settlement can occur. Allowing plaintiffs to bring, and forcing defendants to settle, frivolous suits is bad enough; having the parties waste money as they haggle over the magnitude of the transfer payment is worse.

IV POLICY IMPLICATIONS

The above analysis demonstrates that the nature of discovery costs and current procedural rules permit plaintiffs to extract settlements from defendants on even specious theories of liability. Given that both promoting private prosecution of anticompetitive behavior and deterring litigation abuse are desirable ends, it is worthwhile to seek low-cost reforms that can reduce the incidence of frivolous settlement-seeking without unduly prejudicing legitimate lawsuits.

Plaintiff can extract a settlement if three conditions are satisfied. namely that Plaintiff has a credible threat to go to trial after discovery is completed (10a), to conduct discovery after the filing stage is completed (10b), and to file a lawsuit in the first place (10c).128 As demonstrated earlier, settlements exceeding the expected judgment amount can occur when Plaintiff has only a small probability of succeeding at trial, and when Plaintiff would find it unprofitable to litigate the case to verdict, but for Defendant's incentive to settle the suit and avoid legal fees. The impact of Plaintiff's ability to impose asymmetric costs can be quite significant in lawsuits where Plaintiff's expected judgment award is small relative to the parties' litigation costs, whereas the importance of the increase in settlement amount will be minimal when Plaintiff's expected award is large relative to litigation costs. As such, a hypothetical \$100,000 increase in settlement amount will have only minimal impact on the parties' settlement negotiations when Plaintiff claims damages in the hundreds of millions of dollars, but would be a major factor in pressuring Defendant to settle a smaller lawsuit.

Classifying what types of lawsuits are "frivolous" is a task beyond the scope of this Note, but at some point a lawsuit with only a de minimis probability of success should not be able to induce a defendant to settle when he is almost certainly not at fault. Of course, well-meaning reforms should not stifle lawsuits or settlements in cases in which the defendant's wrongfulness is almost certain but the plaintiff's cost of litigating the claim outweighs the size of the injury. However, any policy that permits a plaintiff to extract a settlement far

¹²⁸ See infra app. at Inequalities (10a)-(10c).

exceeding the value of a litigated claim solely because of asymmetric litigation costs should be scrutinized.

A. Eliminate Mandatory Fee Shifting

Courts currently are required to grant successful antitrust plaintiffs an award of their attorneys' fees, while fee-shifting law in other arenas allows courts at least some discretionary authority to award payment of a plaintiff's attorneys' fees. 129 Judges given greater discretionary authority could determine whether to award attorneys' fees to a successful antitrust plaintiff on a full factual record, and would have the opportunity to evaluate the relative financial strengths of the litigants, the egregiousness of the defendant's conduct, whether the parties had complied with the judge's discovery-related orders in good faith and in a timely manner, and the novelty of the plaintiff's successful antitrust claim. By the time a fee-shifting decision must be made, the judge has become familiar with the case and has rendered a verdict, leaving her much better situated to evaluate the parties' strategic decisions than if she were to write a protective order earlier in the case under Rule 26(c) or to impose sanctions under Rule 11.

Injecting uncertainty about the existence of fee shifting could reduce both parties' abilities to threaten to engage in abusive discovery credibly during settlement talks: Plaintiffs could no longer take for granted that the verdict would include their legal costs, especially if they filed bad-faith discovery requests, and defendants would be similarly dissuaded from filing overbroad requests for fear of drawing the wrath of the judge in the event that the suit is lost. On the other hand, adding uncertainty regarding the magnitude of a verdict increases the chances that the parties will have divergent expecta-

¹²⁹ Compare 15 U.S.C. § 15 (2000) ("[A]ny person who shall be injured in his business or property by reason of anything forbidden in the antitrust laws . . . shall recover threefold the damages by him sustained, and the cost of suit, including a reasonable attorney's fee." (emphasis added)), with provisions granting judges discretionary power to award attorneys' fees, such as 42 U.S.C. § 2000a-3(b) (2000) and 42 U.S.C. § 1988 (2000) ("In any action . . . to enforce [various civil rights provisions], the court, in its discretion, may allow the prevailing party, other than the United States, a reasonable attorney's fee as part of the costs." (emphasis added)). While these provisions appear to grant judges broad discretion to shift fees in either direction, in practice successful plaintiffs are almost always granted attorneys' fees. See Newman v. Piggie Park Enter., Inc., 390 U.S. 400, 401-02 (1968) (per curiam) (holding that, absent "special circumstances," plaintiffs obtaining injunctive relief under Title II are entitled to attorneys' fees); S. Rep. No. 94-1101, at 4 (1976), reprinted in 1976 U.S.C.C.A.N. 5908, 5912 (in legislative history of § 1988 citing approvingly Piggie Park standard). Defendants, in contrast, receive legal fees under § 1988 only if the plaintiff's failed action is found to be frivolous, unreasonable, or groundless. See Hughes v. Rowe, 449 U.S. 5, 14 (1980) (per curiam) (refusing to require prisoner plaintiff to pay state's legal fees following unsuccessful complaint under 42 U.S.C. § 1983).

tions about the likelihood of fees being shifted, and thus risks an increase in the number of cases going to trial.

Dropping fee shifting entirely would reduce but not completely eliminate plaintiffs' abilities to extract settlements from blameless defendants, but it would not increase uncertainty in the same manner as would a discretionary fee-shifting rule. To see this, recall that the reason that defendants do not retaliate against an abusive discovery request with a similarly overbroad request is that, under a fee-shifting regime, the defendant's expected payoff at trial decreases as the plaintiff's discovery costs increase; the plaintiff recognizes that the defendant's threat to retaliate is not credible and thus the plaintiff engages in excessive discovery without fear of reprisal.¹³⁰ In contrast, under the usual American rule where both parties pay their own legal bills, a defendant's expected payoff at trial does not change regardless of whether he engages in only the required level of discovery, or whether he asks the plaintiff to produce mountains of useless documents. This means that a plaintiff faces a real threat of reprisal if she files overbroad discovery requests, which may deter her from making such a request if the case may go to trial rather than settle.¹³¹ If the defendant recognizes that the plaintiff has no credible threat to file an overbroad discovery request, he will take this information into account and offer a lower settlement to the plaintiff.

Eliminating mandatory fee shifting will greatly reduce the *magnitude* but will only modestly reduce the *number* of settlements, however, because if Plaintiff's suit can be deterred by Defendant playing D_{Pmax} , Defendant will have a credible threat to do so and Plaintiff will be unable to extract a settlement under either the fee-shifting rule or the American rule.¹³² Because this policy change will reduce the settlement amounts of both meritorious and frivolous antitrust suits, it also will reduce the deterrent effect on anticompetitive behavior in society at large and decrease the incentive for potential plaintiffs to sue and act as private attorneys general, contrary to the policy concerns motivating treble damages and fee shifting in the first place. To

¹³⁰ See infra app. at Lemma 1 (proof).

¹³¹ A plaintiff anticipating a settlement still will threaten to make overbroad discovery requests if she can increase the defendant's discovery costs by more than the defendant can raise hers; since neither party plans to actually go to trial this threat merely results in further jockeying over the settlement amount.

 $^{^{132}}$ See infra app. at Lemma 1 (illustrating that under American rule defendants may still play D_{Pmax} to deter some plaintiff lawsuits). The number of settlements will decline as well, because a move to the American rule will both reduce Plaintiff's expected verdict at trial and increase Defendant's ability to retaliate. Because settlement magnitude is influenced by both of these factors but the number of settlements is only affected by the reduction in verdict, the effect on settlement magnitude is greater. See infra app. Proposition 3.

the extent that this is a concern, the expected verdict could be raised by increasing the damages multiplier from three to some larger number, or by giving the judge the ability to award punitive damages in addition to treble actual damages. Such changes could keep the overall level of deterrence relatively constant, but would decouple such deterrence from the abuse of discovery rules.¹³³

B. Limit Discovery in Antitrust Cases

Restricting the scope of discovery, thereby reducing the magnitude of D_{max} , also would reduce the ability of plaintiffs to use discovery to extract excessive settlements. Because D_{min} , the amount of discovery the parties must expend to litigate the case effectively, remains constant, constraining discovery overall can shrink the amount of wasteful discovery sought by the parties for a purely tactical advantage.

However, this approach is not without serious costs. Cavalier restrictions on discovery risk cutting muscle as well as fat-if the amount of discoverable information is reduced below D_{min} , the parties will not obtain all necessary information and the quality and predictability of litigation will decrease. Similarly, the line between essential and excessive discovery may be blurry: Deposing and obtaining the emails of key executives may be necessary to prove the existence or lack of a conspiracy, while deposing additional employees higher or lower on the corporate ladder may simply increase a litigant's costs without yielding usable evidence. Simply increasing the ethical or sanctions-based penalties for filing abusive discovery requests will deter both legitimate and abusive discovery if judicial error in distinguishing the two is not decreased. This problem is compounded by the fact that sometimes the most useful discovery is also the most costly, making arbitrary cost cut-offs or categorical restrictions on forms of discovery inadvisable. The overall lack of clear judicial standards for differentiating between legitimate and abusive discovery therefore counsels against restricting the scope of discovery.

C. Establish Heightened Pleading Requirements

Perhaps the most effective means of combating abusive discovery would be to block nuisance litigation at its inception by

¹³³ This is not to say that treble damages provide the optimal level of deterrence, but only that adjusting the multiplier provides a basis for maintaining the current level of deterrence while reducing discovery's importance as a tactical weapon. For an overview of the literature on treble damages, see generally Cavanagh, supra note 2 (surveying treble damages' history, effectiveness, and academic debate surrounding trebling).

(re)introducing a heightened pleading requirement—perhaps akin to that required for averments of fraud or mistake,¹³⁴ or even securities law violations,¹³⁵ without necessarily reverting to the old system of fact pleading.¹³⁶ Private antitrust has been perceived as a tempting target for heightened pleading standards,¹³⁷ but implementing such change without congressional action or amendments to the Federal Rules of Civil Procedure appears to be foreclosed.¹³⁸

Such an amendment to the antitrust laws or the Federal Rules would effectively increase the Plaintiff's filing costs F_P , which would make the filing of truly frivolous lawsuits less palatable to plaintiffs. ¹³⁹ Although legitimate plaintiffs harmed by antitrust violations often will be ignorant of the precise factual mechanism by which the anticompetitive restraint or conspiracy functioned, ¹⁴⁰ it seems reasonable to require at least some factual basis for assertions of belief that a com-

¹³⁴ See Fed. R. Civ. P. 9(b) (requiring circumstances surrounding allegations of fraud or mistake to be "stated with particularity").

¹³⁵ See Private Securities Litigation Reform Act of 1995, Pub. L. No. 104-67, 109 Stat. 737, 747 (1995) (codified at 15 U.S.C. § 78u-4(b)(1) (2000)) (requiring complaints alleging untrue statements or omissions of material fact in securities suit to "specify each statement alleged to have been misleading, the reason or reasons why the statement is misleading, and, if an allegation regarding the statement or omission is made on information and belief, . . . [to] state with particularity all facts on which that belief is formed").

¹³⁶ Prior to the introduction of the Federal Rules of Civil Procedure, fact pleading was both widespread and widely criticized. See Martin B. Louis, Intercepting and Discouraging Doubtful Litigation: A Golden Anniversary View of Pleading, Summary Judgment, and Rule 11 Sanctions Under the Federal Rules of Civil Procedure, 67 N.C. L. Rev. 1023, 1024, 1037 (1989) (noting discontent with fact pleading under Field Code, dominant procedural system prior to Federal Rules). For example, complaints were sometimes criticized for failing to state "what occurred, when it occurred, where it occurred, who did what, the relationships between defendants and plaintiff or of defendants inter se, or any other factual data that might identify the occasion or describe the circumstances of the alleged wrongful conduct of defendants." Gillespie v. Goodyear Serv. Stores, 128 S.E.2d 762, 766 (N.C. 1963).

¹³⁷ See Louis, supra note 136, at 1037-38 (stating that antitrust and civil rights cases are popular candidates for inclusion in Rule 9(b) because of claims' inherent vagueness, complexity and duration of litigation, and low likelihood of success).

¹³⁸ See id. at 1037-38 (arguing that increasing pleading requirements in antitrust should be done, if at all, through Rule amendments, nevertheless noting that antitrust's complexity stems from congressionally created rights, thus questioning legitimacy of procedural changes undermining these rights).

 $^{^{139}}$ See infra app. at Inequality (10c). As illustrated by (10c), plaintiffs with a high probability of success would not be deterred by such a procedural change, whereas true long-shot lawsuits with low P values may no longer be credible. Similarly, we might ask whether the increase in F_P would be the same for all antitrust plaintiffs: Those litigants most likely to prevail at trial likely can allege specific instances of wrongdoing more easily than plaintiffs grasping at straws. Cf. Bone, supra note 4, at 564-66 (noting that requiring plaintiffs to engage in reasonable prefiling investigation is often efficiency-enhancing when dealing with informed defendants).

¹⁴⁰ See, e.g., Poller v. Columbia Broad. Sys., Inc., 368 U.S. 464, 473 (1962) (noting that evidence in antitrust cases "is largely in the hands of the alleged conspirators").

petitor's price cut is predatory, that a conspiracy induced a supplier's prices to increase, or that a dealer termination was wrongful. Similarly, if heightened pleading were adopted, judges would have to be careful not to foreclose a lawsuit simply because the facts asserted in the complaint rely on a novel or newly developed economic theory—antitrust would be a sorry discipline indeed if nineteenth-century economics were applied to twenty-first-century markets. Nonetheless, a revised pleading rule could demand that the facts supporting the novel theory be alleged with some particularity, and that some citation to academic literature supporting that theory be provided. The availability of summary judgment to defendants is not by itself an adequate safeguard against frivolous antitrust litigation; although having a case dismissed prior to trial will save a defendant some money, by the time a summary judgment motion is entertained, significant discovery will have taken place and years may have passed.

¹⁴¹ Cf. 15 U.S.C. § 78u-4(b)(1) (requiring disclosure of all facts upon which plaintiff's beliefs are based in private securities litigation context). See also Bone, supra note 4, at 587-89 (noting that stricter pleading standards can be beneficial in "informed-defendant" situations, such as antitrust).

¹⁴² See Richard A. Posner, Antitrust Law: An Economic Perspective 228 (1976) ("Students of the antitrust laws have been appalled by the wild and woolly antitrust suits that the private bar has brought—and won.").

¹⁴³ See Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 596-98 (1986) (granting summary judgment because plaintiff's economic theory attributing anticompetitive predatory intent to defendants was implausible); Easterbrook, supra note 35, at 643-44 & n.24 (praising *Matsushita* Court's narrowing of relevant issues to reduce scope of discoverable facts). The propriety of dismissing a claim based on a court's application of economic analysis to the facts is, nonetheless, questionable. See *Matsushita*, 475 U.S. at 601-04 (White, J., dissenting) (arguing that conflicting expert reports generate genuine factual issues, despite "the Court prefer[ring] its own economic theorizing to" that of plaintiff's expert). For a criticism of courts' reliance on legal precedent resting on outdated economics, see Bolton et al., supra note 14, at 2242 (arguing that judges improperly adhere to "a static, non-strategic view of predatory pricing, believing this view to be an economic consensus. This consensus, however, is one most economists no longer accept.").

¹⁴⁴ See, e.g., Matsushita, 475 U.S. at 577-82 (ruling on summary judgment motion twelve years after lawsuit initially was filed). Of course, a summary judgment motion, while costly, can be cheaper than a full-blown trial, and thus conceptually the "trial cost" variable T can be seen as the costs of preparing and defending a fact-intensive summary judgment motion. Cf. Tops Mkts., Inc. v. Quality Mkts., Inc., 142 F.3d 90, 95 (2d Cir. 1998) (noting that Matsushita's summary judgment standard helps "[avoid] wasteful trials and [prevent] lengthy litigation that may have a chilling effect on pro-competitive market forces"). The wisdom of using summary judgment in claims involving the defendant's state of mind is also questionable, given that summary judgment motions at least partially interpose the judge into the role of the jury. See 10B Charles Alan Wright, Arthur R. Miller & Mary Kay Kane, Federal Practice and Procedure § 2732.1 (3d ed. 1998) ("Antitrust . . . actions are by their very nature poorly suited for disposition by summary judgment In antitrust cases, questions of motive or intent, credibility, and conspiracy frequently prevent summary judgment from being entered, since these issues involve subjective questions regarding state of mind that can only be decided after a full trial.").

Conclusion

Private antitrust litigation is an attractive vehicle for nuisance litigation due to treble damages, one-way fee shifting, and highly asymmetric discovery costs. Although private litigation can act as a supplement to governmental enforcement of the antitrust laws, these factors combine to provide plaintiffs with a potent weapon to use against even relatively innocent defendants. The feasibility of such strike suits can be lessened by eliminating or modifying the feeshifting remedy, or by requiring greater specificity in alleging antitrust violations than required under the current rules of civil procedure. Such changes would do little prejudice to the claims of legitimate plaintiffs and would reduce minimally the deterrence of anticompetitive behavior, while shrinking significantly the potential for innocent firms to be held up by strategically sophisticated plaintiffs using discovery as a weapon.

APPENDIX

This Appendix specifies a model of litigation strategy between a single plaintiff and a single defendant. The parties are assumed to have identical expectations about the outcome of trial, and to have identical estimates of all costs incurred by each party. Because the plaintiff is assumed to allege an antitrust violation, a successful lawsuit allows the plaintiff to collect a reasonable attorney's fee, which is assumed to fully compensate the plaintiff for all legal costs incurred by her.

Let **u** = Probability of verdict for Plaintiff at trial; J =Award to Plaintiff if she wins (excluding fee shifting & trebling); F_P , $F_D =$ Filing costs (prediscovery) of Plaintiff and Defendant; D_P , $D_D =$ Discovery costs incurred by Plaintiff and Defendant; T_P , $T_D =$ Trial costs incurred by Plaintiff and Defendant $S_i =$ Settlement cost at each stage of the trial, I = 1, 2, 3, 4.

Each of these variables is fixed, with the exception of each party's discovery costs D. It is assumed that each party selects the amount of discovery costs that will be incurred by the other party, bounded at the low end by the minimum amount of discovery necessary to properly litigate the case to trial (defined as D_{imino} i = P (plaintiff) or D (defendant)), and bounded at the high end by the tipping point at which a judge will impose sanctions for discovery abuse (defined as D_{imax} , I = P or D). Furthermore, given the nature of antitrust claims, it is assumed that Defendant's discovery costs are higher than those of Plaintiff.

$$D_{Pmin} \leq D_P \leq D_{Pmax}; D_{Dmin} \leq D_D \leq D_{Dmax}; D_{Pmin} < D_{Dmin}; D_{Pmax} < D_{Dmax}, D_P < D_D.$$

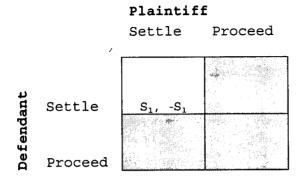
The parties are assumed to have equal bargaining power and skill—that is, if a zone of possible agreement exists where a settlement is possible, the parties will agree to settle at the midpoint of the settlement talks.

MODEL SPECIFICATIONS

Stage 1 (Pretrial Negotiation)

The parties negotiate prior to the commencement of litigation and decide whether to settle for S_1 or proceed to Stage 2.

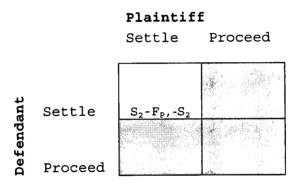
Stage 1



Stage 2 (Pleadings)

The Plaintiff incurs filing costs F_P . The parties decide to settle for S_2 or proceed to *Stage 3*, in which case Defendant incurs responsive filing costs F_D and the game proceeds.

Stage 2



Stage 3 (Discovery)

The parties decide whether to settle for S_3 . If no settlement occurs, the parties choose and incur costs D_P and D_D and proceed to Stage 4.

Stage 3

Plaintiff

Settle Proceed

Settle Proceed S_3-F_p , $-S_3-F_D$

Stage 4 (Trial)

The parties decide whether to settle for S_4 . If no settlement occurs, the parties incur trial costs T_P and T_D . Recalling that antitrust suits award treble damages, we see that the Plaintiff receives $\mu(3J + F_P + D_P + T_P)$ as an expected verdict, while Defendant pays that same amount.

Let

(0): $V = \mu(3J + F_P + D_P + T_P)$, to simplify notation.

Stage 4

Plaintiff

Settle Proceed

fendant	Settle	$S_4 - F_p - D_p, -S_4 - F_p - D_p$	**************************************
			$V-F_p-D_p T_p$, $-V-F_p-$
De	Proceed		$D_{D}-T_{D}$

MODEL SOLUTION

The solution proceeds by backward induction.

Proposition 1: Given symmetric information and expectations and a credible threat by Plaintiff to sue, the parties will settle for $S_1 = 3\mu J + (\mu - 0.5)(F_P + D_{Pmin} + T_P) + 0.5(F_D + D_{Dmax} + T_D)$.

Proof. The proof proceeds in four steps.

Step 1. In Stage 4, the parties will settle rather than litigate if:

(1):
$$S_4 - F_P - D_P > V - F_P - D_P - T_P$$
 and $V + F_D + D_D + T_D > S_4 + F_D + D_D$ or $-S_4 - F_D - D_D > -V - F_D - D_D - T_D$.

This reduces to Plaintiff being willing to accept a settlement $S_4 > V - T_P$, and Defendant being willing to accept a settlement $S_4 < V + T_D$. Since trial costs are assumed to be greater than zero, it follows that reaching a settlement strictly dominates trying the case to verdict in *Stage 4*. Given the parties' equal bargaining power, the parties will agree to settle for:

(2): $S_4 = V + (T_D - T_P) / 2$, yielding total payoffs from settling in Stage 4 of:

(2a):
$$V + (T_D - T_P) / 2 - F_P - D_P$$
 for Plaintiff; and

(2b):
$$-(V + (T_D - T_P) / 2) - F_D - D_D$$
 for Defendant.

In Stage 3, the parties must decide whether to settle the lawsuit or incur discovery costs to settle in Stage 4. The parties will be willing to settle in Stage 3 if:

(3):
$$S_3 - F_P > V - F_P - D_P - T_P$$
 and $-S_3 - F_D > -V - F_D - D_D - T_D$.

This reduces to Plaintiff accepting a settlement $S_3 > V - D_P - T_P$ and Defendant accepting a settlement $S_3 < V + D_D + T_D$. Thus, if settlement is possible, the settlement amount will equal:

(4):
$$S_3 = V + (T_D + D_D - T_P - D_P) / 2$$
, yielding payoffs of

(4a):
$$V + (T_D + D_D - T_{P} - D_P) / 2 - F_P$$
 for Plaintiff, and

(4b):
$$-(V + (T_D + D_D - T_{P} - D_P) / 2) - F_D$$
 for Defendant.

Settling in Stage 3 for S_3 strictly dominates settling in Stage 4 because (4a) > (2a) and (4b) > (2b) (recall that $D_P < D_D$): both parties prefer to settle the case early and avoid incurring discovery costs.

Step 2.

Lemma 1: If $D_{Pmax} < S_4$, Plaintiff will play D_{Dmax} and Defendant will play D_{Pmin} .

Proof. Given that the parties would prefer to settle in Stage 3, under the American rule where the judgment award does not change with litigation costs (that is, where $V = 3\mu J$), both parties would have the incentive to threaten to engage in far-reaching and costly discovery to improve their bargaining positions during settlement talks because $\delta S_3/\delta D_D > 0$, and $\delta S_3/\delta D_P < 0$. However, under one-way fee shifting these incentives are changed: because $V = \mu(3J + F_P + D_P + T_P)$, $\delta S_3/\delta D_D = 0.5$ and $\delta S_3/\delta D_P = (P-0.5)$, Defendant has a reduced ability to threaten to increase Plaintiff's litigation costs—if Plaintiff litigates the case to trial and prevails, Defendant will have to pay the increased costs it imposed upon Plaintiff. If settlement talks in Stage 3 fail, Plaintiff is not harmed by imposing costs D_{Dmax} on Defendant because $\delta S_4/\delta D_D = \delta V/\delta D_D = 0$, and so Plaintiff's threat to play D_{Dmax} during settlement talks is credible.

Defendant's threat to increase D_P beyond D_{Pmin} is rarely credible for any $\mu > 0$ —if settlement talks fail in Stage~3, Defendant has no incentive to increase Plaintiff's costs because $\delta S_4/\delta D_P = \mu$, making any increase in Plaintiff's costs costly to both Plaintiff and Defendant. Defendant will only have a credible threat to play D_{Pmax} if so doing makes Plaintiff's threat noncredible. Because Plaintiff will have a credible threat to proceed to Stage~4 if $S_4 > D_P$, Defendant can credibly threaten to play D_{Pmax} only if $D_{Pmax} > S_4$, at which point Plaintiff would drop her suit. If Defendant lacks such a credible threat, Plaintiff can threaten to play D_{Dmax} and thus increase S_3 .

Step 3. In Stage 2, the parties are willing to settle if:

(5):
$$S_2 - F_P > V - F_P - D_P - T_P$$
; and $-S_2 > -V - F_D - D_D - T_D$.

Reducing these inequalities, Plaintiff is willing to accept any S_2 greater than $V - D_P - T_P$, and Defendant will accept any S_2 less than $V + F_D + D_D + T_D$. The parties thus will settle for:

(6):
$$S_2 = V + (F_D + D_D + T_D - D_P - T_P) / 2$$
, yielding payoffs of:

(6a):
$$V + (F_D + D_D + T_D - D_P - T_P) / 2 - F_P$$
 for Plaintiff; and

(6b):
$$-(V + (F_D + D_D + T_D - D_P - T_P) / 2)$$
 for Defendant.

Settling for S_2 strictly dominates settling for S_3 because (6a) > (4a) and (6b) > (4b); therefore, the parties will settle in *Stage 2* rather than engage in discovery and proceed to *Stage 3*.

Step 4. The solution for Stage 1 is similarly straightforward; the parties will agree to settle if:

(7):
$$S_1 > V - F_P - D_P - T_P$$
; and $-S_1 > -V - F_D - D_D - T_D$.

Solving for S_1 , we find that the parties will settle for:

(8): $S_1 = V + (F_D + D_D + T_D - D_P - T_P - F_P) / 2$; yielding payoffs to Plaintiff of:

(8a):
$$V + (F_D + D_D + T_D - D_P - T_P - F_P) / 2$$
; and

(8b):
$$-(V + (F_D + D_D + T_D - D_P - T_P - F_P) / 2)$$
 for Defendant.

Thus, given symmetric information and expectations, the parties will agree to settle for S_1 prior to any litigation because (8a) > (6a) and (8b) > (6b), if Plaintiff has a credible threat to bring suit in the first place. Assuming for now that such credibility exists, when Eq. (8) is expanded to show all relevant variables, we see that:

$$S_1 = \mu (3J + F_P + D_{Pmin} + T_P) + (F_D + D_{Dmax} + T_D - D_{Pmin} - T_P - F_P) / 2$$
; reducing to:

(9):
$$S_1 = 3\mu J + (\mu - 0.5)(F_P + D_{Pmin} + T_P) + 0.5(F_D + D_{Dmax} + T_D)$$
.
O.E.D.

Proposition 2: Under certain conditions, Plaintiff can extract a settlement in excess of the expected value of her claim, even when her lawsuit overall has negative expected value. *Proof.* To find the conditions when Plaintiff's threat to bring suit is credible, and thus when Plaintiff may extract S_1 from Defendant prior to bringing suit, we again proceed by backward induction. In $Stage\ 4$, Plaintiff can only extract a settlement if she has a credible threat to litigate the case to trial, i.e., the expected verdict is greater than the trial costs. See (10a) below. In $Stage\ 3$, as stated in $Lemma\ 1$ above, Plaintiff will have a credible threat to proceed to $Stage\ 4$ if the cost of settlement, S_4 , exceeds the maximum discovery costs imposable by Defendant. See (10b) below. In $Stage\ 2$, Plaintiff always has a credible threat to proceed to $Stage\ 3$ since Plaintiff has already incurred the filing costs. In $Stage\ 1$, Plaintiff has a credible threat to proceed to $Stage\ 2$ and file a lawsuit if the cost of settlement, S_2 , exceeds the filing costs. See (10c) below. If all three conditions below are satisfied, Plaintiff's threat to litigate is credible and settling for S_1 becomes the subgame perfect solution to the game.

(10a):
$$V > T_P$$
, or $(P/(1-P))(3J + F_P + D_{Pmin}) > T_P \text{ (using Eq. } (0));$

(10b):
$$S_4 > D_{Pmax}$$
, or $(P/(1-P))(3J + F_P) + (1/2(1-P))T_D + ((2P-1)/2(1-P))T_P > D_{Pmax}$ (using Eqs. (0) and (2));

(10c):
$$S_2 > F_P$$
, or $3JP/(1-P) + ((2P-1)/2(1-P))(D_{Pmax} + T_P) + (1/2(1-P))(F_D + D_{Dmax} + T_D) > F_P$ (applying Eqs. (0) and (6)). Q.E.D.

Proposition 3: Settlements under the one-way fee shifting rule are greater than settlements under the American rule by more than the increase in expected verdict.

Proof. Under the American rule, a successful plaintiff pays for her own legal costs. Let V' denote the expected verdict and S_i' denote the settlement at stage i, i = 1, 2, 3, or 4, under the American rule. Then, proceeding as in the proof of Proposition 2 we obtain:

(11): $V' = 3\mu J$; and

(11a): $\delta V' / \delta D_D = 0$, for all D between D_{Dmin} and D_{Dmax} ; and

(11b): $\delta V' / \delta D_P = 0$, for all D between D_{Pmin} and D_{Pmax} .

Therefore, neither party's abuse (or non abuse) of discovery affects the verdict amount under the American rule. It follows that because:

(12):
$$S_3' = V' + (T_D + D_D - T_P - D_P) / 2$$
; that

(12a): $\delta S_3' / \delta D_D = 0.5$; and

(12b): $\delta S_3' / \delta D_P = -0.5$.

Each party thus has the incentive during Stage 3 to threaten to engage in abusive discovery in an attempt to increase (for Plaintiff) or decrease (for Defendant) the settlement amount. Since each party has the incentive to threaten to increase discovery costs and play D_{max} ,

Plaintiff's ability to increase the settlement amount is reduced under the American rule as opposed to the one-way fee shifting rule. Using Eq. (11) in Eq. (8) yields:

(13): $S_1' = 3\mu J + (F_D + D_{Dmax} + T_D - D_{Pmax} - T_P - F_P) / 2$; and we see that:

(13a): $S_1 > S_1'$; and

(13b): V > V'.

Combining Eqs. (0), (9), (11), and (13), it follows that:

(14):
$$(S_1 - S_1') = (V - V') + 0.5(D_{Pmax} - D_{Pmin}) > 0.$$

As shown by Eq. (14), moving from the American rule to a oneway fee-shifting rule increases settlement amounts by the amount of the expected increase in the verdict, plus half the reduction in the Plaintiff's discovery costs arising from the removal of Defendant's ability to reciprocate against an abusive discovery request.

Q.E.D.