

WHY BARRING SETTLEMENT BARS LEGITIMATE SUITS: A REPLY TO ROSENBERG AND SHAVELL

*Ted Sichelman**

Professors David Rosenberg and Steven Shavell recently proposed granting defendants an “option to bar settlement” to discourage frivolous suits filed for a mere “nuisance-value” settlement. By exercising this option, a defendant could prevent judicial enforcement of any ensuing settlement agreement between the parties. Rosenberg and Shavell contend that if courts were to foreclose settlement, a plaintiff would drop its nuisance-value suit, because its costs of litigating to judgment would exceed its expected benefits. They conclude that because defendants would only exercise the option if faced with a nuisance-value suit, adopting it would be socially beneficial. Although an option to bar settlement is an innovative proposal and an important scholarly contribution, this Article shows that it could be highly problematic. First, a defendant would often exercise the option in small-stakes, high-cost, meritorious suits, which would decrease social welfare. Second, the option would fail to prevent many high-stakes, low-cost, frivolous suits. Finally, Rosenberg and Shavell’s analysis depends on a problematic definition of “nuisance suit,” questionable simplifying assumptions, and speculative, empirical assertions. In sum, without additional investigation, it would be folly to adopt an option to bar settlement.

| | |
|--|----|
| INTRODUCTION | 58 |
| I. ROSENBERG AND SHAVELL’S ANALYSIS: OFF-THE-CUFF | |
| ASSUMPTIONS | 64 |
| A. <i>Dubiously Defining “Nuisance Suit”</i> | 64 |
| B. <i>An Unbalanced Model of Litigation</i> | 75 |
| C. <i>Omniscient Parties and Lackadaisical Litigants</i> | 80 |
| 1. <i>Estimating Probabilities of Success</i> | 81 |
| 2. <i>Forecasting Litigation Costs</i> | 83 |

* Kauffman Foundation Legal Research Fellow, University of California, Berkeley, School of Law. J.D., Harvard Law School; M.S., Florida State University; A.B., Stanford University. I am grateful to Michael Abramowicz, Miriam Bitton, Robert Bone, Jack Lerner, Lance McMillian, Paul Pecorino, Brian Slocum, and Megan H. Williams for helpful comments. George Wilson of the Stanford Law School Library and Stephen Ullmer provided generous research assistance.

3. The Obscuring Effects of Information Gaps and Asymmetries 84

II. ADOPTING AN OPTION TO BAR SETTLEMENT IS PREMATURE 88

 A. *Ungrounded Empirical Speculation* 88

 B. *Not So Many Caveats* 91

CONCLUSION 93

INTRODUCTION

Defendants often settle frivolous suits because litigation is not costless.¹ In the face of litigation defense costs that roughly equal or exceed the amount of a plaintiff’s settlement demand—and a credible threat from the plaintiff that the defendant will actually incur those costs—the defendant will ordinarily concede to settlement, regardless of the relative merits of the plaintiff’s case. Otherwise, the defendant would pay just as much (or more) in litigation costs in order to defend the suit for the mere prospect of paying no damages. In more tangible terms, if it regularly costs \$150 to defend a meritless \$50 traffic ticket, a disgruntled driver would remit his money to the city coffers, no questions asked.²

Over the years, there have been numerous efforts to deter frivolous litigation:³ fee-shifting is now available in many classes of federal and

¹ In addition to filing suits to extract “nuisance-value settlements,” plaintiffs may also bring frivolous suits because of an expectation that a judge or jury will err in the plaintiff’s favor, especially if the plaintiff is able to hide evidence or convincingly lie, and because of an expectation that the defendant will err in its estimation of the plaintiff’s chance of success or other key settlement factors. *See, e.g.*, ERIC RASMUSEN, GAMES AND INFORMATION: AN INTRODUCTION TO GAME THEORY 103 (3d ed. 2001) [hereinafter RASMUSEN, GAMES]; Avery Katz, *The Effect of Frivolous Lawsuits on the Settlement of Litigation*, 10 INT’L REV. L. & ECON. 3, 3 (1990); Charles M. Yablon, *The Good, the Bad, and the Frivolous Case: An Essay on Probability and Rule 11*, 44 UCLA L. REV. 65, 70 n.12 (1996). For a concise discussion of other factors contributing to frivolous litigation, including information asymmetry between the parties, contingent fee relationships, party reputation issues, and the divisibility of a plaintiff’s litigation costs, see Lucian Bebchuk, *Suits with Negative Expected Value*, in 3 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 551, 552–54 (Peter Newman ed., 1998) [hereinafter Bebchuk, *Negative Expected Value*].

² Of course, this hypothetical assumes that the government will not settle the case for any amount less than fifty dollars. While this assumption seems reasonable, nuisance-value settlements can of course occur in more complex scenarios. *See infra* notes 82–90 and accompanying text.

³ *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, 372 n.3 (1996) (noting the use of fee-shifting proposals to discourage frivolous suits); Robert G. Bone, *Modeling Frivolous Suits*, 145 U. PA. L. REV. 519, 521 n.4, 587–93 (1997) (discussing proposals for stricter pleading requirements and sanctions); Katz, *supra* note 1, at 17–19 (analyzing the effects of fee shifting on frivolous suits).

state cases,⁴ stricter pleading requirements apply to more claims and defenses,⁵ and a strengthened Federal Rule of Civil Procedure 11 and similar state laws threaten parties and attorneys with sanctions for filing meritless pleadings.⁶ Nonetheless, though the empirical data is limited,⁷ there is a widespread belief that frivolous suits continue to clog the courts.⁸

In a recent article, Professors David Rosenberg and Steven Shavell make an important contribution to the literature by proposing an “option to bar settlement” as a new solution to the problem of “nuisance suits.”⁹ This option is a right always granted to a defendant to demand that the court not enforce any ensuing settlement agreement between the plaintiff and defendant.¹⁰ Once the defendant exercises its option, which is irrev-

⁴ In federal court, there are numerous fee-shifting statutes. Although slightly out of date, the appendix to *Marek v. Chesny* enumerates a list of more than 100 federal fee-shifting provisions. 473 U.S. 1, 43–51 (1985) (Brennan, J., dissenting). For a similarly dated yet exhaustive tally and general description of state fee-shifting statutes, see Note, *State Attorney Fee Shifting Statutes: Are We Quietly Repealing the American Rule?*, 47 LAW & CONTEMP. PROBS. 321, 328–45 (1984) (documenting a total of nearly 2,000 state fee-shifting provisions).

⁵ See, e.g., Private Securities Litigation Reform Act of 1995, 15 U.S.C. § 78u-4(b)(2) (2000) (heightening pleading standards to deter certain securities actions); Prison Litigation Reform Act of 1995, Pub. L. No. 104-134, §§ 801–810, 110 Stat. 132, 1321-66 to 1321-77 (codified as amended in scattered sections of 18 U.S.C., 28 U.S.C., and 42 U.S.C. (1996)) (heightening pleading standards for frivolous prisoner suits); *Bell Atl. Corp. v. Twombly*, 550 U.S. 544 (2007) (rejecting a very liberal view of pleading standards under FED. R. CIV. P. 8 and *Conley v. Gibson*, 355 U.S. 41, 45 (1957)); *Ferguson Beauregard/Logic Controls v. Mega Sys, LLC*, 350 F.3d 1327, 1344 (Fed. Cir. 2003) (“[I]n contrast to the willfulness claim discussed above, inequitable conduct, while a broader concept than fraud, must be pled with particularity.”).

⁶ See FED. R. CIV. P. 11 advisory committee’s note (1983) (noting the goals of reducing frivolous claims and defenses). The 1993 amendments to Rule 11 slightly loosened the stricter requirements of the 1983 amendments, but the primary aim of Rule 11 has always been to deter frivolous and unfounded filings. See FED. R. CIV. P. 11 advisory committee’s note (1993); see also Byron C. Keeling, *Toward a Balanced Approach to ‘Frivolous’ Litigation: A Critical Review of Federal Rule 11 and State Sanction Provisions*, 21 PEPP. L. REV. 1067, 1073 n.25 (1994) (listing state provisions similar to Rule 11 designed to prevent frivolous suits and filings).

⁷ See e.g., Bone, *supra* note 3, at 596 (“[W]e have no hard empirical evidence bearing on the nature or seriousness of the problem [of frivolous litigation].”).

⁸ See, e.g., *id.* at 520 nn.1–2, 521 (1997) (contending there is a “widespread belief that frivolous litigation is out of control” and relying upon numerous sources); Marc Galanter, *Planet of the APs: Reflections on the Scale of Law and Its Users*, 53 BUFF. L. REV. 1369, 1412 (2006) (describing the “familiar belief that the U.S. is overflowing with frivolous litigation”); Chris Guthrie, *Framing Frivolous Litigation: A Psychological Theory*, 67 U. CHI. L. REV. 163, 163–64 (2000); Deborah L. Rhode, *Frivolous Litigation and Civil Justice Reform: Miscasting the Problem, Recasting the Solution*, 54 DUKE L.J. 447, 449 (2004) (“Americans are in widespread agreement that the nation has too much frivolous litigation . . .”). *But cf.* Rhode, *supra*, at 453–54 (contesting the common view that frivolous litigation is rampant).

⁹ David Rosenberg & Steven Shavell, *A Solution to the Problem of Nuisance Suits: The Option to Have the Court Bar Settlement*, 26 INT’L REV. L. & ECON. 42 (2006) [hereinafter Rosenberg & Shavell, *Option to Bar Settlement*].

¹⁰ See *id.* at 43.

ocable, any purported settlement of the suit will have no effect.¹¹ With settlement foreclosed, the plaintiff must withdraw, the defendant must default, or the parties must litigate the case to judgment.¹² Rosenberg and Shavell argue that if the plaintiff's expected return from judgment is less than its projected litigation costs, then the plaintiff would no longer have a rational incentive to pursue the lawsuit.¹³ In this event, the plaintiff would drop out of the case, sparing the defendant a nuisance settlement.¹⁴ Indeed, on this reasoning, if the plaintiff knew before filing suit that the defendant could bar settlement, then the plaintiff would never file in the first place.¹⁵

Although Rosenberg and Shavell's argument might initially seem appealing, a closer examination belies the rigor of their analysis and assumptions.¹⁶ First, they adopt a definition of nuisance suit that is both over- and under-inclusive. In particular, they effectively define nuisance suit as any case a plaintiff is "unwilling to pursue . . . to trial" because the costs of doing so exceed the expected judgment.¹⁷ Their definition is over-inclusive because it includes cases in which the plaintiff has a meritorious suit (even a 100% chance of winning), but its litigation costs exceed any potential judgment. Most of these cases are hardly "nuisances," in the sense that they should be barred rather than immediately settled.¹⁸ Their definition is also under-inclusive because it excludes suits in which a plaintiff has a mostly "frivolous" case (e.g., a 0.5%

¹¹ See *id.* at 42–43.

¹² See *id.* at 43.

¹³ See *id.*

¹⁴ See *id.*

¹⁵ See *id.* One might ask why defendants cannot simply make it a policy to refuse to settle any case they know is a nuisance suit, thereby rendering any option to bar settlement unnecessary. On the one hand, although a defendant may be able to put some pressure on a plaintiff to drop its case by refusing to settle, unless the defendant can irrevocably commit to such a stance, a plaintiff will typically be able to make a credible threat that the defendant must incur some litigation costs to force the plaintiff to withdraw. See *infra* Part I.B. Thus, a defendant will usually settle for up to the amount of those costs. See *id.* On the other hand, if the defendant receives some external benefit that outweighs these costs, such as reputational benefits spread across many cases, then it will be able to force the plaintiff to drop its case by refusing to settle. See *infra* note 68 and accompanying text.

¹⁶ To date, no commentator has thoroughly critiqued Rosenberg and Shavell's proposal and related analysis. Lance McMillian provides a brief assessment in the broader context of proposing a "Nuisance Litigation Sanctions Act," but notes that his purpose "is not to analyze [Rosenberg and Shavell's] proposal in-depth." Lance P. McMillian, *The Nuisance Settlement "Problem": The Elusive Truth and a Clarifying Proposal*, 31 AM. J. TRIAL ADVOC. 221, 267, 274–79, 280 nn.137–48 (2007) (citing an earlier version of this Article); see also Andrew F. Daughety & Jennifer F. Reinganum, *Settlement*, in 10 ENCYCLOPEDIA OF LAW AND ECONOMICS: PROCEDURAL LAW AND ECONOMICS (2d ed. 2008) (evaluating Rosenberg and Shavell's proposal in a few sentences).

¹⁷ Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 42; see also *infra* Part I.A.

¹⁸ See *infra* Part I.A.

chance of winning), but the potential judgment is so large (e.g., \$1 billion) compared to litigation costs (e.g., \$4 million), that the plaintiff would be motivated to litigate to judgment. These suits usually are “nuisances.”¹⁹ Because a defendant will exercise an option to bar settlement precisely when a case falls under Rosenberg and Shavell’s flawed definition of nuisance suit, the option discourages socially beneficial suits characterized by small stakes and high costs, and fails to prevent socially harmful, low-cost suits with large stakes. Indeed, using Rosenberg and Shavell’s own model of litigation, this Article formally proves these results.²⁰

Second, Rosenberg and Shavell make unrealistic assumptions about the timing of the parties’ litigation costs, leading them to predict a greater incentive for the defendant to settle weak cases than actually exists.²¹ One particularly problematic aspect of their model is that once a plaintiff files a suit, a defendant will pay for *all* of its own litigation costs *before* the plaintiff pays for *any* of its own litigation costs (other than filing costs).²² Thus, the defendant is faced with significant immediate costs in the absence of any counterbalancing costs for the plaintiff. Because Rosenberg and Shavell unrealistically predict that the defendant must immediately spend large sums in defense, they inappropriately bolster their argument that an option to bar settlement is desirable.

Third, Rosenberg and Shavell assume that it is socially optimal for a plaintiff filing a non-nuisance suit to net an amount between its expected and requested damages,²³ but a plaintiff filing a nuisance suit to net nothing.²⁴ This binary reasoning assumes that allowing a nuisance suit to go forward is less optimal than barring it and, in so doing, inappropriately obscures the probabilistic nature of optimal compensation and deterrence. Putting aside litigation costs, suppose that based on all of the available evidence in an oil spill action worth \$10 million in damages, there is a 40% chance that a jury would find the crew negligently operated the tanker. According to Professor Shavell’s well-known primer, *Economic Analysis of Accident Law*, optimal deterrence occurs in this case if the defendant pays exactly \$4 million.²⁵ Thus, despite a plain-

¹⁹ See *id.*; cf. Lucian Arye Bebchuk, *Suing Solely to Extract a Settlement Offer*, 17 J. LEGAL STUD. 437, 437 (1988) [hereinafter Bebchuk, *Settlement Offer*] (defining a “frivolous” suit as one in which “the chances of winning a trial are small”).

²⁰ See *infra* Part I.A.

²¹ See *infra* Part I.B.

²² Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 44–45.

²³ For suits that are not nuisances, Rosenberg and Shavell predict that the plaintiff will receive the lesser of (1) its requested damages or (2) the defendant’s total litigation costs plus the plaintiff’s expected award at judgment. See *id.* at 48.

²⁴ See *id.* at 43, 48.

²⁵ Specifically, 40% of \$10 million is \$4 million, so \$4 million would be the amount of optimal deterrence, according to Shavell. See STEVEN SHAVELL, *ECONOMIC ANALYSIS OF AC-*

tiff's potential lack of incentives to litigate such a case to judgment—e.g., because the costs of doing so are \$15 million—a nuisance suit settlement of exactly \$4 million would achieve an ideal outcome, while barring suit by barring settlement would not. Generally, it is misguided to use the plaintiff's incentive to litigate to judgment as a proxy for the net social benefit from barring the suit.²⁶ As demonstrated below, there are many cases fitting Rosenberg and Shavell's nuisance suit definition—including ones in which the plaintiff's probability of success is significantly less than 50%—such that filing and immediate settlement increase social welfare.²⁷

Finally, other problematic theoretical assumptions and empirical assertions further limit the usefulness of Rosenberg and Shavell's analysis. For instance, they assume that the parties are risk neutral and have complete knowledge of their litigation costs and probabilities of success on the merits. They also assume that the amount spent on litigation costs is exogenous and, consequently, independent of the parties' probabilities of winning. Moreover, Rosenberg and Shavell implicitly assume that there is no agency problem between a party and its lawyer.²⁸ Relaxing any of

CIDENT LAW 115–18 (1987) [hereinafter SHAVELL, ACCIDENT LAW]; see also David Rosenberg, *The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System*, 97 HARV. L. REV. 851, 866 (1984). This result assumes that there are no litigation costs actually incurred, there is no uncertainty in the probability estimate of negligence, there are no decisional errors on the part of the judge or jury, the substantive and procedural law are optimal, no added deterrence is required (e.g., to compensate for under-enforcement), there are no positive externalities from a judicial or jury decision, and fairness is irrelevant. Introducing any of these often-significant factors could of course change the optimal outcome. See, e.g., Michael Abramowicz, *A Compromise Approach to Compromise Verdicts*, 89 CAL. L. REV. 239 (2001) (evaluating in detail Rosenberg's, Shavell's, and others' proposals for proportional liability). Notwithstanding these additional factors, this example shows that Rosenberg and Shavell's predictions do not hold even under their own model and assumptions. See generally *infra* Part I.A.

²⁶ See, e.g., Robert D. Cooter & Daniel L. Rubinfeld, *Economic Analysis of Legal Disputes and Their Resolution*, 27 J. ECON. LIT. 1067, 1089 (1989) ("When trial costs are substantial, the private net benefit from trial may be negative . . . even though the social gain from deterring injurers is large."); Steven Shavell, *The Social Versus the Private Incentive to Bring Suit in a Costly Legal System*, 11 J. LEGAL STUD. 333, 334 (1982) ("It may be that the social benefit exceeds the private benefit, that is, suit may lead to a reduction in losses caused by potential defendants that is greater than a plaintiff's expected gains . . ."); *id.* at 336 (noting that high legal expenses for the plaintiff and a low level of loss may result in a situation "where it would be desirable for suit to occur but it does not").

²⁷ See *infra* Part I.A. In a co-authored article written in 2004, Rosenberg apparently recognized as much for "negative expected value" suits that, like Rosenberg and Shavell's definition of nuisance suits, are defined as ones for which a plaintiff's expected award at judgment is less than the plaintiff's post-filing litigation costs. Randy J. Kozel & David Rosenberg, *Solving the Nuisance-Value Settlement Problem: Mandatory Summary Judgment*, 90 VA. L. REV. 1849, 1904 (2004) ("Whether [negative expected value suits are] socially desirable or undesirable is an open question depending on whether a particular type of negative expected value litigation delivers net deterrence benefits . . .").

²⁸ For instance, a contingent fee arrangement or simply a lawyer's incentive to continue billing on a matter will generally create such a distortion, especially in class actions. See, e.g.,

these additional assumptions can, depending on the values of the variables involved, make the effects of an option to bar settlement drastically different from those Rosenberg and Shavell predict.²⁹

In sum, Rosenberg and Shavell's analysis is too simplified to be reliable. Although their proposal is innovative³⁰ and may indeed be better than the status quo or other solutions to the problem of nuisance suits (e.g., fee-shifting), further analytical and empirical investigation is necessary to determine whether it would be socially beneficial. Although this seems a formidable task,³¹ it may be feasible in fields such as patent and medical malpractice litigation, where data collection has been relatively robust.³²

RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 614 (7th ed. 2007); STEVEN SHAVELL, *FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW* 435–37 (2004) [hereinafter SHAVELL, *FOUNDATIONS*]; Bone, *supra* note 3, at 541 n.78; Katz, *supra* note 1, at 14; Kathryn E. Spier, *Litigation*, in 1 *HANDBOOK OF LAW AND ECONOMICS* 308–11 (A. Mitchell Polinsky & Steven Shavell eds., 2007). Given the recurring allegations that plaintiffs often bring nuisance suits in the context of contingent fee and class action litigation, the effects of agency distortions are particularly important. See, e.g., Zhiqi Chen, *Nuisance Suits and Contingent Attorney Fees*, 2 *REV. L. & ECON.* 363 (2006); Amy Farmer & Paul Pecorino, *Negative Expected Value Suits in a Signaling Model*, 74 *S. ECON. J.* 434, 443–44 (2007); Yablon, *supra* note 1, at 73–75. But see Kevin M. Clermont & John D. Currihan, *Improving on the Contingent Fee*, 63 *CORNELL L. REV.* 529, 532 (1978) (asserting that contingent fee arrangements may reduce frivolous filings); Kozel & Rosenberg, *supra* note 27, at 1879–90 (challenging in certain respects the “conventional assumption” of the “contribution of class actions to the nuisance-value settlement problem”). Unless stated otherwise, this Article assumes that parties pay their attorneys by the hour.

²⁹ See *infra* Part I.C.

³⁰ Rosenberg and Shavell's suggestion stems from the literature on the well-known phenomenon that a party (and society) may benefit from foreclosing *ex ante* otherwise available *ex post* choices. See Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 43. Nonetheless, and despite the fact that it is related to a proposal of Ayres and Madison regarding injunctions, it appears to be a novel approach to barring nuisance suits. See Ian Ayres & Kristin Madison, *Threatening Inefficient Performance of Injunctions and Contracts*, 148 *U. PA. L. REV.* 45, 106–08 (1999); cf. Lucian Bebchuk, *A New Theory Concerning the Credibility and Success of Threats to Sue*, 25 *J. LEGAL STUD.* 1, 24 (1996) [hereinafter Bebchuk, *Credibility and Success*] (recognizing that a commitment by the defendant to reject any settlement offer made by the plaintiff would “eliminate the plaintiff's ability to extract a settlement in a [negative expected value] suit”); Katz, *supra* note 1, at 16 (noting that a ban on settlement would eliminate incentives to bring nuisance suits); Kozel & Rosenberg, *supra* note 27, at 1853 (proposing “precluding judicial enforcement of any settlement agreement entered into before the relevant claim or defense has been submitted for merits review on summary judgment”).

³¹ See Bone, *supra* note 3, at 528; McMillian, *supra* note 16, at 234–38 (commenting on the difficulty of doing empirical research on nuisance-value suits).

³² AM. INTELL. PROP. LAW ASS'N, *REPORT OF THE ECONOMIC SURVEY* (2007) (providing data on litigation costs for various types of intellectual property suits); LEGALMETRIC, *LEGALMETRIC NATIONAL PATENT LITIGATION REPORT* (2008) (disclosing detailed statistics on patentee win rates at preliminary injunction, summary judgment, and trial stages), available at <http://www.legalmetric.com/NewProducts/> (last visited Jan. 17, 2009); David A. Hyman & Charles Silver, *Believing Six Improbable Things: Medical Malpractice and “Legal Fear,”* 28 *HARV. J.L. & PUB. POL'Y* 107, 109 n.10 (2004) (listing empirical studies of medical malpractice litigation).

This Article comprises two parts. Part I summarizes and critiques the assumptions and implications of Rosenberg and Shavell's analysis. Specifically, it discusses problematic aspects of their definition of "nuisance suit," model of litigation and settlement, assumption of complete party knowledge, and adoption of exogenously determined variables, such as litigation costs and the plaintiff's probability of success at judgment. Part II contends that adopting an option to bar settlement would be premature and concludes by suggesting important areas for further analysis and empirical study of nuisance-value suits.

I. ROSENBERG AND SHAVELL'S ANALYSIS: OFF-THE-CUFF ASSUMPTIONS

A. *Dubiously Defining "Nuisance Suit"*

Rosenberg and Shavell's analysis takes its first missteps with their definition of a nuisance suit. According to them, a nuisance suit is "a legal action in which the plaintiff's case is sufficiently weak that he would be unwilling to pursue it to trial."³³ This definition is ambiguous. In particular, does the phrase "sufficiently weak" in their definition imply that the plaintiff must have a low probability of winning *and* no incentive to litigate to judgment, or just the latter condition? In a 1985 article on frivolous suits, Rosenberg and Shavell clearly intended the former option—that is, a nuisance suit must exhibit two independent characteristics, a low probability of success (apparently, less than 50%) and total plaintiff litigation costs greater than the expected judgment.³⁴ In their 2006 article at issue here, however, they make no such explicit distinction.³⁵ Rather, they appear to assume that a nuisance suit occurs if the value of the plaintiff's "expected judgment from litigation" is less than the plaintiff's "litigation costs," regardless of the plaintiff's

³³ Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 42.

³⁴ See David Rosenberg & Steven Shavell, *A Model in Which Suits are Brought for Their Nuisance Value*, 5 INT'L REV. L. & ECON. 3, 3 (1985) [hereinafter Rosenberg & Shavell, *Nuisance Model*] ("[I]n addition to that of the nuisance suit . . . are those where the plaintiff's case is 'meritorious'—*he would be likely to prevail at trial*—but he would still not want to go to trial because the litigation costs would exceed the expected judgment . . ." (emphasis added)); *id.* at 11 n.12 (noting that a plaintiff may not have sufficient incentive to litigate to judgment either "if p is sufficiently low (the typical nuisance suit), or for high p if [the judgment award] is sufficiently low (the meritorious suit not worth bringing)"); *cf.* Kozel & Rosenberg, *supra* note 27, at 1851 (limiting a "nuisance-value settlement" to a "meritless claim or defense that both parties know the court would readily dismiss as 'untrialable'").

³⁵ Although Rosenberg and Shavell provide examples in their informal analysis in which a nuisance suit (a "weak" case) has a probability of success of 1% and a "strong" case has a probability of 60%, it is unclear whether "weak" and "strong" refer to the probability of success on the merits, the plaintiff's willingness to litigate to judgment, or a combination of the two factors. See Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 44–46. More importantly, in their formal analysis, they make no distinction between high and low probability suits in analyzing the effects of an option to bar settlement. See *id.* at 47.

probability of success.³⁶ In any event, Rosenberg and Shavell propose to grant a defendant an option to bar settlement for all cases.³⁷ Yet, the defendant would rationally exercise the option exactly when the plaintiff does not have sufficient incentive to litigate to judgment, regardless of the plaintiff's chances of winning the suit.³⁸ Thus, for the practical purpose of analyzing their proposal, their definition includes meritorious suits.³⁹

This expansive description of a nuisance suit fails to capture precisely those suits that plaintiffs should be discouraged from filing. In particular, Rosenberg and Shavell's definition inappropriately encompasses socially beneficial suits (of both high and low probability) that are stymied by high litigation costs and small potential damage awards (or hard-to-quantify injunction values).⁴⁰ At the same time, their definition neglects frivolous (i.e., very low probability) suits that large potential damage awards and low litigation costs encourage.⁴¹

³⁶ See *id.* ("Assume that plaintiff P would be unwilling to litigate—his expected judgment pw is less than his litigation cost c_P In the absence of the opportunity to have the court bar settlement, P will bring a nuisance suit"); *id.* at 43 ("As we also explain, the defendant would not exercise the option to bar settlement when he believes that the plaintiff is not bringing a nuisance suit and would be willing to proceed to trial."). This is borne out even more by their statement, "but [the option] will not be problematic otherwise, as it will not be exercised and will have no effect on the bringing or the settlement of strong suits, which would go trial if not settled." *Id.* at 46. If "strong suit" merely refers to the probability of plaintiff's success at judgment, this statement would be entirely incorrect, since plaintiffs with high probability suits might not have sufficient incentive to pursue a case to trial. See, e.g., Rosenberg & Shavell, *Nuisance Model*, *supra* note 34, at 11 n.12. Thus, "strong suit" must refer merely to a suit that a plaintiff would rationally litigate to judgment and "nuisance suit" must refer to all other suits, regardless of a suit's probability of success on the merits.

³⁷ See Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 48–49.

³⁸ See *id.*

³⁹ There is no scholarly consensus on the definition of a meritorious suit. See, e.g., Bone, *supra* note 3, at 533; Frederick C. Dunbar et al., *Shareholder Litigation: Deterrent Value, Merit and Litigants' Options* 25 (Washington University John M. Olin School of Business, Paper 95-07-a, 1995), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=10181 (last visited Jan. 17, 2009); Peter H. Huang, *Lawsuit Abandonment Options in Possibly Frivolous Litigation Games*, 23 REV. LITIG. 47, 59–60 (2004); Warren F. Schwartz & C. Frederick Beckner, *Toward a Theory of the "Meritorious" Case: Legal Uncertainty as a Social Choice Problem*, 6 GEO. MASON L. REV. 801, 801 (1998); Yablon, *supra* note 1, at 65–67. Whatever one's definition, Rosenberg and Shavell's definition of a nuisance suit includes suits with a probability of success well over 50%. See *infra* notes 55–60 and accompanying text.

⁴⁰ For instance, many environmental and civil rights actions aim merely to impose an injunction on a defendant's behavior in order to remedy non-pecuniary losses. Although the cost of a defendant's compliance with an injunction might be viewed as akin to a "damage award," the benefits to society and a plaintiff will typically diverge from any such quantification, making it difficult to categorize these types of actions. See, e.g., SHAVELL, ACCIDENT LAW, *supra* note 25, at 134–35; Bone, *supra* note 3, at 530 n.44.

⁴¹ Scholars have regularly debated the appropriate definitions of "frivolous" and "meritorious" suits. See *supra* note 39. For ease of exposition, unless otherwise noted, the term "frivolous" herein refers to a suit of negligible probability of success.

A few concrete examples suffice to show the definition's weakness. Suppose the potential plaintiff, Mary, is a musician who sells her songs online for \$1.00 each. An unscrupulous web company, Crookster, pilfers Mary's songs and sells them for \$0.50 each to unsuspecting buyers. After three years, Mary learns of Crookster's behavior. She reckons she has lost \$45,000 in potential profits. (Unfortunately, any injunction value is now worthless, because over the three-year period, Mary's popularity faded.) A copyright litigator tells Mary that she has virtually a 100% chance of winning the case, but litigating it to judgment will cost \$50,000 for each party involved. Moreover, the litigator informs Mary that there is no possibility of recovering any attorneys' fees or costs.⁴²

Under Rosenberg and Shavell's expansive definition, a claim filed by Mary against Crookster would be a nuisance suit, because the expected value of judgment of \$45,000 is less than her expected litigation costs of \$50,000. Yet, it is clear that Crookster engaged in wrongful behavior and that Mary has a meritorious suit. In a world of optimal compensation and deterrence,⁴³ Mary would net exactly her damages, Crookster would pay (in costs and damages) the amount of monetary harm it caused (or possibly more, for deterrence purposes), and society would incur no net costs.⁴⁴ In particular, Mary would net \$45,000, Crookster would pay \$45,000 (or more), and the courts and parties would spend nothing on litigation costs.⁴⁵ Under Rosenberg and Shavell's model of how settlement proceeds in the absence of an option to bar settlement, a "nuisance suit" filed by Mary would in fact yield a result

⁴² In actual copyright suits, there is a means to obtain attorneys' fees for unreasonable or frivolous suits. See 17 U.S.C. § 505 (2000). To conform to Rosenberg and Shavell's model, this Article has excluded the possibility of fee-shifting. See Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 43–49.

⁴³ "Optimal compensation and deterrence" here refers to those litigation outcomes that (1) maximize the net social benefits of both the compensatory and the deterrent aims of the substantive law at issue; and (2) minimize net social costs. See generally ROBERT COOTER & THOMAS ULEN, *LAW & ECONOMICS* 416–18 (5th ed. 2008); SHAVELL, *ACCIDENT LAW*, *supra* note 25, at 231–35; SHAVELL, *FOUNDATIONS*, *supra* note 28, at 515–26; Rosenberg, *supra* note 25, at 861–62.

⁴⁴ See generally Bone, *supra* note 3, at 565; A. Mitchell Polinsky & Daniel L. Rubinfeld, *The Welfare Implications of Costly Litigation for the Level of Liability*, 17 J. LEGAL STUD. 151, 151 (1988) ("[A]ssuming litigation is costless, the rule of strict liability with compensatory damages leads the injurer to choose the appropriate level of care."). Even if no additional deterrence is required, some scholars have argued that optimal compensation and deterrence values should be "decoupled" in order to lower total social costs by reducing the total number of cases filed. See, e.g., A. Mitchell Polinsky & Yeon-Koo Che, *Decoupling Liability: Optimal Incentives for Care and Litigation*, 22 RAND J. ECON. 562, 562–63 (1991). The proposition in the text applies only if total litigation costs are zero, which this Article generally assumes throughout the analysis, because with complete information parties will immediately settle their cases, effectively incurring no costs. See *infra* note 51 and accompanying text.

⁴⁵ See SHAVELL, *FOUNDATIONS*, *supra* note 28, at 284–85. This Article assumes that Crookster and similarly situated defendants would stop their infringing activities in the face of optimal penalties.

quite near to the socially optimal one.⁴⁶ If Mary brought suit in federal court, she would incur \$350 in filing costs.⁴⁷ Assume Mary then demands \$50,000 from Crookster and Crookster's lawyer determines that litigating the case to judgment will cost \$50,000. Using Rosenberg and Shavell's settlement model, Crookster would choose not to litigate and would pay Mary \$50,000.⁴⁸ In this instance, Mary nets \$49,650, Crookster pays \$50,000, and administrative costs are close to zero (\$350 in Mary's filing fees, which presumably cover the court's minimal expenses of docketing the case and issuing a consent judgment). Given that the outcome of Mary's suit is nearly identical to the socially optimal response to the harm caused by Crookster, one can hardly term the suit—and ensuing settlement—a “nuisance.”⁴⁹

⁴⁶ See Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 43–49. In their model, they assume (explicitly and implicitly) that the parties have complete knowledge of the relevant variables (which are exogenously determined), the parties are risk neutral, there is no fee-shifting, the litigants make personally optimal decisions, the plaintiff holds all the bargaining power, the cost of settling is nothing, there is no decisional error on the part of the court or jury, the parties incur no legal representation costs, there are no externalities, and the discount rate is zero. See *id.*

⁴⁷ See 28 U.S.C. § 1914 (2000). Filing may also incur attorneys' fees and related costs of pre-filing investigation, formulating and drafting a complaint, and attorney-client communication. Like Rosenberg and Shavell, this Article assumes that these pre-filing costs are effectively incorporated into the total filing costs, unless otherwise noted. See Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 47, 49 & n.9.

⁴⁸ This Article generally assumes, as do Rosenberg and Shavell, that there is one judgment phase and one associated probability of success. See Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 44–45 & figs.1 & 2. Of course, summary judgment, trial, and appeals all function as separate judgment phases, with associated probabilities of success. A more sophisticated model would take account of these multiple judgment phases. Additionally, this Article assumes, again as do Rosenberg and Shavell, that the substantive law applied to a given case is optimal, in the sense that optimal compensation and deterrence outcomes cannot be improved by altering the applicable substantive law. See *id.* In this regard, it is important to recognize that Rosenberg and Shavell, as well as this Article, assume that—in the absence of litigation costs and decisional error—optimal compensation and deterrence result from proportional liability. See *supra* note 25. Of course, the current American system is a “winner-take-all” one, and there is a vast amount of literature evaluating the merits of this and other approaches. See generally Abramowicz, *supra* note 25 (examining the literature and tentatively proposing a “mixed verdict” system). Moreover, because of the uncertainty inherent in essentially all litigation, optimal litigation outcomes in practice will always depend on the procedural rules in place. See Joseph A. Grundfest & Peter H. Huang, *The Unexpected Value of Litigation*, 58 STAN. L. REV. 1267, 1281, 1320–21 (2006). This means that substantive optimality cannot be divorced from procedural optimality. See *id.* These complicating factors, of course, cast additional doubt on Rosenberg and Shavell's conclusions.

⁴⁹ In his brief discussion of Rosenberg and Shavell's proposal, McMillian concludes, “In the option to bar settlement's favor, its limited application would not cause the disruption of non-nuisance civil litigation.” McMillian, *supra* note 16, at 278. McMillian is probably correct as an empirical matter that many defense attorneys would be averse to foreclosing settlement. See *infra* note 108 and accompanying text. Nonetheless, in meritorious cases involving small-stakes and large costs like the Mary-Crookster hypothetical, arguably, defense attorneys would often exercise the option. In particular, if the defendant knows it is very likely to lose at trial—and there is not much uncertainty in its knowledge—then it would have a strong incentive to settle the case to save on litigation costs. This is especially so if its costs of discovery

If the court had provided Crookster with an option to bar settlement of the type envisioned by Rosenberg and Shavell, Mary would have never brought suit at all.⁵⁰ In this instance, other than for minimal court costs,⁵¹ the deviation from the optimal outcome is striking: Mary is woefully undercompensated and Crookster is grossly under-deterred. Thus, Rosenberg and Shavell overlook the fact that the option to bar settlement enables defendants to prevent highly meritorious, socially beneficial suits⁵² for which the plaintiff does not have a sufficient incentive to litigate to judgment.⁵³ In fact, using Rosenberg

are much higher than the plaintiff's. See *infra* notes 78–80 and accompanying text. If the defendant can tie its own hands by exercising the option, it can force the plaintiff to expend significant sums to win at trial. Although the plaintiff could attempt to bluff the defendant, it is likely that the plaintiff would be more risk averse than the defendant, and—as Rosenberg and Shavell predict—would drop the case. Thus, McMillian's conclusion that “even a small benefit could justify implementing the Rosenberg-Shavell model” should be discounted. McMillian, *supra* note 16, at 278; cf. Daughety & Reinganum, *supra* note 16, at 89 (finding that Rosenberg and Shavell's “procedure would facilitate the deterrence of even valid [negative expected value] suits (not just frivolous suits)”).

⁵⁰ One might wonder whether Mary can force Crookster to pay a secret side-payment settlement, which would effectively nullify the effects of the option to bar settlement. As Rosenberg and Shavell contend, “such a settlement would be valueless for the defendant,” because it would not legally bind the parties. Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 45 n.6. However, if there were some means to effectively enforce such a settlement—for instance, by “washing” it through an unrelated contractual transaction between the parties—the exercise of the option would have no effect. See generally Bone, *supra* note 3, at 584.

⁵¹ Generally, society (excluding Mary) bears none of the costs of Mary's suit, since it immediately settles. In addition, the relative social optimality of Mary's suit is reflected in its net compensation and deterrence values, which encompass her filing costs. Thus, unless the net compensation and deterrence values with the option differ from the values without the option by an amount close to the total filing costs, these costs can effectively be ignored. Note that in a situation of complete party knowledge, the parties would more realistically settle before either party files suit, eliminating the filing costs entirely. See, e.g., Bone, *supra* note 3, at 538 n.70; Kozel & Rosenberg, *supra* note 27, at 1857 n.13; Rosenberg & Shavell, *Nuisance Model*, *supra* note 34, at 9.

⁵² For instance, in Rosenberg and Shavell's informal analysis, they only consider a nuisance suit that has a mere 1% probability of success on the merits. Rosenberg & Shavell, *Nuisance Model*, *supra* note 34, at 43–46. In their formal analysis, they implicitly assume that barring nuisance suits is socially optimal without formally testing the assertion. See *id.* at 46–49; cf. SHAVELL, FOUNDATIONS, *supra* note 28, at 412 (noting that “the prospect of settlement . . . may, at least in principle, result in suits that would not otherwise occur; thus it is possible that settlement might increase deterrence”).

⁵³ Rosenberg and Shavell might argue that optimality should be measured not by the actual costs incurred in settlement, but simply by examining whether Mary's suit would cost more to take to judgment than any deterrence or compensation benefits resulting from such judgment. Cf. Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 50. If this were so, then Mary's suit would in fact be a nuisance that courts should bar. However, it seems difficult to justify measuring optimality based on conjectured costs through judgment if almost all of those costs will never come to pass. Of course, relaxing Rosenberg and Shavell's assumption of complete party knowledge to allow for information asymmetry may cause the conjectured litigation costs to be borne by the parties, which could change the analysis. See *infra* notes 116–124 and accompanying text.

and Shavell's own model of litigation, this result can be formally proved.⁵⁴

Furthermore, there is a class of suits with a probability of success less than 50%, for which filing and settlement is socially optimal relative to barring suit. Thus, even if one uses Rosenberg and Shavell's more restrictive definition of nuisance suit from their 1985 article,⁵⁵ the option to bar settlement may still have detrimental consequences. For example, suppose Party Planners, Inc., sues Deadbeat, Inc., for failing to pay \$5,000 of its bill for a New Year's bash arranged by Party Planners. Deadbeat asserts that Party Planners ordered only half of the amount of champagne requested by Deadbeat, much to the dismay of Deadbeat's employees. Party Planners contends that the amount it ordered was customary and standard for the 500 people at the party.

Based on all of the available and accurate facts, suppose Party Planners knows it has a 30% chance of winning the case with litigation costs of \$2,000. For simplicity, assume there are no filing costs.⁵⁶ Assume Deadbeat's litigation costs are \$1,250. In this instance, Party Planners' expected value at judgment of \$1,500 (30% of \$5,000) is less than its litigation costs of \$2,000. Additionally, Party Planners' chances of winning are less than 50%. Thus, no matter how one reads Rosenberg and Shavell's definition of nuisance suit, this case would come within its scope and, according to them, should be barred.

However, barring the suit would result in a greater deviation from the optimal outcome than allowing settlement to occur. In the optimal

⁵⁴ Using Rosenberg and Shavell's terminology, let:

f = the plaintiff (P)'s cost of filing a claim, $f = 0$;

s = P's settlement demand, $s = 0$;

c_D = the defendant (D)'s cost of defense, $c_D = 0$;

c_P = P's cost of litigation, $c_P = 0$;

p = probability that P would prevail in litigation, $0 = p = 1$; and

w = amount at stake (that P would obtain in a judgment), $w > 0$, i.e.,

pw = P's net expected value at judgment ($p \times w$).

See Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 47. In the event $c_P > w$, if D is granted an option, a highly meritorious suit would be entirely precluded. See *id.* at 47. In the absence of an option, P would collect a settlement award (equal either to c_D or w , whichever is lower). See *id.* For high p (i.e., $p \sim 1$), pw —which in a world of optimal compensation and deterrence P should receive (if not more)—is nearly equal to w . Hence, settlement (i.e., P receives the lesser of c_D and w) is nearer to the optimal outcome ($\sim w$) than the result of the option to bar settlement (i.e., P receives nothing). Of course, this result is limited to high p . The option may also result in sub-optimal outcomes across a wide range of lower probabilities. See *infra* note 59.

⁵⁵ Rosenberg & Shavell, *Nuisance Model*, *supra* note 34, at 3 (defining a "nuisance suit" as a suit that has a probability of success less than 50% (a suit is only "meritorious" if it is likely to prevail at trial) and total plaintiff litigation costs greater than the expected judgment); see also *supra* note 34 and accompanying text.

⁵⁶ It is reasonable to assume on several grounds that filing costs can be effectively ignored. See *supra* note 51.

result, Party Planners receives its net expected award of \$1,500, Deadbeat pays the net expected award of \$1,500 (assuming no added deterrence is necessary), and total litigation and court costs are zero.⁵⁷ If the suit goes forward, under Rosenberg and Shavell's model of litigation, Deadbeat immediately settles for its costs of \$1,250. In this instance, Party Planners receives (and Deadbeat pays) \$250 less than the optimal result, while the total costs are (the optimal) zero.⁵⁸ If the suit is barred via Deadbeat's exercise of an option, Party Planners receives nothing, Deadbeat pays nothing, and the total costs are zero. In this event, Party Planners receives (and Deadbeat pays) \$1,500 less than the optimal result. Barring suit is thus sub-optimal to settlement. Contrary to Rosenberg and Shavell's assertion, this suit should not be labeled a "nuisance." Moreover, using Rosenberg and Shavell's model of litigation, one can prove this result for a broad class of suits.⁵⁹

Not only does Rosenberg and Shavell's definition include meritorious claims that can hardly be called "nuisance suits," but it fails to in-

⁵⁷ See SHAVELL, FOUNDATIONS, *supra* note 28, at 284–85.

⁵⁸ This Article assumes, like Rosenberg and Shavell, that the cost of negotiating the settlement is negligible. Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 47–48.

⁵⁹ Suppose a plaintiff plans to file a nuisance suit under Rosenberg and Shavell's definition, i.e., its costs (c_P) exceed its expected judgment (pw). See *supra* notes 34–39 and accompanying text. If the defendant does not have an option to bar settlement, the plaintiff will file, and the defendant will settle for the lesser of the amount at issue (w) and the defendant's litigation costs (c_D) (i.e., $\text{Min}(w, c_D)$) immediately after filing. However, if the defendant has an option, given that the plaintiff has no incentive to litigate to judgment, it will never file suit, because it knows the defendant will exercise its option. See Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 47. In both situations, society achieves optimal compensation and deterrence if the plaintiff receives (and the defendant pays) the expected judgment (pw). See *supra* note 25 and accompanying text. Thus, if the defendant does not have an option, the absolute deviation from optimal compensation and deterrence are, respectively: $-\text{Min}(w, c_D) - f - pw$ (that is, the difference between what the plaintiff nets and the optimal amount (pw)) and $-\text{Min}(w, c_D) - pw$ (the difference between what the defendant pays and the optimal amount). If the defendant has the option, the absolute deviation from optimal compensation and deterrence is exactly $-0 - pw = pw$, since no suit is filed and $p \& w = 0$.

If the deviations from optimal compensation and deterrence with the option are greater than without the option for a given class of cases, and assuming higher order deviations (e.g., the standard deviation) are unimportant, then an option is relatively sub-optimal for those cases. In particular, if $pw > -\text{Min}(w, c_D) - f - pw$ (condition 1) and $pw > -\text{Min}(w, c_D) - pw$ (condition 2), then no option is preferable to an option. For a first class of cases, suppose that $\text{Min}(w, c_D) = w$. In this event, condition 2 holds if and only if (iff) $p > 0.5$. Moreover, if $p > 0.5$, then condition 1 holds. For a second class, suppose that $\text{Min}(w, c_D) = c_D$ & $c_D > (pw + f)$. In this event, condition 1 holds, and condition 2 holds iff $p > c_D/2w$. For a third class, suppose that $\text{Min}(w, c_D) = c_D$ & $c_D < (pw + f)$. In this event, condition 2 holds, and condition 1 holds iff $c_D > f$. These three classes exhaust all the possibilities. Thus, if a plaintiff has a nuisance suit, i.e., $c_P > pw$, an option is sub-optimal in the following instances: (1) if $\text{Min}(w, c_D) = w$, iff $p > 0.5$; (2) if $\text{Min}(w, c_D) = c_D$, & $c_D > (pw + f)$, iff $p > c_D/2w$; and (3) if $\text{Min}(w, c_D) = c_D$ & $c_D < (pw + f)$, iff $c_D > f$. In sum, there is a large class of supposed nuisance suits, including cases in which the plaintiff's probability of success on the merits is less than 50%, for which barring suit via an option is sub-optimal.

clude suits that are essentially meritless. Suppose that Iggy, an inventor, patents a method of searching the Internet from a mobile phone. Although one cannot patent “obvious” inventions, because Iggy’s patent examiner failed to locate a published article that would have almost certainly shown Iggy’s invention to be obvious, the patent nonetheless issued.⁶⁰ Iggy sues Supersoft for patent infringement. Supersoft locates the article showing that Iggy’s invention is obvious and provides it to its lawyer. Supersoft’s lawyer informs it that in view of the article, Iggy has only a 0.1% chance of winning the case. The lawyer cautions Supersoft, however, that potential damages are \$1 billion,⁶¹ and that Supersoft’s expected litigation costs to judgment are \$2 million compared with Iggy’s \$500,000 (Iggy has lower costs of discovery).

In this situation, the socially optimal outcome is for Iggy to receive \$1 million (assuming the 0.1% chance of winning is due to the objective merits of Iggy’s claim),⁶² Supersoft to pay \$1 million, and the court to incur no net costs. Under Rosenberg and Shavell’s litigation model, because Iggy’s expected value at judgment of \$1 million exceeds his litigation costs of \$500,000, the suit is not a nuisance suit. Therefore, Iggy would be willing to take the case to judgment.⁶³ In this example, under Rosenberg and Shavell’s assumptions,⁶⁴ Supersoft would settle with Iggy for \$3 million—\$2 million in potential litigation costs plus \$1 million for the expected judgment. Thus, Supersoft pays, and Iggy receives, \$2 million more than the optimal resolution. Barring Iggy’s suit would result in Supersoft’s paying nothing, which is \$1 million less than the optimal outcome. Thus, despite the fact that Rosenberg and Shavell would not

⁶⁰ See, e.g., Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 NW. U.L. REV. 1495, 1495 (“The PTO has come under attack of late for failing to do a serious job of examining patents, thus allowing bad patents to slip through the system.”).

⁶¹ See, e.g., *Polaroid Corp. v. Eastman Kodak Co.*, 17 U.S.P.Q.2d 1711 (D. Mass. 1991) (finding damages of \$873 million).

⁶² More precisely, Iggy’s 0.1% chance may either be a prediction of the objectively correct outcome, based on all of the available (and accurate) facts, or attributable to systematic judge or jury error. For instance, if Iggy has a wholly frivolous case, and his 0.1% chance of winning is merely the result of decisional error, he should net nothing. This Article, like Rosenberg and Shavell, generally assumes that judgments are error-free; however, decisional error can change the results of the analysis. For instance, a risk-averse defendant would experience greater pressure to settle in the event it thought there was a large chance of decisional error on the part of a jury. See, e.g., J.B. Heaton, *Settlement Pressure*, 25 INT’L REV. L. & ECON. 264, 271 (2005).

⁶³ See generally Dunbar et al., *supra* note 39, at 30 (explaining that plaintiffs’ attorneys have incentives to bring “weak” cases, because “as long as the potential damage claim is large relative to the opportunity cost of pursuing discovery and the remainder of litigation,” there will be sufficient “option” value to file suit); Yablon, *supra* note 1, at 67 (discussing the incentives of attorneys to file “long-shot” suits).

⁶⁴ Importantly, Rosenberg and Shavell assume that the plaintiff makes a take-it-or-leave-it offer and holds all of the bargaining power. See Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 44 n.5.

classify Iggy's suit as a nuisance that should be barred,⁶⁵ no suit is better than settlement. Again, using Rosenberg and Shavell's model of litigation, this result follows mathematically for a large class of cases.⁶⁶

Furthermore, because Supersoft is likely to be risk averse, courts should consider Iggy's suit even more of a nuisance. Defendants may fear even a 0.1% chance of losing \$1 billion.⁶⁷ Thus, Supersoft's risk aversion would allow Iggy to extract much more than Supersoft's \$3 million in litigation costs plus expected judgment payout.⁶⁸ Rosenberg and Shavell obscure this kind of low-probability, high-stakes counterexample in their informal analysis by only considering a suit in which the plaintiff is motivated to litigate to judgment with a 60% probability of

⁶⁵ To their credit, Rosenberg and Shavell note at the end of their article that *only* "if the costs of [nuisance] suits – the litigation and settlement costs associated with them – outweigh the possible social benefits – notably, deterrence of undesirable behavior," such suits would "be a problem for society." Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 50. The Iggy hypothetical, however, addresses the converse situation—namely, a suit that is not a nuisance suit per Rosenberg and Shavell's definition, but is still a problem for society. Rosenberg and Shavell do not address this category of suits.

⁶⁶ Assume the amount at issue (w) is so large, that despite P 's very low probability of success (p), P 's costs (c_P) are less than its expected judgment (pw). In this event, it is reasonable to assume that $c_D \ll w$ and $c_D + pw < w$. Assuming the filing cost (f) is small, without an option to bar settlement, the deviation of the expected outcome from the optimal compensation outcome [$-\text{Min}(w, c_D + pw) - f - pw$] and the deviation from the optimal deterrence outcome [$-\text{Min}(w, c_D + pw) - pw$] become equivalent to c_D . If the defendant's exercise of an option bars suit, the compensation and deterrence deviation values are exactly pw , i.e., $-0 - pw$. Thus, if $c_D > pw$, it is more optimal to eliminate these types of suits.

⁶⁷ See *In re Rhone-Poulenc Rorer, Inc.*, 51 F.3d 1293, 1298 (7th Cir. 1995) (Posner, J.) ("[The defendants] could not be confident that the defenses would prevail. Therefore, they might easily be facing \$25 billion in potential liability (conceivably more) and with it, bankruptcy. They may not wish to roll these dice. That is putting it mildly. They will be under intense pressure to settle. . . . Judge Friendly, who was not given to hyperbole, called settlements induced by a small probability of an immense judgment in a class action 'blackmail settlements.'"); Kozel & Rosenberg, *supra* note 27, at 1903 (describing the "blackmail class settlement 'problem'" as stemming "from the defendant's aversion to the risk of gambling a large sum on the outcome of a single, classwide trial").

⁶⁸ If defendants expect repeated frivolous suits, they may have a compensating incentive to build a reputation for not settling. See, e.g., Bone, *supra* note 3, at 539–40; Thomas J. Miceli, *Optimal Deterrence of Nuisance Suits by Repeat Defendants*, 13 INT'L REV. L. & ECON. 135, 135 (1993); Rosenberg & Shavell, *Nuisance Model*, *supra* note 34, at 10 n.3. Of course, a similar logic applies to plaintiffs (or plaintiffs' attorneys) that regularly sue. See generally Amy Farmer & Paul Pecorino, *A Reputation for Being a Nuisance: Frivolous Lawsuits and Fee Shifting in a Repeated Play Game*, 18 INT'L REV. L. & ECON. 147 (1998); Eric Rasmusen, *Nuisance Suits*, in 2 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 691 (Peter Newman ed., 1998) [hereinafter Rasmusen, *Nuisance Suits*]. For example, "patent trolls"—licensing entities that own patents but perform little to no research and development and sell no products—regularly file suit against alleged infringers. See, e.g., Brief of Amicus Curiae Yahoo! Inc. in Support of Petitioner, eBay, Inc. v. MercExchange, L.L.C., No. 05-130, reprinted in *Supreme Court Development: No. 05-130*, 21 BERKELEY TECH. L.J. 999, 1002 (2006). Unless noted otherwise, this Article assumes that reputation effects do not play a role in the settlement process.

success on the merits,⁶⁹ and throughout their entire analysis, by implicitly assuming that any suit that is not a nuisance suit under their definition is not socially problematic.⁷⁰

In sum, although Rosenberg and Shavell's definition of nuisance suit conveniently bolsters their arguments in favor of an option to bar settlement, it includes within its scope suits that are clearly not nuisances—in the sense that the settlement of such suits does not reduce social welfare—and, conversely, it fails to include suits that are nuisances.⁷¹ Specifically, their definition encompasses small-stakes, high-cost actions, for which settlement may be socially beneficial. Moreover, their definition excludes low-probability, high-stakes, low-cost actions that are often socially harmful. Because a defendant will exercise the option to bar settlement precisely when a plaintiff files what they have characterized as a “nuisance suit,” contrary to their claims, the option does not always result in optimal outcomes.⁷²

⁶⁹ See Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 46.

⁷⁰ See *id.* at 43. Specifically, they assert that “the option to bar settlement would not turn out to stymie settlement if settlement would save the parties and the courts the costs of litigation,” since the option does not bar suits that are not nuisance suits. Of course, all settlements “save the parties and the courts the costs of litigation.” *Id.* Here, Rosenberg and Shavell imply that the option does not bar suits for which settlements (and their concomitant cost savings) are “socially desirable.” *Id.* As the above example demonstrates, however, some suits that the option does not bar are socially detrimental.

⁷¹ Most commentators have basically adopted Rosenberg and Shavell's definition of nuisance suit from their 1985 article, Rosenberg & Shavell, *Nuisance Model*, *supra* note 34, which is limited to cases having both a low probability of success and insufficient incentives for the plaintiff to litigate to judgment. See, e.g., Katz, *supra* note 1, at 3; Rasmusen, *Nuisance Suits*, *supra* note 68, at 690. Although the requirement of low probability removes from the definition clearly meritorious suits, it remains over- and under-inclusive. First, it fails to capture socially harmful suits with a negligible probability of success on the merits, but that still provide a plaintiff sufficient incentive to litigate to judgment. Second, there are numerous suits, such as the Deadbeat hypothetical above, with a low enough probability of success that the plaintiff has no incentive to litigate to judgment, but for which settlement is socially beneficial. See *supra* text accompanying notes 54–57. Cooter and Rubinfeld avoid both problems by limiting nuisance suits to those with no (0%) chance of winning at judgment. See Cooter & Rubinfeld, *supra* note 26, at 1084. But, this definition is under-inclusive in the sense that it fails to capture numerous suits with a probability of success of more than 0%, but that are socially detrimental if filed. Bebchuk appropriately eschews the vague term “nuisance suit” in favor of “negative expected value” (NEV) suit to describe those suits for which a plaintiff's expected award at judgment is less than post-filing litigation costs, regardless of its probability of success. See Bebchuk, *Credibility and Success*, *supra* note 30, at 1; Bebchuk, *Settlement Offer*, *supra* note 19, at 437. Interestingly, Shavell essentially adopts Bebchuk's terminology, naming such suits “negative value suits.” See SHAVELL, FOUNDATIONS, *supra* note 28, at 420. Kozel and Rosenberg make a distinction between “nuisance-value settlement” and NEV claims. Kozel & Rosenberg, *supra* note 27, at 1855 n.9. Unfortunately, Rosenberg and Shavell fail to distinguish clearly between NEV and nuisance suits, generally leaving the impression that the two are coextensive. See Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 42, 50.

⁷² Not all NEV suits should be barred, and not all positive expected value suits should be allowed to go forward. Cf. SHAVELL, FOUNDATIONS, *supra* note 28, at 422–23 (noting explicitly that “negative value suits” include “suits that the plaintiff is certain to win”). See *gener-*

Given these detrimental effects, the key issue becomes how frequently these negatively affected categories of suit actually occur in litigation. In particular, if these types of suits are statistical outliers, then Rosenberg and Shavell's definition of nuisance suit, for all practical purposes, is sufficient. Although there is no definitive empirical answer to this question,⁷³ there is strong reason to believe that both socially beneficial, small-stakes, high-cost cases⁷⁴ and socially detrimental, low-probability, large-stakes, low-cost cases occur frequently.⁷⁵ Thus, even

ally Bebchuk, *Negative Expected Value*, *supra* note 1, at 554; Barry Nalebuff, *Credible Pretrial Negotiation*, 18 RAND J. ECON 198, 200 n.3 (1987) ("The fact that a case has positive expected value to a plaintiff does not in itself imply that the case should in any normative sense proceed to court; nor do we mean that a case without 'merit' should not go to court. The social objective of the legal system is concerned with broader issues ranging from fairness to precedent to deterrence that cannot be fully captured by the plaintiff's expected value of the court judgment.").

⁷³ Cf. DOUGLAS G. BAIRD ET AL., *GAME THEORY AND THE LAW* 260 (1994) (noting that cases that are litigated are "not representative of the population of disputes"); SHAVELL, *FOUNDATIONS*, *supra* note 28, at 432–34 (remarking that "often, the most readily available data is on cases that go to trial" but that these cases are "not a random sample from the population of cases"). See generally Bone, *supra* note 3, at 596 ("[W]e have no hard empirical evidence bearing on the nature or seriousness of the problem [of frivolous litigation.]"); Huang, *supra* note 41, at 49; Kozel & Rosenberg, *supra* note 27, at 1852 n.3.

⁷⁴ Interestingly, small creditors' claims in bankruptcy are akin to a situation of a small-stakes, high-cost case with an option to bar settlement in play—although a creditor typically has a meritorious claim, because there is generally no effective side-settlement possibility, the creditor will often avoid participating in bankruptcy proceedings. See, e.g., Thomas E. Carlson & Jennifer F. Hayes, *The Small Business Provisions of the 2005 Bankruptcy Amendments*, 79 AM. BANKR. L.J. 645, 650 (2005).

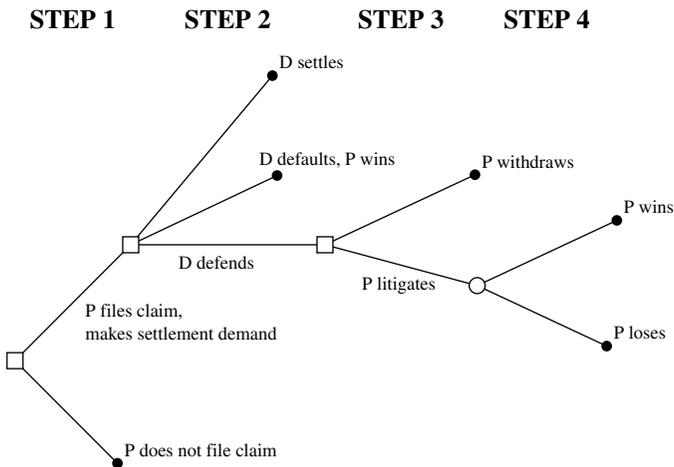
⁷⁵ Many commentators describe small-stakes, high-cost cases. See, e.g., SHAVELL, *FOUNDATIONS*, *supra* note 28, at 387 ("[L]itigation to achieve settlements or judgments is so costly that its expense appears on average to outweigh the amounts received by victims of harm."); Bebchuk, *Credibility and Success*, *supra* note 30, at 23 ("[T]here are numerous cases in which defendants know (or suspect with a high probability) that the plaintiff has a [negative-expected value] suit in his hands. To start with, in the universe of small-stakes cases, there are numerous instances in which defendants recognize that the small amount at stake is smaller than the litigation costs needed to pursue it."); Dunbar et al., *supra* note 41, at 36 (concluding that, after examining empirical data regarding securities class action settlements, "[s]ome of the so-called nuisance cases may be efficient low-value settlements of meritorious cases because costs of going to trial are high or the probability of getting a jury verdict is uncertain"); Rhode, *supra* note 8, at 460 (citing several surveys and studies finding that plaintiffs on average recover a fraction of their litigation costs). The need for small-claims class actions lends further support to this empirical claim. See, e.g., *Ace Heating & Plumbing Co. v. Crane Co.*, 453 F.2d 30, 33 (3d Cir. 1971) ("Rule 23 recognizes the fact that many small claimants frequently have no litigable claims unless aggregated. So, without court approval and a subsequent right to ask for review, such claimants would be faced with equally unpalatable alternatives—accept either nothing at all or a possibly unfair settlement."). Although low-cost, high-stakes cases are surely less prevalent than high-cost, low-stakes cases, the latter are not mere theoretical constructs. For instance, suits filed by patent trolls are often viewed as low-probability, high-stakes suits that the troll can bring at a low cost to extract a nuisance settlement. See, e.g., Jason Ratanen, *Slaying the Troll: Litigation as an Effective Strategy Against Patent Threats*, 23 SANTA CLARA COMPUTER & HIGH TECH. L.J. 159, 163–69 (2006); James F. McDonough, Comment, *The Myth of the Patent Troll: An Alternative View of the Function of Patent Dealers in an Idea Economy*, 56 EMORY L.J. 189, 196 (2006).

under Rosenberg and Shavell's model of litigation and settlement, whether adopting the option to bar settlement in *all* cases is socially beneficial requires further empirical investigation. In particular, it is necessary to determine the empirical prevalence of these negatively affected cases—as well as the positively affected cases—to calculate the aggregate net effect of the option to bar settlement on social welfare.⁷⁶

B. An Unbalanced Model of Litigation

The second distorting aspect of Rosenberg and Shavell's analysis is their model of litigation and the associated costs borne by the parties. They adopt a model of traditional litigation—a suit in the absence of an option to bar settlement—that proceeds in essentially four steps: (1) Plaintiff (P) either files a claim or not; (2) Defendant (D) defaults, settles, or defends; (3) P litigates or withdraws; and (4) P wins or loses upon judgment. Figure 1 provides a visual representation.⁷⁷

FIGURE 1: THE MODEL WITHOUT THE OPTION TO HAVE THE COURT BAR SETTLEMENT



The squares represent decision points for the parties, and the circle represents the outcome of judgment.

Associated litigation costs and payments are also divided into four phases: (1) P pays the cost of filing the claim, if any; (2) D pays the

⁷⁶ Under Rosenberg and Shavell's model of litigation, one can show formally that determining the effects of an option to bar settlement requires knowing the actual likelihood of occurrence of various classes of suit. See *supra* notes 54, 59, and 66. More realistic models lead to the same conclusion. See *infra* Part I.B–C.

⁷⁷ Figure 1 is adapted from Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 43–45.

judgment amount if it defaults, the settlement amount if it settles, or litigation costs if it defends; (3) P pays litigation costs if it litigates; and (4) P collects a judgment award and D pays the award amount if P wins. Importantly, all of the costs incurred in each phase precede the costs incurred in the next phase. For instance, Rosenberg and Shavell's model implies, intentionally or not, that if D decides to litigate in step (2), then D bears all of its own litigation costs, including its trial costs, before P bears any post-filing litigation costs (much less its trial costs).⁷⁸

In reality, after a claim is filed by P and answered by D,⁷⁹ both parties will usually bear litigation costs more or less simultaneously as

⁷⁸ Rosenberg and Shavell's multi-step model is essentially the same as the model proposed in their 1985 article on nuisance-value suits. Compare Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 44 & fig. 1, with Rosenberg & Shavell, *Nuisance Model*, *supra* note 34, at 4 & fig.1. Several scholars have interpreted D's litigation costs in step (2) of Rosenberg and Shavell's model as merely D's costs of responding to, or dismissing, P's complaint (e.g., filing an answer, motion to dismiss, motion for summary judgment, etc.). See, e.g., Bebchuk, *Credibility and Success*, *supra* note 30; Bebchuk, *Settlement Offer*, *supra* note 19, at 437–38; Katz, *supra* note 1, at 3; Rasmusen, *Nuisance Suits*, *supra* note 68, at 690; cf. SHAVELL, FOUNDATIONS, *supra* note 28, at 421–22; Kozel and Rosenberg, *supra* note 27, at 1856 (initiating a suit requires plaintiffs to proceed at a lower cost than defendant's costs of responding by some dispositive motion). A careful reading of Rosenberg and Shavell's 1985 and 2006 articles, however, shows that this interpretation is not accurate. First, in the formal analyses of both articles, there is only one variable to account for both the defendant's response and post-response (including trial) costs. In other words, Rosenberg and Shavell assume that if D is to defend at all, it must spend, in one shot, all of its defense costs, including those of going to trial. See Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 48; Rosenberg & Shavell, *Nuisance Model*, *supra* note 34, at 6–8. Second, both articles present one numerical example (with almost identical numbers in the 1985 and 2006 papers) of a situation in which the defendant settles and another example in which the defendant rejects settlement and litigates to judgment. In the defendant settles example, his cost of defending himself is \$200. See Rosenberg & Shavell, *Nuisance Model*, *supra* note 34, at 4; Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 44. The plaintiff's total costs are \$25 in filing and \$100 in litigating through trial. See Rosenberg & Shavell, *Nuisance Model*, *supra* note 34, at 4; Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 44. It would be quite odd if a defendant's costs of merely responding to a complaint (and not going to trial) were less than a plaintiff's total costs of going to trial. Indeed, in the numerical example in which the defendant actually defends at trial, Rosenberg and Shavell simply change P's probability of success on the merits, but no other numbers—thus, D's costs (including costs at trial) remain at \$200—which implies that Rosenberg and Shavell intend to capture D's total costs in Step (2) of their litigation model. See Rosenberg & Shavell, *Nuisance Model*, *supra* note 34, at 5; Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 46. In any event, if Rosenberg and Shavell's model is limited merely to settlements driven by the defendant's response costs to a complaint, its explanatory power becomes minimal. See *infra* note 79.

⁷⁹ For the reasons presented earlier, see *supra* note 78, Rosenberg and Shavell's model does not categorize D's litigation costs as merely its costs of responding to, or dismissing, P's complaint. Of course, because in any model of litigation, D bears its costs of answering the complaint before P must bear any post-filing costs, P can force D to settle up to the amount it costs D to answer. See, e.g., Bebchuk, *Credibility and Success*, *supra* note 30, at 3–4; Bebchuk, *Settlement Offer*, *supra* note 19, at 439; Rasmusen, *Nuisance Suits*, *supra* note 68, at 691. However, the costs of answering a complaint will typically be insignificant, since a defendant usually can categorically deny a plaintiff's factual and legal contentions with mini-

the parties proceed through discovery,⁸⁰ summary judgment motions, pre-trial activity, and trial.⁸¹ Although Rosenberg and Shavell's serial model of litigation costs simplifies their analysis, their conclusions do not always hold if a more realistic parallel model of litigation costs is adopted.⁸² A simple counterexample suffices to illustrate this point.

Suppose Paul, the plaintiff, sues his neighbor, Dan, for damage Paul alleges his bonsai garden sustained when one of Dan's trees fell on it. In reality, Paul and Dan know that the problems in Paul's garden were most likely due to Paul's failure to water it properly. Paul claims that his garden has sustained \$10,000 in damages. Paul knows that if he takes the case to trial, Dan will likely expose Paul's contributory negligence, making Paul's odds of winning 10%, with total litigation costs of \$5,000. Because Dan only needs to spend enough to demonstrate Paul's contributory negligence, Dan's costs of going to trial are only \$2,500.⁸³ Under

mal work and investigation. See Bone, *supra* note 3, at 538–39; Katz, *supra* note 1, at 4 (“[A] defendant who knows a suit to be frivolous can merely respond with a blanket denial of the plaintiff’s allegations. This will suffice to avoid a default and will shift the burden of the next expenditure back to the plaintiff.”). Indeed, just the costs of negotiating and contracting for settlement, which Rosenberg and Shavell ignore, usually outweigh the costs of answering a complaint. Cf. McMillian, *supra* note 16, at 231 n.33 (“[I]n my practice experience, the answer may be the easiest pleading to prepare.”). After the defendant files an answer, the plaintiff will then bear costs with the defendant on an effectively simultaneous basis, which usually eliminates the plaintiff’s ability to force a nuisance-value settlement. See, e.g., RASMUSEN, GAMES, *supra* note 1, at 97; Katz, *supra* note 1, at 4 (“[The] Rosenberg-Shavell model . . . cannot explain . . . why frivolous suits might settle for amounts greater than the cost of a minimal response.”).

⁸⁰ In some cases, parties may *not* bear costs more or less simultaneously, or at least symmetrically. For instance, a defendant might bear very high discovery costs, e.g., \$1 million, while the plaintiff bears minimal costs, e.g., \$50,000. In these situations, plaintiffs may be able to force defendants to settle for a proportion of their discovery costs, depending upon the expected post-discovery litigation costs and the plaintiff’s expected award at trial. See *United States v. Am. Tel.*, 86 F.R.D. 603, 656 n.8 (D.D.C. 1979) (citing Justice Lewis F. Powell’s dissent from the Supreme Court’s adoption of amendments to Rules 26, 33, 34, and 37 of the Federal Rules of Civil Procedure and noting that because litigation is costly, the party with greater financial resources will often prevail over the party with weaker financial resources). See generally Bebchuk, *Credibility and Success*, *supra* note 30; Kozel & Rosenberg, *supra* note 25, at 1856.

⁸¹ This Article generally assumes there are no available appeals. A more sophisticated analysis would also consider the appeals process. See, e.g., COOTER & ULEN, *supra* note 43, at 466–67; SHAVELL, FOUNDATIONS, *supra* note 28, at 456–63.

⁸² There are limited exceptions to the following observations, particularly if a plaintiff’s suit imposes external costs. For instance, if a patent infringement lawsuit is filed against a defendant in the process of being acquired by a third party, the defendant may immediately settle the case for a large sum to remove the “cloud” of uncertainty cast by the suit. See generally Lisa Bernstein, *Understanding the Limits of Court-Connected ADR: A Critique of Federal Court-Annexed Arbitration Programs*, 141 U. PA. L. REV. 2169, 2203–05 (1993). These situations are likely to be infrequent and, in any event, play no role in the model presented by Rosenberg and Shavell.

⁸³ Technically, if Paul knows that Dan only needs to spend \$2,500 in litigation costs to reduce Paul’s chances of winning to 10%, then Paul would most likely be able to avoid spending the full \$5,000 in litigation costs. Because Rosenberg and Shavell assume that litigation

Rosenberg and Shavell's model, once Paul files suit, Dan will settle. As noted above, in their model of litigation, Dan has three options: (1) default and lose \$10,000, (2) litigate and spend \$2,500 to induce Paul to withdraw (because there is no incentive for Paul to spend \$5,000 in litigation costs for a 10% chance to win \$10,000), or (3) settle for something slightly less than \$2,500. Under this simplified model, Dan will rationally choose the settlement option and pay Paul slightly less than \$2,500.

Under a more realistic model of litigation costs borne by the parties on a recurring and simultaneous basis, Dan might not settle. Suppose the total time from Dan's answer to trial is 100 days and, during this period, Paul spends \$50 per day and Dan spends \$25 per day.⁸⁴ Dan knows that Paul's expected value at trial is \$1,000 (10% of \$10,000), which effectively lowers Paul's (and raises Dan's) expenditures by \$10 per day. Thus, in net terms, Paul spends \$40 per day while Dan spends \$35 per day.⁸⁵ If both parties are risk neutral and act in their own self-interest, as Rosenberg and Shavell assume, Paul will realize he has nothing to gain by losing more money than Dan. Namely, Paul will realize that he cannot bluff Dan, because Paul knows that Dan understands that he (Paul) will always have to outspend Dan in order to keep the case going.⁸⁶ Paul also knows that since Dan will never outspend him during the litigation,⁸⁷ there is no justification for spending a little up front to force Dan

costs are exogenous, the hypothetical implicitly assumes that Paul maximizes his gross return at trial by spending \$5,000. See *infra* Part I.C (discussing the plausibility of exogenous litigation costs and the effects of relaxing this assumption on Rosenberg and Shavell's model).

⁸⁴ If the discount rate is zero and the parties spend an equal amount each day, then Paul spends \$5,000/100, or \$50 a day, and Dan spends \$2,500/100, or \$25 a day.

⁸⁵ In other words, in the scenario in which the parties litigate to judgment, looking backwards from that point, Paul effectively spends \$10 less per day, or \$40 net, and Dan effectively spends \$10 more per day, or \$35 net.

⁸⁶ Cf. Cooter & Rubinfeld, *supra* note 26, at 1083–84 (1989) (discussing the effects of asymmetric costs on nuisance suits). See generally Grundfest & Huang, *supra* note 48, at 1305 (recognizing possible extortionist behavior in litigation, because a plaintiff can threaten “to continue a lawsuit that has a negative expected payoff because the payoff to the defendant is even more negative, and the plaintiff calculates that the defendant can be induced to make a settlement payment to avoid this more adverse outcome”).

⁸⁷ Bebchuk proposes that shifting a defendant's costs from later to earlier stages of the litigation “will never make the plaintiff better-off.” Lucian Arye Bebchuk, *On Divisibility and Credibility: The Effects of the Distribution of Litigation Costs Over Time on the Credibility of Threats to Sue*, at 11–13 (John M. Olin Center for Law, Economics, and Business, Discussion Paper Series No. 190, 1996) [hereinafter Bebchuk, *Divisibility*]. This contention contradicts the analysis and the bonsai garden hypothetical presented here. However, Bebchuk fails to mention one crucial exception—namely, his own insight from an earlier article that if a defendant's litigation costs are shifted from a later stage to an earlier stage that is *cost-free* for the plaintiff, then the plaintiff may benefit to the extent the shifted costs outweigh any pre-shift value of settlement. See Bebchuk, *Credibility and Success*, *supra* note 30, at 20–22 (noting that a plaintiff can extract a settlement in a period that is costless to the plaintiff up to the defendant's litigation costs in that period). Rosenberg and Shavell effectively shift all of the

to settle.⁸⁸ In this instance, Paul will immediately withdraw.⁸⁹ In fact, if Paul knows this before he files suit, he will not file suit at all.⁹⁰

Thus, what appears in this example to be a wasteful nuisance suit settlement under Rosenberg and Shavell's model of litigation costs turns out to be none at all. In effect, their model of sequential litigation costs creates a settlement process distortion in favor of the plaintiff in every case even though a significant proportion of cases present no such distortion.⁹¹ In general, how the sequence and amount of party litigation costs

defendant's litigation costs from later stages to a single stage immediately following the filing of suit that is cost-free for the plaintiff. See Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 44–45 figs.1 & 2, 47–49. Thus, even under Bebchuk's model of litigation costs, the plaintiff may benefit from the type of cost-shifting present in Rosenberg and Shavell's model. See *id.* Moreover, as Grundfest and Huang show under a sophisticated "real-options" model of litigation (of which Bebchuk's model is a mere subset), "a lawsuit's settlement value increases as [a] plaintiff's litigation expenses occur later in the litigation process." Grundfest & Huang, *supra* note 48, at 1268, 1279, 1312–13, 1333–34; see also Huang, *supra* note 39, at 66. Thus, delaying all of the plaintiff's post-filing litigation costs until after the defendant bears all of its costs will only improve the plaintiff's bargaining power.

⁸⁸ In certain situations, if a plaintiff can spend enough to get to the final stages of litigation, then the plaintiff may be able to force a defendant to settle. See Bebchuk, *Credibility and Success*, *supra* note 30, at 6–7.

⁸⁹ In a more realistic model, whether a plaintiff decides to withdraw depends not only on the amount and timing of the parties' costs, but also on the relative risk aversion of the parties. For instance, if Dan only has \$1,000 in his bank account, Paul might be able to bluff Dan after all, because Paul knows that Dan will only be able to last for forty days. Similarly, a distortion in settlement incentives may arise if a general counsel or corporate manager settles a case against a company's and shareholders' best interests to eliminate the possibility of a large loss at judgment because of personal risk aversion. See, e.g., Bone, *supra* note 3, at 541 n.79; Donald C. Langevoort, *Capping Damages for Open-Market Securities Fraud*, 38 ARIZ. L. REV. 639, 641 & n.11 (1996). See generally John J. Donohue III, *Opting for the British Rule, or if Posner and Shavell Can't Remember the Coase Theorem, Who Will?*, 104 HARV. L. REV. 1093, 1107–08 (1991); Guthrie, *supra* note 8, at 165–70.

⁹⁰ A related, yet socially detrimental, result may occur if a plaintiff has a sufficient incentive to litigate to judgment but does not have sufficient funds to litigate to judgment. Suppose a plaintiff P has an 80% chance of winning \$100,000 at judgment, P's litigation costs are \$50,000, and D's litigation costs are \$80,000. If P has sufficient funds (and D knows this), under Rosenberg and Shavell's model, D will settle for \$160,000. However, suppose P has only \$20,000 in disposable funds, and D knows this. In this event, P could last forty days at a rate of \$500 per day. In the same forty-day period, D would spend \$32,000 at \$800 per day. If P is sufficiently risk neutral so as to present a credible threat that it will litigate for the full forty days, and assuming (like Rosenberg and Shavell) that P holds all of the bargaining power, then D would settle for \$32,000. However, if D were granted an option to bar settlement, D would exercise the option at the beginning of the case, which would force P to withdraw. This hypothetical presents yet another class of cases for which the option may exacerbate existing defects in litigation settlement incentives. (Of course, in some situations, a plaintiff may be able to hire an attorney on a contingent fee, but information asymmetries and search costs will often prevent this type of representation.)

⁹¹ Presumably, the prevalence of cases in which the plaintiff bears a greater daily cost of litigation than the defendant is large. For instance, according to Shavell, "in 2000, victims' fraction of total litigation expenditures by victims and defendants in tort cases was approximately 52%." SHAVELL, FOUNDATIONS, *supra* note 28, at 395 n.9 (citing TILLINGHAST-TOWERS PERRIN, U.S. TORT COSTS, 2000: TRENDS AND FINDINGS ON THE COSTS OF THE U.S. TORT SYSTEM (2002)).

over the course of a case affect a plaintiff's ability to extract a settlement requires complex modeling.⁹² Consistent with the hypothetical presented above, these models demonstrate—contrary to Rosenberg and Shavell's prediction—that not all plaintiffs with a nuisance suit will have a credible threat to induce a settlement on the order of the defendant's total litigation costs.⁹³ If a plaintiff poses no credible threat, the defendant can ignore an option to bar settlement because it is of no added benefit.⁹⁴ As explained above, however, if a plaintiff does pose a credible threat, an option may detrimentally affect the litigation outcome.⁹⁵ By overestimating a plaintiff's ability to extract a settlement and underestimating the socially detrimental effects of an option to bar settlement, Rosenberg and Shavell inappropriately bolster the arguments in favor of their proposal.

C. Omniscient Parties and Lackadaisical Litigants

Rosenberg and Shavell make a number of other questionable analytical and empirical assumptions. This section focuses on two related assumptions: (1) parties are fully knowledgeable about the key litigation and settlement variables (party omniscience);⁹⁶ and (2) what parties decide to spend in litigation does not affect the plaintiff's probability of success at judgment. Specifically, Rosenberg and Shavell assume that "[t]he characteristics of the litigation situation—including the filing and the litigation costs, the amount at stake, and the likelihood of P prevailing at trial—are [exogenous and] known by both P and D."⁹⁷ As with the assumptions discussed earlier,⁹⁸ these assumptions significantly simplify their analysis, but they are far from realistic. Relaxing them can yield wildly differing results from Rosenberg and Shavell's analysis.⁹⁹

⁹² See, e.g., Bebchuk, *Credibility and Success*, *supra* note 30, at 10–15; Bebchuk, *Divisibility*, *supra* note 87.

⁹³ See, e.g., Bebchuk, *Credibility and Success*, *supra* note 30, at 10–15.

⁹⁴ Furthermore, if a plaintiff's case is so weak that its incentives to litigate are minimal, a defendant may lower its litigation (and, hence, its response) costs by asserting nuisance defenses, such as by filing an unfounded, but low-cost, motion for a more definite statement under Federal Rule of Civil Procedure 12(e). See FED. R. CIV. P. 12(e). Although these low cost responses will have little chance of success, they lower the *ex ante* threat value of a plaintiff's suit by forcing the plaintiff to incur costs to defeat the response. See generally Katz, *supra* note 1, at 8 n.7; Kozel & Rosenberg, *supra* note 27, at 1857; Yablon, *supra* note 1, at 70 n.12.

⁹⁵ See *supra* Part I.A.

⁹⁶ Cf. Richard A. Posner, *Rational Choice, Behavioral Economics, and the Law*, 50 STAN. L. REV. 1551, 1553 (1998) ("Rationality does not imply omniscience.").

⁹⁷ Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 44.

⁹⁸ See *supra* Part I.A–B.

⁹⁹ Rosenberg and Shavell recognize, albeit in the last paragraph of their paper, that a defendant's lack of knowledge of a plaintiff's willingness to litigate to judgment will nullify the effect of an option to bar settlement. *Id.* at 50. This section focuses on the parties' *simultaneous* lack of knowledge (and differing beliefs) concerning any of the key litigation variables. Rosenberg and Shavell fail to point out the significant likelihood that both plaintiffs and

1. Estimating Probabilities of Success

In many cases, both parties often have poor information about their odds of winning a suit prior to discovery. For instance, in mass tort actions, a plaintiff class may initially have sufficient evidence to pass the pleading bar set by Federal Rule of Civil Procedure 11 or a state law “frivolous suit” standard,¹⁰⁰ but both parties will often have scant knowledge of whether sufficient evidence exists to provide a “causal connection” between a defendant’s allegedly tortious activity and injuries sustained by the plaintiff class.¹⁰¹ Similarly, in joint causation cases (in which, for example, both a plaintiff’s and defendant’s negligence may have played a role in the plaintiff’s injury), each party will frequently have little or no initial knowledge regarding the extent of the other party’s responsibility for injury.¹⁰² As such, at the beginning of a case, parties will often have misguided notions of their chances of success.¹⁰³ As the parties exchange information and subpoena third parties during the discovery process, each party will acquire better and better knowledge of its odds of winning.¹⁰⁴ Thus, instead of being a fixed point known at the outset of a case, the probability of success is a continuous function that becomes more accurate over the course of a case.

Furthermore, even in those cases in which the parties do have a decent idea of their probability of success, the uncertainty in the estimate

defendants will be unable to predict accurately most, if not all, of the key variables at the outset of a case. *See id.*

¹⁰⁰ *See generally* GREGORY P. JOSEPH, SANCTIONS: THE FEDERAL LAW OF LITIGATION ABUSE chs. 1–2 (3d ed. 2000) (describing in detail the federal standards used to gauge whether pleadings are frivolous); Byron C. Keeling, *Toward a Balanced Approach to ‘Frivolous’ Litigation: A Critical Review of Federal Rule 11 and State Sanction Provisions*, 21 PEPP. L. REV. 1067, 1094–125 (1994) (discussing state law pleading standards).

¹⁰¹ *See generally* Rosenberg, *supra* note 25, at 855–59.

¹⁰² *See, e.g.*, Richard A. Epstein, *Two Fallacies in the Law of Joint Torts*, 73 GEO. L.J. 1377, 1383 (1985).

¹⁰³ *See, e.g.*, McMillian, *supra* note 16, at 275 (arguing that Rosenberg and Shavell’s assumption that the “defendant would have to know . . . at this early point in the litigation . . . that the plaintiff had no intention of pursuing the case to trial . . . [m]ay not be terribly realistic”).

¹⁰⁴ *See, e.g.*, SHAVELL, FOUNDATIONS, *supra* note 28, at 404–05; Bradford Cornell, *The Incentive to Sue: An Option-Pricing Approach*, 19 J. LEGAL STUD. 173 (1990); William Landes, *Sequential Versus Unitary Trials: An Economic Analysis*, 22 J. LEGAL STUD. 99, 102–34 (1993); Steven Shavell, *Sharing of Information Prior to Settlement or Litigation*, 20 RAND J. ECON. 183 (1989). The information a plaintiff receives as the suit progresses may change its incentives to proceed to judgment. As Grundfest and Huang show, the mere possibility of receiving such information provides the parties with an “options” value that can either increase or decrease the baseline expected value of suit and, hence, change the parties’ incentives to settle. Grundfest & Huang, *supra* note 48, at 1275–80. *But cf.* Robert J. Rhee, *The Effect of Risk on Legal Valuation*, 78 U. COLO. L. REV. 193, 196 (asserting that Grundfest and Huang’s model is incomplete because it focuses too heavily on the procedural right of a plaintiff to drop its case, which is merely a call option embedded in the asset of the underlying substantive right at issue).

(in effect, the variance of the expected probability of the plaintiff prevailing) may be large.¹⁰⁵ For instance, in a relatively simple suit against an automobile accident insurer by a victim allegedly suffering severe neck injuries from an accident, the insurer and the victim's lawyer may both know that on average, in these types of cases, the victim wins 30% of the time. However, before relevant facts in discovery are collected, the uncertainty in this probability could be about 30% itself, e.g., $\pm 25\%$, especially if critical facts reside with a third-party driver who refuses to provide information absent a subpoena.¹⁰⁶ This large uncertainty may play a significant role in a risk-averse plaintiff's incentive to settle for a lower than expected sum relative to a risk-neutral insurer.¹⁰⁷ Similarly, risk-averse defendants will often be wary of eliminating any possibility of settlement by exercising an option at the outset of a case because later on in the litigation, the plaintiff might receive information creating sufficient incentive for it to proceed to trial, thereby forcing the defendant to incur legal fees and, possibly, pay an award at judgment.¹⁰⁸

Finally, in many suits, there is no single percentage that characterizes success on the merits, because a suit may contain multiple claims and requests for relief. For instance, in a patent infringement case, in addition to the main infringement claim, there may be associated anti-

¹⁰⁵ Cognitive errors that parties are bound to make when assessing limited information will typically cause further uncertainty. See generally Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 *ECONOMETRICA* 263, 287–88 (1979). Of course, some of these cognitive errors may persist in the face of complete information, such as party spite. See, e.g., RASMUSEN, *GAMES*, *supra* note 1, at 101–02; Eric Talley, *Liability-Based Fee-Shifting Rules and Settlement Mechanisms Under Incomplete Information*, 71 *CHL-KENT L. REV.* 461, 493 (1995). The fact that parties are not fully rational in the face of complete information presents yet another theoretical weakness in Rosenberg and Shavell's model. See, e.g., *BEHAVIORAL LAW AND ECONOMICS* (Cass R. Sunstein ed., 2000); Guthrie, *supra* note 8, at 165; Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 *CAL. L. REV.* 1051, 1060–68 (2000).

¹⁰⁶ See Grundfest & Huang, *supra* note 48, at 1285–89. See generally Yablon, *supra* note 1, at 92, 93 & n.71, 94 (discussing the significant uncertainty inherent in litigation, including the “vagueness or indeterminacy of legal doctrine, imperfect knowledge of the facts, uncertainty as to the impact evidence will have on the decisionmaker, and uncertainty as to the identity of the decisionmaker”). Notably, Grundfest and Huang show that if there is sufficient variance of the key litigation variables at the outset of a case, then every negative expected value suit can become credible. See Grundfest & Huang, *supra* note 48, at 1277–79, 1306, 1336. *But cf.* Rhee, *supra* note 104, at 221–22 (arguing that Grundfest and Huang overlook a put option in the hands of the defendant to increase the plaintiff's costs of litigating the case that may dampen the plaintiff's incentive to press its suit).

¹⁰⁷ *Cf.* Steven Shavell, *Suit, Settlement, and Trial: A Theoretical Analysis Under Alternative Methods for the Allocation of Legal Costs*, 11 *J. LEGAL STUD.* 55, 68 (1982).

¹⁰⁸ See, e.g., McMillian, *supra* note 16, at 275–76 (asserting that risk-averse attorneys are unlikely to make an irrevocable choice to foreclose settlement prior to discovery and that doing so would be “bad lawyering”). Of course, if attorneys did not regularly exercise the option, its *ex ante* deterrent effect would be minimal. See *id.* at 277. See generally *supra* note 104.

trust, unfair competition, and breach of license claims, as well as requests for up to treble damages for willful infringement. Each claim or request would have a different probability of success on the merits. Although one could theoretically account for each probability by multiplying it by the amount requested for each claim, typically these claims are dependent upon one another. This is particularly so in a trial in which a jury is apt to “split the difference” by finding for a plaintiff only on a minor secondary claim so as effectively to provide the plaintiff with a lower damage award on a primary claim.¹⁰⁹ This interdependence can make estimating the probability of success on the merits and the associated requested damage award extremely difficult for both sides.

2. Forecasting Litigation Costs

Parties often find it very difficult to estimate accurately their own litigation costs through judgment. Moreover, the amount spent by each party in litigation is usually directly (and, often, significantly) correlated to the plaintiff’s probability of success. Just to take a few examples: better lawyers and expert witnesses typically charge higher rates and usually result in better outcomes, more spent on discovery will often reveal key facts and lead to a better chance of winning, and more spent on preparing for trial (e.g., through mock juries) and on trial (e.g., through Hollywood-style trial graphics) will frequently increase a party’s odds.¹¹⁰ In another strategy, a defendant may attempt to “bury” a plaintiff with excessive document production and motion practice.¹¹¹ In other words, there is no fixed amount a party will spend to litigate a case to judgment, and there is no fixed probability of success.¹¹² The two are interrelated

¹⁰⁹ See Abramowicz, *supra* note 25, at 253–54.

¹¹⁰ See, e.g., Bruce L. Hay, *Effort, Information, Settlement, Trial*, 24 J. LEGAL. STUD. 29, 35 (1995) (“In preparing a case, each party decides how many expert consultants to hire, how much research in the engineering literature to undertake, how much effort to put into investigating the background of eyewitnesses, how many doctors to talk to, and (in the plaintiff’s case) how many medical tests to undergo. Each decides how much to invest in reviewing the evidence and assembling it for trial, which witnesses to call and documents to introduce, and what questions to ask on direct and cross-examination. These and other aspects of case preparation may have a considerable impact on the rulings of judge and jury.”).

¹¹¹ See, e.g., Paul D. Carrington, *Renovating Discovery*, 49 ALA. L. REV. 51, 59, 71 & n.37 (1997); see also *United States v. Am. Tel. & Tel. Co.*, 86 F.R.D. 603, 656 n.8 (D.D.C. 1979) (quoting Justice Lewis F. Powell’s dissent from the Supreme Court’s adoption of amendments to Rules 26, 33, 34, and 37 of the Federal Rules of Civil Procedure) (“[A]ll too often discovery practices enable the party with the greatest financial resources to prevail by exhausting the resources of a weaker opponent. The mere threat of delay or unbearable expense denies justice to many actual or prospective litigants. Persons or businesses of comparatively little means settle unjust claims simply because they cannot afford to litigate. Litigation costs have become intolerable, and they cast a lengthening shadow over the basic fairness of our legal system.”).

¹¹² See, e.g., Cooter & Rubinfeld, *supra* note 26, at 1071 (“The amount that the plaintiff expects to win is determined, not by the merits of the case alone, but also by the efforts the

in a non-linear fashion that depends on the strategies and counter-strategies of each party.¹¹³ Since these tactics unfold over the course of litigation, a party's initial prediction of litigation costs through judgment will be fraught with uncertainty. Moreover, litigants frequently underestimate total litigation costs at the outset of a suit.¹¹⁴

3. The Obscuring Effects of Information Gaps and Asymmetries

Taken together, these more realistic considerations imply that in the early stages of litigation—exactly the time when Rosenberg and Shavell's option to bar settlement is to play its crucial role—parties will have no accurate idea of their probabilities of success or their total litigation costs. Because Rosenberg and Shavell's analysis is based on the contrary assumption, the critical question becomes whether the effect of an option to bar settlement changes in view of the parties' uncertainties. At first blush, if neither party systematically skews its estimates in one direction or the other, then presumably on average, the parties should accurately estimate their probabilities of success and litigation costs. That is, while there may be significant inaccuracy in each given case of parties' estimates of their litigation costs and probabilities of winning, one would predict that these inaccuracies would roughly cancel out over the course of many cases. If the parties are risk neutral, then on average, the option to bar settlement would generally have the same effect Rosenberg and Shavell predict for a single case.

However, there are good reasons to believe that there are systematic distortions in party estimates of probability of success and of litigation costs. First, although there are certainly cases in which a plaintiff knows that its case has no merit and is wholly calculated to extract a settlement from the defendant, likely more common are cases in which the plaintiff overestimates its chances of success on the merits so as to view a non-

parties devote to winning.”); Grundfest & Huang, *supra* note 48, at 1269–71 & n.9 (“[E]very lawsuit forces litigants to make current expenditures in order to influence future outcomes. . . . [L]itigants and their lawyers are not ‘potted plants’ who adopt a strategy at a lawsuit’s inception and then watch passively as new information spills out and opponents alter their tactics.”); Hay, *supra* note 110, at 29–30, 35 (“[T]he expected judgment in a case . . . depends on the level of effort the parties put into preparing the case—investigating the facts, doing legal research, planning trial strategy, and so forth.”); Huang, *supra* note 39, at 100 (“[L]itigants might choose the levels of litigation expenditures as endogenous variables as opposed to facing litigation costs that are exogenously distributed random variables.”); *see also* POSNER, *supra* note 28, at 599–601; SHAVELL, FOUNDATIONS, *supra* note 28, 416–17.

¹¹³ *See, e.g.*, Avinash Dixit, *Strategic Behavior in Contests*, 77 AM. ECON. REV. 891, 891 (1987); Spier, *supra* note 28, at 264–65.

¹¹⁴ This phenomenon often stems from agency problems—for instance, a lawyer has a strong incentive to provide low litigation cost estimates to a prospective client in order to win the client's business, especially in today's dynamic legal environment. *See infra* Part I.C.3. *See generally* Stephen McG. Bundy, *The Policy in Favor of Settlement in an Adversary System*, 44 HASTINGS L.J. 1, 19–22 (1992).

meritorious case as meritorious. Reminiscent of the “winner’s curse”—the phenomenon of a buyer winning an auction by overestimating the value of the goods purchased¹¹⁵—many plaintiffs can be viewed as part of a self-selecting subset of litigants that decide to launch suit after overestimating their odds of success.¹¹⁶ Thus, there is a strong likelihood that plaintiffs will systematically overestimate their chances of success on the merits. Second, when the parties do not yet have legal counsel, lawyers will compete to represent the parties, often in what are termed “beauty contests.” Like a real beauty contest, lawyers will often apply “makeup” that masks the reality of the situation in order to win the contest. This puffing will likely include an overestimation of their potential client’s success on the merits and an underestimation of litigation costs.¹¹⁷

Last, and perhaps most importantly, even if the parties on average do not skew their estimates of litigation costs and probabilities of success, information asymmetry and uncertainty in individual cases will tend to cause the parties to settle later in a case or not at all, leading to increased litigation costs over all cases.¹¹⁸ For instance, suppose Plain-

¹¹⁵ See, e.g., John H. Kagel & Dan Levin, *The Winner’s Curse and Public Information in Common Value Actions*, 76 AM. ECON. REV. 894, 894 (1986).

¹¹⁶ See, e.g., Hay, *supra* note 110, at 31 n.2 (noting the presence of “cognitive errors leading each party to overestimate his or her chances of winning at trial”). See generally SHAVELL, FOUNDATIONS, *supra* note 28, at 405; George Lowenstein et al., *Self-Serving Assessments of Fairness and Pretrial Bargaining*, 22 J. LEGAL STUD. 135, 138–39 (1993) (“[P]laintiffs are likely to systematically overestimate the value of their claims, and defendants are likely to underestimate the value of claims brought against them.”); Rasmusen, *Nuisance Suits*, *supra* note 68, at 691 (“A man is not just a poor judge in his own case, but often a sincerely poor judge, unable to see what is obvious to others: that his suit is hopeless.”); Talley, *supra* note 105, at 493 (“[O]verconfidence is commonly the result of systematic overvaluation of ‘strong’ elements of one’s case, and corresponding undervaluation of ‘weak’ or unknown elements.”). Although contingent-fee attorneys may often serve as gatekeepers that inject a dose of reality into plaintiff-selection, even they are likely to be subject to some cognitive bias in selecting their clients. See, e.g., Deborah L. Rhode, *Moral Counseling*, 75 FORDHAM L. REV. 1317, 1325 (2006) (“Even with the best of intentions, attorneys, like any decision makers, are subject to cognitive biases, peer pressures, and information barriers that compromise counseling responsibilities.”); Jean L. Sternlight & Jennifer Robbennolt, *Good Lawyers Should Be Good Psychologists: Insights for Interviewing and Counseling Clients*, 23 OHIO ST. J. ON DISP. RESOL. 437, 543 (2008) (“Both lawyers and clients tend to perceive the world through their schema and stereotypes, emphasize personal characteristics when they attribute causation, assume that others see the world the same way they do, are affected by an array of positive illusions, and show a tendency to do Monday morning quarterbacking.”).

¹¹⁷ Cf. COOTER & ULEN, *supra* note 43, at 432–33; SHAVELL, FOUNDATIONS, *supra* note 28, at 405; Rasmusen, *Nuisance Suits*, *supra* note 68, at 691 (noting the incentive of attorneys “to convince the plaintiff to sue”). Of course, the extent of this sort of puffing is a difficult-to-assess empirical question—and one to which little effort has been devoted.

¹¹⁸ There is ample literature showing that party disagreement about the likelihood of their chances of winning deters settlement. See, e.g., BAIRD ET AL., *supra* note 73, at 247; John P. Gould, *The Economics of Legal Conflicts*, 2 J. LEGAL STUD. 279, 287 (1973); H.S.E. Gravelle, *The Efficiency Implications of Cost-Shifting Rules*, 13 INT’L REV. L. & ECON. 3, 3–6 (1993) (“[M]ore recent models of legal disputes . . . explain failure to settle as arising from differ-

tiff Paula estimates her chances of winning at 50% (when they are really 30%) and Defendant Dinah estimates her odds of success at 90% (when they are really 70%). Also assume that Paula estimates her litigation costs are \$50,000 (when they are actually \$100,000) and Dinah estimates her costs are \$80,000 (when they are actually \$100,000). Both parties agree that potential damages are \$200,000.¹¹⁹ Under Rosenberg and Shavell's model of litigation costs and party omniscience of accurate costs and probabilities, and with an option to bar settlement in play, Paula would not bring suit. In particular, Paula's net expected value of judgment of \$60,000 (30% of \$200,000) is less than her actual litigation costs of \$100,000. The omniscient Paula, knowing that the omniscient Dinah would exercise her option to bar settlement, would decide to forgo litigation. Yet, under the more realistic view of no party omniscience, the knowledge-deficient Paula would estimate her net expected value of judgment at \$100,000 (50% of \$200,000), which is more than her estimated litigation costs of \$50,000, and would decide to bring suit. Dinah, sincerely believing that Paula has a non-meritorious case, would then exercise her irrevocable option, forever barring settlement. Although Dinah's exercise of the option might alert Paula to the weakness of her case, Paula might very well continue to litigate, standing by her belief that her net expected damages outweighed her costs of litigation.¹²⁰ Moreover, as the case progressed, Paula's incentive to withdraw would diminish, because the remaining costs of litigating to judgment would decrease. Thus, even though Paula's knowledge would become more accurate over time,¹²¹ she would likely have less and less incentive to with-

ences in information"); William M. Landes, *An Economic Analysis of the Courts*, 14 J.L. & ECON. 61, 98–102 (1971); see also SHAVELL, FOUNDATIONS, *supra* note 28, at 402–05, 420–21. Grundfest and Huang posit that even if the parties have complete and accurate knowledge of all the key variables, as long as the parties sufficiently disagree about the variance of these variables, early settlement will not occur. Grundfest & Huang, *supra* note 48, at 1314.

¹¹⁹ This Article assumes throughout this section and in this hypothetical that damages, unlike probabilities of success and litigation costs, can be known with certainty by the parties. In some types of cases, however, even damages are not known at the outset of a suit. For instance, in patent infringement actions, it is usually difficult to estimate damages reliably before the exchange of confidential financial information during discovery. See, e.g., Douglas Lichtman, *Uncertainty and the Standard for Preliminary Relief*, 70 U. CHI. L. REV. 197, 197–98 (2003). Lack of knowledge of potential damages further complicates the analysis.

¹²⁰ See generally Alon Klement, *Threats to Sue and Cost Divisibility Under Asymmetric Information*, 23 INT'L REV. L. & ECON. 261 (2003) (constructing a theoretical model of suit and settlement in the presence of asymmetric information and cost divisibility).

¹²¹ Even so, information asymmetries are likely to remain throughout the case. Indeed, even if both parties have access to the same evidence following discovery, one party's ignorance of the effort level of another party in developing its claims or defenses can deter settlement. See Hay, *supra* note 110, at 29–38.

draw.¹²² Dinah's exercise of the option to bar settlement, therefore, would result in socially wasteful expenditures by both parties and the court.¹²³

Moreover, if parties are not risk neutral, then increased uncertainty at the outset of a case may distort parties' settlement incentives in the shadow of a potential option to bar settlement. As mentioned briefly above, a more realistic model of litigation costs would take into account that plaintiffs and defendants incur costs more or less simultaneously after the initial stages of litigation, and that settlement incentives for the parties depend in part on their relative risk aversion.¹²⁴ Even if parties on average correctly guess their litigation costs and probabilities of success, given the greater uncertainty in these estimates at the outset of the case (and the parties' likely awareness of this), risk-averse parties will have a greater incentive to settle than risk-neutral or risk-preferring parties. Because of this asymmetry, there will be distortions from optimality in settlement incentives, especially in the face of a risk-neutral defendant's option to bar settlement.¹²⁵ These distortions may also lead to results that differ from Rosenberg and Shavell's predictions.

In conclusion, contrary to Rosenberg and Shavell's assumptions, parties are not likely to predict accurately their likelihood of winning or their total litigation costs. If the parties are not both risk neutral, or if parties miscalculate their chances on the merits or their litigation costs, then Rosenberg and Shavell's analysis of settlement outcomes does not hold. As partly demonstrated by the Paula-Dinah hypothetical, for many situations involving party error and risk aversion, an option to bar settlement may exacerbate existing defects in the litigation settlement process.

¹²² Depending on the state of Paula's knowledge late in the case of her remaining costs plus expected payout, she would either withdraw or push the case to judgment (but not settle, since Dinah exercised her option). Similarly, Dinah would either default prior to trial or continue to defend herself.

¹²³ Scholars have focused on information asymmetry between the parties—that is, the plaintiff, defendant, or both have knowledge the other party does not—as a source of negative expected value (NEV) suits. See, e.g., Bebchuk, *Settlement Offer*, *supra* note 19, at 440; Bone, *supra* note 3, at 542–77; I. P. L. P'ng, *Strategic Behavior in Suit, Settlement, and Trial*, 14 BELL J. ECON. 539, 540–44 (1983); Katz, *supra* note 1, at 6–8; Shavell, *supra* note 107, at 64–66. Indeed, Rosenberg and Shavell note at the end of their article that if “the defendant does not realize the plaintiff would not litigate,” the option to bar settlement “would not function to prevent these nuisance suits.” Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 50. The example in the text shows that asymmetry between a party's *belief* of the case and the *actual* state of the case can also cause NEV suits. For instance, even if each party has perfect knowledge of the *other* party's costs and chances of winning, if it does not accurately estimate its *own* costs, a NEV suit may ensue (and persist). See *generally* Huang, *supra* note 39, at 62, 100–13.

¹²⁴ See *supra* note 89.

¹²⁵ Interestingly, Grundfest and Huang show under a real-options model of litigation that settlement incentives may be distorted, even for risk-neutral parties. See Grundfest & Huang, *supra* note 48, at 1278, 1310, 1333.

In general, calculating whether an option is more optimal than no option—even with simple information asymmetry—is complex, because both the plaintiff’s and the defendant’s costs come into play, even assuming D bears all of its costs before P.¹²⁶ Taking into account that the plaintiff’s and defendant’s estimates of key variables change during the course of litigation will further complicate the analysis.¹²⁷ Finally, since there is information asymmetry, there are incentives for a party to bluff to signal to the other party a stronger case (or lower costs) in order to induce the other party to settle or withdraw.¹²⁸ Of course, with some careful analysis, this complex bargaining and litigation phenomena can be at least partially modeled, albeit with the use of sophisticated game-theoretic approaches.¹²⁹ These models reinforce the complex nature and empirical dependence of predicting whether an option to bar settlement is, on balance, preferable to none.¹³⁰

II. ADOPTING AN OPTION TO BAR SETTLEMENT IS PREMATURE

A. *Ungrounded Empirical Speculation*

Rosenberg and Shavell conclude their article by commenting briefly on the analytical and empirical plausibility of their proposal and by offering several caveats to it. Unfortunately, this commentary is generally inadequate to alert their readers to the potentially damaging effects of an

¹²⁶ See, e.g., Bone, *supra* note 3, at 542–77; Bebchuk, *Settlement Offer*, *supra* note 19, at 440; Katz, *supra* note 1, at 7–8; P’ng, *supra* note 123, at 540–44; Shavell, *supra* note 107, at 64–66.

¹²⁷ See, e.g., Bebchuk, *Credibility and Success*, *supra* note 30, at 2 n.1; Grundfest & Huang, *supra* note 48, at 1272–91; Huang, *supra* note 39, at 53–71. Moreover, a settlement amount offered by a plaintiff or defendant will typically result in the offeree revising its estimate of its chances of winning. See, e.g., Bebchuk, *Settlement Offer*, *supra* note 19, at 443 n.9. This sort of information transmission will also affect which party is inclined to make settlement offers. See *id.* Like Rosenberg and Shavell, this Article assumes throughout the analysis that the plaintiff makes a take-it-or-leave-it offer. See generally Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 44–45, 47–48. However, as Bebchuk aptly notes, information transmission during settlement negotiations may sufficiently deter a plaintiff with private information from a position as offeror, instead placing the onus on a defendant to demand a settlement, creating additional complexity. Bebchuk, *Settlement Offer*, *supra* note 19, at 443 n.9.

¹²⁸ See, e.g., BAIRD ET AL., *supra* note 73, at 248–49; Bone, *supra* note 3, at 552; Farmer & Pecorino, *supra* note 28, at 6; Nalebuff, *supra* note 72, at 199–200; Talley, *supra* note 105, at 465–66. There are additional complicating incentives for a party to disclose *truthful* information to an opposing party to adjust the opposing party’s estimates of winning. See, e.g., Bebchuk, *Settlement Offer*, *supra* note 19, at 442 n.8.

¹²⁹ See, e.g., Bebchuk, *Settlement Offer*, *supra* note 19, at 441–48; Bone, *supra* note 3, at 522–23; Grundfest & Huang, *supra* note 48, at 1272–91; Katz, *supra* note 1, at 8–10; Klement, *supra* note 120, at 13–22; P’ng, *supra* note 123, at 540–49; Talley, *supra* note 105, at 463–87.

¹³⁰ See, e.g., Bebchuk, *Settlement Offer*, *supra* note 19, at 441–48; Grundfest & Huang, *supra* note 48, at 1272–91; Katz, *supra* note 1, at 8–15; P’ng, *supra* note 123, at 540–49; Talley, *supra* note 105, at 463–87.

option to bar settlement. Initially, Rosenberg and Shavell examine the plausibility of the assertion that a plaintiff can “cheaply . . . place the defendant in a position where he would lose unless he engaged in a relatively costly defense.”¹³¹ They assert that “[p]laintiffs often seem able to do this,” because of low filing fees, the difficulty of showing a suit is frivolous, the high costs of defeating a claim, and the ease of garnering a default judgment.¹³² However, there are significant countervailing factors. First, although filing fees in federal and state court are very low, plaintiffs must often incur significant pre-filing investigation costs before making any sort of claim. For example, in order to make a claim of securities fraud, a plaintiff must “state with particularity facts giving rise to a strong inference that the defendant acted with the required state of mind.”¹³³ Plaintiffs in patent actions, as another example, must review how their patents cover accused products and methods, which often requires costly reverse-engineering of a competitor’s products.¹³⁴ In addition, most plaintiffs in any action will need to pay sizable attorney fees to file a complaint.¹³⁵ These include the costs of drafting the complaint, strategic considerations (e.g., choosing a forum, which can involve significant research), attorney-client communication, and service of process.¹³⁶ Thus, despite low filing fees, the actual costs of lodging a complaint may be significantly higher, especially for certain classes of cases.¹³⁷

¹³¹ Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 49.

¹³² *Id.*

¹³³ 15 U.S.C. § 78u-4(b)(2) (2000). *See generally* William C. Baskin, Note, *Using Rule 9(b) to Reduce Nuisance Securities Litigation*, 99 YALE L.J. 1591, 1601 (1990) (noting that such a rule “deters the commencement of nuisance litigation”).

¹³⁴ *See, e.g.*, Refac Int’l, Ltd. v. Hitachi, Ltd., 141 F.R.D. 281, 286–88 (C.D. Cal. 1991) (imposing sanctions on a patent infringement plaintiff that failed to reverse engineer or examine the accused products prior to filing its complaint). Moreover, patent plaintiffs often review multiple patents and claims, as well as lengthy Patent Office prosecution histories prior to suit. *See, e.g.*, Q-Pharma, Inc. v. Andrew Jergens Co., 360 F.3d 1295, 1300–01 (Fed. Cir. 2004); DE Techs., Inc. v. Dell, Inc., No. 7:04-cv-00628, 2006 U.S. Dist. LEXIS 755 (W.D. Va. Feb. 28, 2006).

¹³⁵ *See, e.g.*, Blackburn v. Goettel-Blanton, 898 F.2d 95, 97 (9th Cir. 1990) (acknowledging that it often costs more than \$6,000 for an attorney to draft a complaint). Although plaintiffs on a contingent-fee arrangement will avoid these expenses, their attorneys will indirectly account for them in deciding whether to take on and file a particular case. *See, e.g.*, Bebchuk, *Negative Expected Value*, *supra* note 1, at 553.

¹³⁶ *See, e.g.*, John Bronsteen, *Against Summary Judgment*, 75 GEO. WASH. L. REV. 522, 535 (2007) (“[E]very court-related document imposes a cost. This begins with the service of process and the complaint . . .”).

¹³⁷ Rosenberg and Shavell mention briefly in a footnote, “Of course, attorney services for drawing up a complaint are also required.” Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 49 n.9. But, they do not explore the full implications of this fact. *Cf.* Katz, *supra* note 1, at 16–17 (arguing under an asymmetric information litigation model that the cost-saving benefits of stricter pleading requirements in reducing the number of nuisance suits and overall trials is exactly offset by increased up-front costs in suits that settle before trial with no change in overall compensation or deterrence).

Second, although collecting attorneys' fees and costs from the plaintiff by showing the suit is frivolous is extremely difficult for a defendant, attorneys are likely to take seriously Federal Rule of Civil Procedure 11 and similar state laws and ethical rules designed to deter the filing of frivolous pleadings. Because Rule 11 and analogous state laws impose individualized sanctions on attorneys who flout them,¹³⁸ and may result in scars on their personal reputations, these rules are apt to deter attorneys from filing wholly or mostly meritless claims.¹³⁹ Of course, as discussed above, if the stakes are very high, the economic incentives to file frivolous suits significantly increase, especially for contingent-fee cases.¹⁴⁰ However, for low-value cases and those involving hourly fees, the threat of sanctions arguably has some bite.¹⁴¹

Third, answering a complaint to stave off default judgment is typically not a costly exercise and is usually less costly than filing a complaint.¹⁴² In particular, the relatively low notice-pleading standards for filing a complaint by implication also apply to an answer.¹⁴³ That is, defendants need only admit or deny particular factual assertions and legal accusations, and briefly set forth defenses and requested relief.¹⁴⁴ There is no need to adduce particular facts at this pleading stage in order to overcome a default judgment.¹⁴⁵ Once the defendant files an answer, the case will proceed to discovery, and the parties will typically bear litigation costs more or less simultaneously. To the extent a plaintiff's costs are roughly similar to a defendant's, the plaintiff will not readily be able to force a settlement or withdrawal by the defendant.¹⁴⁶

¹³⁸ See FED. R. CIV. P. 11(c); see also *Midlock v. Apple Vacations W., Inc.*, 406 F.3d 453 (7th Cir. 2005) (affirming the district court's sanctions of over \$8,000 directly on an attorney in a case the court labeled a "symphony of frivolousness").

¹³⁹ See generally *Bone*, *supra* note 3, at 591 & nn.226–27 (noting that a "lawyer who is falsely accused of filing a frivolous suit faces a potentially serious harm to her reputation").

¹⁴⁰ See, e.g., *Bebchuk & Chang*, *supra* note 3, at 399 & n.33 (asserting that the use of Rule 11 for appropriate "fee shifting would . . . be more than sufficient to deter some frivolous suits," but will not discourage high-stakes, low-cost frivolous suits).

¹⁴¹ See *id.*

¹⁴² See *supra* note 79.

¹⁴³ See FED. R. CIV. P. 8(b)(1) ("[A] party must: state in *short and plain terms* its defenses to each claim asserted against it; and admit or deny the allegations asserted against it by an opposing party." (emphasis added)).

¹⁴⁴ See *id.*

¹⁴⁵ See, e.g., *Kelly v. Locks*, No. 95-341, 1996 U.S. Dist. LEXIS 4581, at *7–8 (W.D. Mich. Mar. 6, 1996) ("Rule 8(b) does not require a fact specific answer, but only requires the respondent to 'admit or deny the averments upon which the adverse party relies' and permits 'general denials.' Therefore, plaintiff is not entitled to summary judgment on his theory of relief that defendants failed to 'plead sufficient facts' to create 'triable issues of material fact.'"). See generally 5 CHARLES ALAN WRIGHT & ARTHUR R. MILLER, FEDERAL PRACTICE AND PROCEDURE § 1261 (3d ed. 2008).

¹⁴⁶ See *supra* notes 78–90 and accompanying text.

Fourth, and related to the third point, Rosenberg and Shavell's claim that "the defendant will often have to spend more to defeat a claim than the plaintiff's cost of making it, for the defendant will have to gather and, at least, prepare to present evidence supporting his contention that he was not legally responsible for the harm done"¹⁴⁷ seems hyperbolic. As noted in the previous paragraph, a defendant can answer a complaint and avert a default judgment without presenting any evidence. Moreover, if a complaint is woefully inadequate, a defendant can move to dismiss on the pleadings.¹⁴⁸ If a defendant files a motion for summary judgment, although the defendant will typically need to present sufficient evidence to eliminate disputes of material fact in order to win, if a plaintiff cannot proffer any evidence to support its claim—presumably the case for a frivolous suit—then the defendant need not proffer any evidence to win its motion.¹⁴⁹ Finally, if a plaintiff truly has no incentive to take a case to trial, it will typically not incur the costs of filing a frivolous motion for summary judgment; a defendant can simply skip the summary judgment phase, thereby forcing the plaintiff to withdraw.¹⁵⁰

In sum, although Rosenberg and Shavell make legitimate arguments to support their assertion regarding a plaintiff's ability to force a nuisance-value settlement, the counterarguments are equally potent. Like their theoretical analysis, the real answer to these questions lies with more realistic modeling and direct empirical analysis—activities that require much more work than presented in their article.

B. *Not So Many Caveats*

To be sure, Rosenberg and Shavell do not merely end their paper by providing arguments to support their conclusions. In addition, they offer several caveats that potentially limit the scope of their claims. Unfortu-

¹⁴⁷ Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 49.

¹⁴⁸ See, e.g., FED. R. CIV. P. 12(b)(6); see also *supra* note 79. But see Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 49 n.12 (arguing without citation that "a reasonably skilled plaintiff will be able to draft a complaint that would survive such a motion"). In the absence of a heightened pleading standard, this may often be the case, but motions to dismiss will weed out the most abysmal of complaints. In any event, given the ease of answering a complaint, clever drafting will not carry unworthy plaintiffs too far. See *supra* note 79.

¹⁴⁹ Rather, the defendant need only point out the plaintiff's failure to present any evidence to defeat the defendant's motion. See *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 257 (1986) ("[T]he plaintiff must present affirmative evidence in order to defeat a properly supported motion for summary judgment."); *Celotex Corp. v. Catrett*, 477 U.S. 317, 325 (1986) ("[T]he burden on the moving party may be discharged by 'showing' - that is, pointing out to the district court - that there is an absence of evidence to support the nonmoving party's case.").

¹⁵⁰ Cf. Katz, *supra* note 1, at 4 (recognizing that once a defendant has answered a complaint, "[s]ince the plaintiff's ultimate threat to go to trial is not credible, the defendant may be able to ignore it").

nately, these cautionary remarks are but a small subset of the potentially problematic aspects of their model and associated analysis. Rosenberg and Shavell begin by noting that:

The nuisance suits considered in the model were implicitly assumed to be a problem for society (otherwise there would be no warrant for the policy allowing defendants to have the court bar settlement). That would be so if the costs of the suits—the litigation and settlement costs associated with them—outweigh the possible social benefits—notably, deterrence of undesirable behavior. . . . [I]t is possible to conceive of situations where that is not so, and nuisance suits are not socially undesirable.¹⁵¹

Importantly, Rosenberg and Shavell admit that they assume that “nuisance suits [are] socially undesirable.” Yet, they fail to acknowledge that there may be a significant number of cases for which this assumption is not borne out. Instead, they provide (in a footnote) one limited example of such a case—namely, ones that are “meritorious but would not be won because of problems of proof.”¹⁵² As discussed earlier, however, there are very likely many meritorious cases (i.e., those in which the probability of winning is greater than 50%) with no problems of proof, but which do not provide the plaintiff with a sufficient incentive to take the case to judgment.¹⁵³ In view of Rosenberg and Shavell’s ambiguous definition of nuisance suit introduced earlier in their article, their example creates the false impression that as long as a plaintiff has a facially meritorious case, it will have a sufficient incentive to take the case to judgment. Additionally, their example ignores the salient fact that many suits they view as non-meritorious (i.e., probability less than 50%) “nuisances” may be socially beneficial if filed and settled.

Furthermore, Rosenberg and Shavell offer no caveats about their oversimplified model of litigation costs and how that might affect the results of their analysis. As explained in Part I.B, a model in which the parties bear litigation costs simultaneously can produce completely different results.¹⁵⁴ Similarly, they fail to note the effects of risk aversion on settlement as well as the interaction between litigation costs and the probability of party success. Additionally, although Rosenberg and Shavell mention that their model does not apply if “the defendant does not realize the plaintiff would not litigate—a suit in which the plaintiff masquerades as a party who would be willing to litigate,”¹⁵⁵ this caveat

¹⁵¹ Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 50.

¹⁵² *Id.* at 50 n.14.

¹⁵³ *See supra* Part I.A.

¹⁵⁴ *See supra* Part I.B.

¹⁵⁵ Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 50.

applies to a much wider class of cases than plaintiff bluffing. In particular, if the parties do not have complete knowledge of their probabilities of success on the merits, litigation costs, or the amount at stake, that uncertainty may cause one party to predict mistakenly that the other has a strong case, though the opposite is true.¹⁵⁶ This information asymmetry makes a complex application of game theory necessary for any model that aspires to approximate reality. Although part of this game-theoretic approach does concern incentives for parties to bluff their way through litigation, this is not the only situation that may potentially skew the analysis. For instance, simple party ignorance may yield the same results.¹⁵⁷

Finally, Rosenberg and Shavell's test to determine whether nuisance suits are socially problematic is misguided. In particular, they argue that a "nuisance suit" (i.e., one that a plaintiff is not willing to litigate to judgment) is problematic if "the costs of the suit[] . . . outweigh the possible social benefits—notably, deterrence."¹⁵⁸ Even if the costs of nuisance suits always outweighed their benefits, it is generally inappropriate to determine whether one procedural rule is preferable to another simply by tallying the costs and benefits under one of those rules for a single type of case (here, nuisance suits). Rather, one must evaluate whether one procedural rule results in outcomes that are more optimal (or not) than another rule across all cases.¹⁵⁹ The status quo (e.g., no option) may be socially detrimental on balance, yet still yield better results than another rule (e.g., an option).¹⁶⁰

CONCLUSION

In the absence of a realistic litigation model and well-grounded empirical observations, any conclusions to be drawn about the option to bar settlement must be tentative and subject to numerous caveats.¹⁶¹ Even using Rosenberg and Shavell's stylized model of litigation—which as-

¹⁵⁶ See *supra* Part I.C.

¹⁵⁷ See *id.*

¹⁵⁸ Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 50.

¹⁵⁹ See *supra* notes 126–130 and accompanying text.

¹⁶⁰ See *id.* In particular, Rosenberg and Shavell ignore this crucial comparative analysis, because they incorrectly conclude that an option to bar settlement always bars nuisance suits and does not affect non-nuisance suits. Rosenberg & Shavell, *Option to Bar Settlement*, *supra* note 9, at 50; see *supra* Part I.B–C (explaining that because parties will typically be uncertain of key litigation variables, an option to bar settlement may result in judgments in nuisance suits and may increase costs in non-nuisance suits).

¹⁶¹ See Bone, *supra* note 3, at 579 (“[W]e cannot rule out the desirability of regulation [of frivolous suits] altogether, but neither can we be confident that extensive regulation is warranted. We need much more empirical information . . .”); cf. Shavell, *supra* note 107, at 56 n.3 (“The usual cautionary remark should be made about this model, that the aim is not for descriptive accuracy, but rather for sufficient simplicity and analytic tractability as to provide a generally useful tool for thought and guide for the design of empirical research.”).

sumes sequential litigation costs, complete party knowledge, and risk-neutrality—to examine the optimality of an option to bar settlement, the result depends on unanswered empirical questions. When Rosenberg and Shavell’s assumptions are relaxed further to generate a more realistic model, the analysis becomes even more complex and fact-dependent.¹⁶²

Instead of relying on a simplified analysis and speculative claims about the empirical prevalence of a limited range of cases, resolving whether an option to bar settlement is a useful means to achieve more optimal litigation outcomes requires: (1) building a tractable, yet suitably realistic,¹⁶³ model of litigation; (2) incorporating actual data about litigation costs, probabilities of success, amounts at stake, party knowledge, and relative risk aversion; (3) conducting empirical research to fill in the gaps where existing data is lacking; and (4) using this data-driven model to make sound predictions about how changes in legal rules affect social welfare.¹⁶⁴ Perhaps doing so would prove Rosenberg and Shavell right. In the meantime, it would be folly to conclude their proposal would work as intended.

¹⁶² See *supra* Part I.B–C.

¹⁶³ Cf. Talley, *supra* note 105, at 495 (“[T]ractability does not necessarily imply reality . . .”).

¹⁶⁴ See generally Rasmusen, *Nuisance Suits*, *supra* note 68, at 693 (“Perhaps the biggest blanks [in law-and-economics research in the area of nuisance suits] are in the areas of public choice theory and theory-driven empirical study. . . . Empirical work would . . . be helpful, particularly to delineate the extent of the problem and which of the many plausible explanations for nuisance suits are most common in practice.”). Particular areas of litigation where data is rich, such as intellectual property law, may be worthwhile starting points for such an analysis. See *supra* note 32 (listing data sources).