THE PARADOX OF PREDATORY PRICING

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Predatory pricing law attempts to keep prices low by harshly sanctioning prices that are anticompetitively low. The paradox of predatory pricing law is that even an analytically perfect specification of the line between predatory and innocent price cuts would result in deviations from optimal pricing because the very recognition of a predatory pricing offense will induce some firms to forgo innocent price cuts. This occurs for several reasons. Firms can strategically misuse predatory pricing law to coerce more efficient rivals to forgo price cuts or to help organize tacit collusion schemes. Even apart from strategic misuse, the remedial structure of antitrust law—including treble damages, unilateral fee shifting, and ease in proof of damages—coupled with unavoidable ex ante uncertainty over adjudicatory results and managerial risk aversion will cause some firms to raise their prices to avoid predatory pricing litigation. No complete solution to the paradox exists, since both the absence and presence of a legal prohibition on predatory pricing would induce upward deviations from optimal pricing. Courts, Congress, and the antitrust agencies can attempt to minimize the costs of maintaining a legal prohibition on predation by adopting decisional rules that mandate deliberate underinclusion in establishing liability norms and in adjudication. They can also adopt procedural and remedial rules—such as detrebling damages in predation cases, bilateral fee shifting, and limiting information exchange in discovery—to minimize the costs of the predatory pricing prohibition.

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INTRODUCTION

Predatory pricing is a paradoxical offense. Although antitrust law values low prices and abhors high ones, the "predator" stands accused of charging too low of a price—of doing too much of a good

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1 One can, of course, believe that the entire antitrust enterprise is paradoxical. See, e.g., Robert H. Bork, The Antitrust Paradox (1978). Even so, the predatory pricing offense is a particularly acute paradox, since it condemns as unlawful low prices, the maintenance of which is the very object of the antitrust laws.

thing. Society considers predation socially harmful because the artificially low prices of today drive out competitors and allow the high prices of tomorrow. But proof of actual high prices in the later time period is not required, since even attempts at predation that never succeed and never lead to monopolistic recoupment are condemned.3 "Predators" can face treble damage suits for pricing too low,4 even if they never offend the law's ultimate concern by pricing too high.

Following the Chicago School of thought, the Supreme Court has repeatedly worried that the existence of predatory pricing may perversely chill vigorous price competition. It has noted that "the mechanism by which a firm engages in predatory pricing—lowering prices—is the same mechanism by which a firm stimulates competition,"5 and that "mistaken inferences . . . are especially costly, because they chill the very conduct the antitrust laws are designed to protect."6 The Court has commented that "[i]t would be ironic indeed if the standards for predatory pricing liability were so low that antitrust suits themselves became a tool for keeping prices high."7 Seeking to avoid this irony, the Court has set a high bar that predatory pricing plaintiffs must hurdle.

Too high, according to many. In the past decade, some commentators and courts have wondered whether the Supreme Court has become too solicitous of price competition and too skeptical about claims of predation.8 In a recent decision, the Tenth Circuit offered that, in light of recent economic scholarship, it would not approach predatory pricing cases with "the incredulity that once prevailed."9 But "incredulity"—skepticism that firms would ever attempt predatory

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3 Probabilistic harm in a future time period—to the degree of a "dangerous probability"—suffices. See 3 Phillip E. Areeda & Herbert Hovenkamp, Antitrust Law ¶ 726 (1996).

4 Such actions would need to be brought by competitors rather than consumers, since consumers that enjoyed lower prices without ever getting to a period of recoupment would lack any viable claim of antitrust injury.


7 Brooke Group, 509 U.S. at 226–27.


9 United States v. AMR Corp., 335 F.3d 1109, 1115 (10th Cir. 2003). Despite approaching predatory pricing claims with less incredulity, the court affirmed the district court's grant of summary judgment against the United States finding that none of the four
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pricing or succeed in it—was only one prong of the Chicago School attack on predatory pricing theories. The other prong was the one mentioned at the outset—that error in the specification of the legal standard could chill vigorous price competition, thus causing predatory pricing law to lead to a net increase in prices. To this latter prong, the more credulous crowd has not yet offered a convincing reply.

Perhaps that is because the "chilling price competition" claim was posited but never established. Despite the claim that error in the legal standard could chill vigorous price competition, no proof has yet been offered that price competition has actually been chilled. The absence of rigorous proof that "chilling" has occurred could be due to the fact that the Supreme Court has gotten it right on the legal standard, thus avoiding the chilling it feared. But that account does not seem wholly persuasive, since the Supreme Court did not begin to reign in predatory pricing theories until the last two decades and still has not resolved circuit splits in the lower courts over certain fundamental predatory pricing issues, such as the appropriate measure for determining when a price is "below cost." Further, although it is accepted wisdom that no predatory pricing plaintiff has won a verdict since *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, plaintiffs have recently won some predatory pricing cases and procured substantial settlements in others. Additionally, regardless of their low probability of success, plaintiffs continue to file a significant number

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10 The Supreme Court has declined in three separate cases to decide what is the appropriate measure of cost below which prices must be set in order to be condemned as predatory. See *Brooke Group*, 509 U.S. at 222 n.1; *Cargill*, 479 U.S. at 117–18 n.12; *Matsushita*, 475 U.S. at 584–85 n.8.


13 See infra notes 56–59 and accompanying text.
of federal predatory pricing cases, suggesting that predatory pricing complaints may afford plaintiffs strategic advantages whether or not they ultimately prevail.

Given the importance of the chilling-price-competition assertion to the development of predatory pricing doctrine, a closer examination of that claim is warranted. In exactly what ways, and to what degree, does predatory pricing law chill price competition? Is some chilling inevitable given that the law condemns pricing too low as an offense, or are there structural means to minimize the incidence of predatory pricing while also minimizing the collateral consequences of recognizing a predation theory? The answers to these questions should play a central role in the continuing debate over optimal structuring of the predatory pricing offense, which appears poised to enter a new phase of development stimulated by advances in behavioral economics and game theory. It is insufficient to justify a particular standard of illegality for price cuts on the ground that the class of prohibited price cuts is socially harmful. Rather, it is necessary to consider whether the net effect of any legal rule prohibiting price cuts is to induce higher or lower prices than those that would obtain in an unregulated, or differently regulated, state given that any prohibition on predatory pricing may also discourage some innocent price cuts.

Part I of this Article considers the most obvious way in which predatory pricing law could adversely affect market pricing: If rival firms strategically misuse predatory pricing law to discourage price cutting, then predatory pricing law could lead to price increases. Firms may strategically misuse predatory pricing law in several different ways. Less efficient firms may use the threat of a predation lawsuit to raise their rivals’ costs and thereby overcome efficiency deficits. Equally efficient firms may use predatory pricing litigation to help organize or enforce a tacit agreement on pricing. Finally, Part I considers whether there is evidence that firms in fact use predatory pricing litigation for strategic purposes, and concludes that there is some evidence suggesting that they do.

Part II considers the incentives that predatory pricing law creates for firms to deviate from socially optimal pricing, particularly in comparison to the incentives that firms would face in an unregulated state. Since both the existence of predatory pricing law and the absence of such a prohibition would induce or permit deviations from optimal pricing, some comparison of the likely effects of weak and strong predatory pricing regimes on pricing behavior is necessary in formulating the optimal legal rules. I argue that a number of remedial features of antitrust law—including the treble damages remedy, fee

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14 See infra note 18.
shifting, and liberality in proof of damages—coupled with behavioral influences on management decision-making, such as risk aversion under conditions of significant uncertainty—suggest that predatory pricing law may induce a substantial amount of deviation from optimal pricing. Part II concludes by reporting the results of an informal study of in-house lawyers that I conducted to understand the extent to which predatory pricing law influences firms' pricing behavior in non-litigation contexts.

Finally, Part III suggests some decisional and remedial approaches to predatory pricing law that could help to minimize the costs of recognizing the predation theory. The adoption of decisional rules mandating underinclusion in liability standards and adjudication and a precommitment to the adoption of predictable bright-line rules would help to stem overdeterrence. Some remedial proposals that others have raised—such as detrebling damages and eliminating competitor standing in predatory pricing cases—are revisited in light of a fuller appreciation of the market effects of predatory pricing law. Several new proposals are also presented, including making fee shifting bilateral and limiting discovery until the plaintiff demonstrates that predation could plausibly have occurred in the relevant market. In short, I argue that if a predation theory is to be recognized at all, it must be tightly contained not only in terms of the specification of the relevant liability rule but also in terms of the remedial structure of predatory pricing litigation.

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Strategic Uses of Predatory Pricing Theories

A mainline view among legal scholars today is that the Supreme Court's decisions in *Matsushita Electric Industrial Co. v. Zenith Radio Corp.* and *Brooke Group* have made it virtually impossible for plaintiffs to win predatory pricing cases. While this pessimism may be somewhat overstated, it raises an interesting question: If predatory pricing cases are doomed to failure in light of *Matsushita* and *Brooke Group*, why do so many plaintiffs continue to assert them? Since *Brooke Group* was decided in 1993, at least fifty-seven federal antitrust lawsuits alleging predatory pricing have been filed, based on a survey of reported decisions alone. Many unreported federal suits probably have been

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15 475 U.S. 574 (1986).
16 See supra note 11.
17 See supra note 12.
18 The following are reported federal cases involving a complaint alleging predatory pricing filed after 1993. The search included predatory pricing claims asserted as monopolization or attempted monopolization claims under § 2 of the Sherman Act and primary line price discrimination claims under the Robinson-Patman Act, but did not include claims made solely under state antitrust statutes or antidumping statutes. Covad
filed as well.19 Are all of these plaintiffs Don Quixotes tilting at windmills? That is unlikely given the cost and complexity of predatory pricing litigation. If obtaining a money judgment is doubtful in light of Matsushita and Brooke Group, the objectives of predatory pricing plaintiffs may be other than simply exacting money from a vulnerable adversary.20 As recognized by a number of authors, business rivals may use antitrust laws for a variety of strategic objectives.21

Predatory pricing law is perhaps the most susceptible of all antitrust theories to strategic use because it involves an effort to punish the lowering of prices—the very behavior that ordinarily counts as a virtue. To the extent that the literature on strategic misuse of the antitrust laws has focused on predatory pricing as a particular problem, it has largely addressed the tendency of less efficient firms to seek the creation of liability rules from the courts that would shelter them from competing with more efficient firms.22 While strategic capture of legal rulemaking by less efficient firms is a legitimate and serious concern, it is one that can be addressed by ensuring transparency in the judicial process and careful deliberation in establishing liability rules. But even assuming that the courts applying these rules are able to discern between legitimate competition and exclusionary behavior, there remains the possibility that plaintiffs will attempt to misuse predatory pricing law to increase prices above competitive levels. Even if

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19 Only about ten to fifteen percent of federal district court decisions are published in the Westlaw database, which was searched to generate these statistics. See, e.g., William A. Hilyerd, Using the Law Library: A Guide for Educators—Part I: Untangling the Legal System, 33 J.L. & EDUC. 213, 221 (2004) (citing Roy M. MERSK& DONALD J. DUNN, FUNDAMENTALS OF LEGAL RESEARCH 23 (8th ed. 2002)). But it would not be safe to extrapolate from the fifty-eight reported decisions that there have been 387 to 580 federal predatory pricing cases filed since 1993. Antitrust cases, which often involve large potential liability and sophisticated counsel, are likely to be reported disproportionately to many more mundane matters, such as prisoner pro se filings and federally backed student loan foreclosure actions. Further, the ten- to fifteen-percent statistic concerns the number of decisions that are published, not the total number of cases in which some written decision gets reported. A particular case may involve multiple written decisions, some reported and some not.


21 See, e.g., William J. Baumol & Janusz A. Ordover, Use of Antitrust to Subvert Competition, 28 J.L. & Econ. 247 (1985); Snyder & Kauper, supra note 20.

22 See, e.g., Baumol & Ordover, supra note 21, at 255 ("[L]ess efficient firms] advocate their costing approach as a device to limit the price-cutting opportunities of rivals rendered more efficient by economies of scale or scope, by superior management, or by other legitimate sources of superiority.").
the content of the law is optimally specified, the opportunity for abuse through predatory pricing litigation does not vanish. This Part considers the ways in which plaintiffs may use predatory pricing litigation, or the threat of litigation, to diminish price competition, even in cases where predation is unlikely to have taken place and the courts are unlikely to conclude erroneously that it has.

A. The Availability of Strategic Predatory Pricing Claims

Firms strategically misuse predatory pricing law in two ways. In the first model, a less efficient rival might use a predation lawsuit to raise its rival's costs or threaten the possibility of a large money judgment in order to overcome an efficiency deficit. In the second model, a firm might use a predation lawsuit to send price signals, exchange information, and otherwise facilitate the formation or maintenance of a consciously parallel pricing scheme. A strategically thinking firm need not adopt only one model because elements of both could be used simultaneously to discourage price competition.

1. Overcoming a Rival's Efficiency Advantages

If a predatory pricing lawsuit is so unlikely to succeed in light of the substantial hurdles created by Matsushita and Brooke Group, then defendants might not allow the threat of such litigation to affect their market behavior. However, the mere fact that a lawsuit is unlikely to succeed is only one factor in the defendant's pricing calculus. Equally important are such factors as the cost and aggravation of litigating, and the magnitude of the plaintiff's recovery in the unlikely event that the plaintiff obtains a favorable verdict or advances far enough in the litigation to exact a settlement.

a. Raising a Rival's Costs Through Predatory Pricing Litigation

A common focal point in predatory pricing litigation and scholarship is the relative productive efficiencies of the alleged predator and prey. If the prey is less efficient than the predator, the predator may be able to exclude the prey from the market by pricing above its own cost but below the prey's. Although this view is not universal, most judicial opinions and commentators agree that any competitor ex-

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24 See LePage's Inc. v. 3M, 324 F.3d 141, 177 (3d Cir. 2003) (Greenberg, J., dissenting) (discussing plaintiff corporation's successful argument that it did not need to show that it was as efficient as defendant corporation in the production of transparent tape in order to challenge defendant's bundled discounts and rebates as exclusionary); cf. Edlin, supra note 8, at 945–46 (proposing a "dynamic" standard for adjudicating predation that would prevent a monopoly from responding to a new entrant with "substantial price cuts or signifi-
cluded from a market because of its inferior efficiency has no complaint under the antitrust laws. The usual discussion on the comparative efficiency of market rivals in predatory pricing cases assumes that each firm brings to the market whatever productive efficiency it has attained on its own. But firms can also affect one another’s efficiency, incidentally or deliberately. When an efficiency gap exists between rival firms, predatory pricing law may enable the less efficient firm to coerce its rival to price in a manner consistent with the less efficient firm’s productive limitations.

Suppose that a new entrant is less efficient than the dominant incumbent. In response, the incumbent may drop its price, thus threatening the new entrant’s survival. To counter, the new entrant may threaten to file a predatory pricing suit, or actually file one, to force the incumbent to soften its price cutting. The incumbent might reasonably anticipate that whatever profits it would forgo by raising its price, thus yielding market share to the new entrant and acquiescing to the threatened predatory pricing suit, would be more than offset by the savings in litigation expenses. Therefore, the incumbent might increase its price to appease its litigious rival.

Firms, of course, prefer not to face the cost of litigation. The mere threat of predatory pricing litigation, however, may not be sufficient to persuade the incumbent firm to increase its price. In order
cant product enhancements until the entrant has had a reasonable time to... become viable").

25 See, e.g., Morgan v. Ponder, 892 F.2d 1355, 1363 (8th Cir. 1989) (holding that a predatory pricing plaintiff must show that defendant’s price would have excluded an equally efficient competitor); Barry Wright Corp. v. ITT Grinnell Corp., 724 F.2d 227, 232 (1st Cir. 1983) (discussing the harmful effect of sub–marginal cost pricing on equally efficient competitors); MCI Commc’ns Corp. v. Am. Tel. & Tel. Co., 708 F.2d 1081, 1113 (7th Cir. 1983) (discussing the view that price cuts by dominant firms are incapable of excluding equally efficient firms, so long as prices remain above costs); Richard A. Posner, Antitrust Law 215 (2d ed. 2001) (arguing that above-cost pricing should not be unlawful because it cannot exclude an equally efficient competitor); Phillip Areeda & Donald F. Turner, Predatory Pricing and Related Practices Under Section 2 of the Sherman Act, 88 Harv. L. Rev. 697, 709–10 (1975) (proposing predation rules with the goal of protecting equally efficient competitors); Einer Elhauge, Why Above-Cost Price Cuts To Drive Out Entrants Are Not Predatory—and the Implications for Defining Costs and Market Power, 112 Yale L.J. 681, 711–14 (2003) (analyzing what sort of price cuts are capable of driving out equally efficient firms).

26 See, e.g., Elhauge, supra note 25, at 687 (explaining how a new entrant can decrease an incumbent’s efficiency by cherry picking the most profitable business, thereby undermining the incumbent’s efficient price-discrimination scheme).


28 See Oliver E. Williamson, Predatory Pricing: A Strategic and Welfare Analysis, 87 Yale L.J. 284, 287 (1977) (noting that predatory pricing law could be invoked as a “shelter against inefficiency”).
for the threat to be credible, the incumbent must believe that the predatory pricing lawsuit would cost it more than it would cost the new entrant, even if the incumbent believes that the suit would be unlikely to succeed. Otherwise, there would be no obvious advantage for the new entrant to file suit because it would harm the new entrant as much as the incumbent. The incumbent firm must generally believe then that the incumbent will pay substantially more to defend the lawsuit than the plaintiff will to prosecute it. For at least four reasons the incumbent might reasonably believe that this is so.

First, the incumbent’s loss aversion may exceed the new entrant’s gain preference because of the “endowment effect”—the propensity of firms to disfavor losses more than they favor equivalent gains. If so, the incumbent might be willing to spend more to avoid an adverse judgment than the new entrant would spend to obtain a favorable one. Facing the prospect of a predatory pricing lawsuit, the incumbent might reasonably conclude that its own defense costs would far exceed the new entrant’s prosecution costs. The defendant would therefore have reason to believe that the plaintiff would be willing to prosecute a predatory pricing lawsuit as a means of increasing defendant’s costs. To avoid such a nuisance suit, the incumbent firm might be induced to soften its price competition, thus enabling the new entrant to overcome the incumbent’s efficiency advantage.

Second, and in a similar vein, the incumbent firm may have reputational reasons, not shared by plaintiffs, that strengthen its aversion to losing antitrust lawsuits. The management team responsible for conduct leading to an adverse judgment or a substantial settlement may fear stigmatization, or a loss of shareholder or customer confidence. While the reputational spillover effects in antitrust cases

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29 See generally Krattenmaker & Salop, supra note 27 (discussing exclusionary restraints and the effectiveness of raising rivals’ costs as a method of anticompetitive exclusion).

30 A threat by the new entrant to raise both firms’ costs by an equal amount could potentially be credible if the new entrant had greater or cheaper access to capital than the incumbent. This is putting aside, of course, the possibility that the new entrant would actually prevail and recover a substantial judgment, which is discussed in the next section.


32 Differences between the plaintiff’s and defendant’s preferences with respect to losses and gains may not only affect the amount of each side’s litigation expenditures but also the dynamics of settlement negotiations. If the defendant’s aversion to large losses exceeds the plaintiff’s preference for large gains, the likelihood increases that the defendant would be willing to make a larger settlement payment to avoid the risk of a substantial adverse judgment in a predatory pricing case. This could increase the attraction of predatory pricing litigation as a strategic threat by plaintiffs to coerce defendants to lessen price competition.
may be weak compared to other categories of corporate crime,\textsuperscript{33} they are likely to be stronger for the defendant than for the plaintiff.\textsuperscript{34} Management teams that instigate frivolous, costly, and ultimately unsuccessful litigation may pay a reputational price, but probably a lower one than executives tagged with violations of the antitrust laws, which are, after all, criminal statutes. Therefore, faced with the threat of a predatory pricing lawsuit, the incumbent firm may elect to increase its prices to appease the new entrant, rather than exploit its efficiency advantage by underpricing its competitors.

Third, plaintiffs may be able to hire lawyers on contingency, thus shifting the risks of litigation failures onto a third party,\textsuperscript{35} whereas the defendant must bear the litigation costs on an hourly-fee basis, regardless of the outcome. The contingency-fee structure can induce the plaintiff to see only an upside to initiating a predatory pricing lawsuit.\textsuperscript{36} Of course, to the extent that the plaintiff's objective in bringing such a lawsuit is to force an abatement of price competition rather than to achieve a favorable money judgment or settlement, it is less likely that the plaintiff would be able to find a law firm agreeable to taking the matter on contingency. Contingency-fee lawyers must be convinced that the lawsuit may bring a monetary benefit to them and not merely a strategic benefit to their client. But, at least where the plaintiff has some hope of exacting a settlement from the defendant, the defendant has reason to believe that its own litigation expenses will be substantial regardless of the outcome, whereas the plaintiff may pay no out-of-pocket fees at all. As will be discussed in Part I.B, a survey of plaintiffs' lawyers in recent predatory pricing cases reveals that despite \textit{Brooke Group} and other decisions hostile to predatory pricing cases, some firms continue to take predatory pricing cases on contingency.


\textsuperscript{34} Cf. Kenneth D. Garbade et al., \textit{Market Reaction to the Filing of Antitrust Suits: An Aggregate and Cross-Sectional Analysis}, 64 REV. ECON. \& STAT. 686, 691 (1982) (finding that the stock of companies named as defendants in antitrust actions by the Department of Justice or Federal Trade Commission experience significant negative returns immediately after the announcement of the governmental action).


\textsuperscript{36} See generally Eric Helland \& Alexander Tabarrok, \textit{Contingency Fees, Settlement Delay, and Low-Quality Litigation: Empirical Evidence from Two Datasets}, 19 J.L. ECON. \& Org. 517 (2003) (reporting that the contingency-fee structure tends to increase legal quality and decrease the time to settlement, while the hourly-fee structure tends to encourage the filing of low-quality, "frivolous" litigation and increase the time to settlement).
Finally, as Frank Easterbrook has argued, antitrust litigation may create an "asymmetrical structure of incentives" favoring plaintiffs, because a plaintiff's litigation costs, and in particular, discovery costs, are likely to be less than the defendant's.\textsuperscript{37} Because "[t]he defendant is apt to be larger, with more files to search, and to have control of more pertinent documents than the plaintiff,"\textsuperscript{38} the defendant may presume that the threatened lawsuit will be more costly to itself than to the new entrant.

A plaintiff's predatory pricing case need not be successful, or even very likely to succeed, in order to teach efficient producers that price temperance, rather than price aggression, is the more profitable route. Rather, simple forcing the incumbent to endure the costly predatory pricing suit may be enough. Further, the new entrant may not need to file suit to chill price competition; a credible threat of litigation may be sufficient to achieve the desired result. If the incumbent anticipates that any predatory pricing lawsuit filed by the new entrant would impose greater costs on the incumbent than on the new entrant, the incumbent will believe that the new entrant has the power to raise the incumbent's costs by filing a predatory pricing lawsuit. If the new entrant threatens litigation, the incumbent may understand that threat as one that can realistically raise its costs, but which can be avoided by easing on price competition. As described, predatory pricing may be an effective strategic tool for less efficient firms to erase a more efficient rival's productive advantage. Moreover, the threat of such litigation, explicit or implicit, may work regardless of whether the new litigation would actually raise the incumbent's costs. Ultimately, what counts is not that the incumbent's costs are actually raised, but that the incumbent believes that its costs would be raised if it continued to engage in vigorous price competition.

b. Exploiting the Magnitude of Recoverable Damages

In the wake of \textit{Brooke Group} and \textit{Matsushita}, plaintiffs find it difficult to win predatory pricing lawsuits, but there remains a pot of gold awaiting any plaintiff that does win. Evaluating the expected cost of a predatory pricing lawsuit requires examining not only the \textit{ex ante} probability of an adverse judgment, which may be quite low, but also the magnitude of the recoverable damages in the unlikely event of a plaintiff's verdict. Whenever attained, the plaintiff's damages in predatory pricing cases are likely to be quite high, which creates a significant expected liability for defendants, even if a finding of liability is unlikely.\textsuperscript{39}

\textsuperscript{37} See Easterbrook, \textit{supra} note 20, at 34.
\textsuperscript{38} See \textit{id}.
\textsuperscript{39} See, \textit{e.g.}, \textit{infra} notes 50-54 and accompanying text.
Once a jury finds the defendant liable for predatory pricing, proving damages is typically not difficult. The tendency of courts in antitrust cases is to require strict proof of causation and antitrust injury, but much more lenient proof of the amount of damages once those elements are established. This tendency has significant systemic effects in predatory pricing cases. A firm's aggressive price competition, whether predatory or innocent, almost inevitably causes damage to competitors by lowering their market share and profit margins. While the antitrust laws presume that most such effects are *damnnum absque injuria*—harm without legal injury—when a plaintiff proves legal injury in a predatory pricing case, proving damages resulting from the predation is relatively easy. Even new market entrants who have not yet established a profitable business can claim that predatory pricing has excluded them from the market and may establish damages by relying on estimates of lost profits. Proving the amount of lost profits but for the incumbent's predatory pricing scheme is, to put it mildly, "not a straightforward matter." Ascertaining this "but-for" world requires the showing of the but-for market price, plaintiff's but-for market share, and plaintiff's profitability at the but-for price and market share. Nevertheless, the difficulty of assessing damages can work to the benefit of the plaintiff, because the cost of any uncertainty regarding the plaintiff's but-for profits is borne by the guilty defendant, rather than by the innocent plaintiff.

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40 See J. Truett Payne Co. v. Chrysler Motors Corp., 451 U.S. 557, 566 (1981) (holding that some uncertainty in proving damages in antitrust cases must be tolerated because "[t]he vagaries of the marketplace usually deny us sure knowledge of what plaintiff's situation would have been in the absence of the defendant's antitrust violation"); Story Parchment Co. v. Paterson Parchment Paper Co., 282 U.S. 555, 562-63 (1931) ("It is true that there was uncertainty as to the extent of the damage, but there was none as to the fact of the damage; and there is a clear distinction between the measure of proof necessary to establish the fact that petitioner had sustained some damage, and the measure of proof necessary to enable the jury to fix the amount. ... Where the [wrongful act] itself is of such a nature as to preclude the ascertainment of the amount of damages with certainty, it would be a perversion of fundamental principles of justice to deny all relief to the injured person, and thereby relieve the wrongdoer from making any amend for his acts. ... [T]he risk of the uncertainty should be thrown upon the wrongdoer instead of upon the injured party."); Roger D. Blair & Jeffrey L. Harrison, Antitrust Policy and Monopsony, 76 CORNELL L. REV. 297, 358 n.221 (1991) ("Traditionally, courts have been lenient about the degree of certainty required to prove the amount of damages in an antitrust case."); Jeffrey L. Harrison, The Lost Profits Measure of Damages in Price Enhancement Cases, 64 MINN. L. REV. 751, 756-58 (1980) (discussing the relaxed requirements for proving the amount of damages once an antitrust injury is shown).

41 See 2 PHILLIP E. AREEDA, ROGER D. BLAIR & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION § 396g (2000) (discussing the complexity of determining damages in predatory pricing cases because the market conditions but-for the defendant's actions must be estimated).

42 See id.

43 See id.

While the jury is deliberating on what damages to award the plaintiff in light of the uncertainty created by defendant's conduct, it is usually unaware that the damages are automatically trebled and that the prevailing plaintiff is entitled to attorney's fees from the defendant, whereas there is no such recovery for a triumphant defendant. Further, the conduct that gives rise to predatory pricing claims—aggressive price competition—might be easily misinterpreted by na"ive jurors as malicious and thus deserving of punishment. A defendant's internal documents are often laced with aggressive or violent metaphors that sound shocking to jurors unfamiliar with the business world. Observing market competition is often like going to a sausage factory—ugly when observed in intimate detail, even if it produces desirable results. Seeing the inner workings of an aggressive pricing campaign by a "big company" against a smaller new entrant may inflame jurors into awarding large damages. Historically, jury awards in predatory pricing cases have been disproportionately large, requiring remittitur by the courts.

Predatory pricing claims thus present a "perfect storm" of factors favorable to plaintiffs in the event that liability is established—straightforward proof that damages were suffered, leniency with respect to proving the amount of damages, automatic trebling and fee shifting, and facts bearing negatively on defendants. Unsurprisingly, plaintiff's jury awards in predatory pricing cases are often enormous. MCI won a jury verdict against AT&T that, with trebling, would have amounted to a $1.8 billion judgment in 1980 dollars. Predation jury verdicts can be large not only in absolute terms but, more importantly, in relation to the defendant's income stream. For example, the


47 See A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc., 881 F.2d 1396, 1402 (7th Cir. 1989) (describing tendency of plaintiff's lawyers in predatory pricing cases to "rummage through business records" for evidence of a "greed-driven desire to succeed and glee at a rival's predicament," which "invites juries to penalize hard competition"); Posner, supra note 25, at 214-15 (describing tendency of judges and juries to misinterpret "metaphors of coercion that are compelling evidence of predatory intent to the naive").

48 See infra text accompanying notes 207-09.

49 See Bolton et al., supra note 8, at 2254-55 (noting that before the current wave of defendant-friendly predatory pricing precedents, juries often awarded disproportionately large amounts in predatory pricing cases).

50 Id.

51 MCI Commc'ns Corp. v. Am. Tel. & Tel. Co., 708 F.2d 1081, 1092 (7th Cir. 1983).
Kinetic Concepts jury verdict of $173.6 million\textsuperscript{52} would have amounted to a $520.8 million judgment after trebling, exclusive of interest or attorney’s fees.\textsuperscript{53} To put that in perspective, defendant Hillenbrand Industries’ net income in the year preceding the judgment was $153 million—less than a third of the amount of the judgment.\textsuperscript{54} Largely due to the $250 million settlement resulting from that judgment, Hillenbrand’s net income fell to $44 million the following year.\textsuperscript{55}

In light of the sheer magnitude of potential damages in predatory pricing cases—indeed, many predatory pricing lawsuits are so-called bet-the-company events—it is not surprising that defendants continue to pay out substantial sums to settle predatory pricing lawsuits, despite two decades of precedents favoring defendants. In recent years, settlements of $250 million,\textsuperscript{56} $65 million,\textsuperscript{57} $36 million,\textsuperscript{58} and $6.5 million,\textsuperscript{59} have been reported in predatory pricing cases despite the prodefendant influence of Matsushita and Brooke Group. Faced with the prospect of such litigation and potentially ruinous economic consequences, it would not be surprising if many firms chose to retreat rather than to continue to engage in aggressive price competition.

2. Facilitating Oligopolistic Pricing Through Price Signaling, Information Exchange, and Judicial Policing

The previous section described the ways in which a firm might use the threat of a predatory pricing suit to overcome an efficiency deficit and coerce another firm to soften its price competition. To be successful, such a strategy requires that one firm force a second firm to abandon an otherwise more profitable pricing strategy in order to avoid costly litigation. Threats of predatory pricing litigation may also be strategically used without threatening to increase the other firm’s costs or coercing the other firm to abandon a more profitable pricing scheme. Threats of predatory pricing litigation, or litigation itself,

\textsuperscript{53} The case was settled before an appeal was taken. See id.
\textsuperscript{54} See Hillenbrand Indus., Inc., Annual Report (Form 10-K), at 15 (Jan. 6, 2003).
\textsuperscript{55} Id. at 19–20.
\textsuperscript{56} See Kinetic Concepts, 262 F. Supp. 2d at 724.
\textsuperscript{57} Brunswick to Settle Pricing Suits for $65 Million, N.Y. TIMES, Dec. 23, 1999, at C4 (“The Brunswick Corporation said yesterday that it had agreed to pay $65 million to settle two class-action suits in which boat builders accused it of using predatory pricing to drive competitors out of business.”).
\textsuperscript{58} Harlan S. Byrne, In a Real Fix, BARRON’S, Oct. 2, 1995, at 16, 16 (reporting that after a state court awarded Thermex Energy $488 million for damages in a predatory pricing suit against Dyno Industries and ICI Explosives, ICI settled for $36 million and Dyno settled “on undisclosed terms”).
\textsuperscript{59} Vicki Vaughan, Family Feud—Centeno Heirs Battle to Control Ruins of Bankrupt Grocery Chain, SAN ANTONIO EXPRESS-NEWS, June 2, 1996, at 1J (reporting that regional grocery store H-E-B Co. paid Centeno Super Markets $6.5 million to settle predatory pricing suit).
may be an ideal tool to create the necessary conditions for tacit price collusion among oligopolists, a market condition that could increase the profits of both the threatening and the threatened firm, to the detriment of consumers.

Tacit collusion among oligopolists, or even conscious parallelism—its weaker form—is a perennial concern in antitrust law. Coordinated pricing effects are the primary reason that the government challenges mergers in concentrated industries, particularly where goods are homogenous and barriers to entry are high. But, even in such markets, there are often significant impediments to parallel pricing that render “[t]his anticompetitive minuet . . . most difficult to compose and to perform.” Uncertainty over competitors’ pricing and output levels prevents multilateral price parallelism, and cheating on the cartel—or suspicion that others will cheat—foments a breakdown of pricing discipline. Threats of predatory pricing litigation and actual litigation may help solve these collective action problems by signaling pricing levels, facilitating information exchange, and providing state-sanctioned cartel policing.

The most immediate competitive effect of a predatory pricing complaint may be to send price signals to competitors by providing a detailed specification of the plaintiff’s objections to the defendant’s present pricing structure. Price signaling is of concern in oligopolistic markets because information about a competitor’s pricing intentions helps eliminate the uncertainty that should drive firms to price at cost. Although there are many less expensive ways of signaling

60 See generally Donald F. Turner, The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusals to Deal, 75 Harv. L. Rev. 655 (1962) (discussing potential antitrust conduct among parties, even in the absence of an explicit agreement).


63 Even overt cartels are known to face policing difficulties, as was shown in two empirical studies of the Joint Executive Committee, an 1880s U.S. railroad cartel. See Glenn Ellison, Theories of Cartel Stability and the Joint Executive Committee, 25 RAND J. ECON. 37, 37-38 (1994) (noting that the cartel suffered occasional price wars); Robert H. Porter, A Study of Cartel Stability: The Joint Executive Committee, 1880-1886, 14 Bell. J. Econ. 301, 312-13 (1983) (noting “reversions to noncooperative behavior . . . with a significant decrease in market price in these periods”).

prices other than filing a predatory pricing complaint, some methods are illegal, while others lack the specificity and detail of a predatory pricing complaint. The predatory pricing complaint provides a vehicle for identifying specific pricing decisions that are objectionable, itemizing customer contracts or promotions that are allegedly anticompetitive, specifying what an appropriate price would be, and even making allegations about defendant’s intentions with respect to ongoing or future pricing that permit inferences about plaintiff’s own planning. For example, Beech-Nut’s 2001 predatory pricing complaint against Gerber contains detailed allegations about supposedly predatory bids that occurred a few months before the complaint, including allegations about Gerber’s and Beech-Nut’s respective bids and Beech-Nut’s variable cost for infant cereal, and makes allegations with respect to Gerber’s future planned pricing and promotional activity.

Discovery in litigation may also provide valuable information about prices, costs, customers, contractual structures, output management, executive compensation, and many other varieties of competitive data. Cost and revenue data, in particular, play a prominent role in predatory pricing litigation since a threshold question is whether defendant’s revenues exceeded its costs. Defendants are also entitled to data about plaintiff’s costs and revenues, since whether the plaintiff is an equally efficient competitor rendered unable to compete by defendant’s prices is a material question in the litigation. Predatory pricing discovery thus becomes a clearinghouse for the very type of information sharing that in other contexts is itself an antitrust violation because of its tendency to facilitate parallel pricing.


See Thomas A. Piraino, Jr., Regulating Oligopoly Conduct Under the Antitrust Laws, 89 Minn. L. Rev. 9, 59 n.203 (2004) (collecting cases where the Federal Trade Commission charged that price signaling was an illegal facilitating practice under section 5 of the FTC Act).


Brooke Group, 509 U.S. at 222 (“First, a plaintiff seeking to establish competitive injury resulting from a rival’s low prices must prove that the prices complained of are below an appropriate measure of its rival’s costs.”).

See supra note 25.

See United States v. Container Corp. of Am., 393 U.S. 333 (1969) (holding that an informal arrangement among corrugated container manufacturers to share bid information on specific customer contracts was sufficient to find an unlawful restraint of trade); Am. Column & Lumber Co. v. United States, 257 U.S. 377, 411–12 (1921) (affirming the district court’s finding that a manufacturers’ association information-sharing plan was an unlawful restraint of trade that contributed to a significant decrease in production and increase in prices); Todd v. Exxon Corp., 275 F.3d 191 (2d Cir. 2001) (holding that em-
Admittedly, litigation is not the ideal tool for oligopolistic information sharing because the events at issue often involve past pricing and discovery may be limited to historical prices, excluding present or future prices.\(^7\) Information on present or future pricing plans is generally more useful than stale, historical information in facilitating parallel pricing.\(^7\) However, some predatory pricing plaintiffs allege ongoing violations and request injunctive relief; consequently, discovery may involve exchanges of information about present and future pricing.\(^7\) Further, even if the price information exchanged is stale, simply exchanging reciprocal details about cost structures may facilitate anticompetitive pricing decisions.\(^7\) Protective orders limiting access to documents and deposition testimony to the lawyers representing the parties may prevent information sharing, but there is no guarantee that such orders will be granted or adequately enforced.\(^7\) It is virtually impossible to ensure that business executives involved in pricing decisions for the litigating parties will remain unaware of the key pricing issues in the litigation when such matters are

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\(^7\) It is also the case, of course, that in litigation one party to the information exchange is an unwilling party. Litigation involves coerced information exchange, but it is not necessarily surprising that one party would need to coerce its rival to do something that could ultimately benefit both firms. The dominant firm may have disincentives to share information with a rival. See Amitai Aviram & Avishalom Tor, Overcoming Impediments to Information Sharing, 55 Ala. L. Rev. 231, 245-47 (2004).

\(^7\) United States v. U.S. Gypsum Co., 438 U.S. 422, 441 n.16 (1978) ("Exchanges of current price information, of course, have the greatest potential for generating anticompetitive effects and although not \textit{per se} unlawful have consistently been held to violate the Sherman Act.").

\(^7\) See, e.g., T.W.A.R., Inc. v. Pac. Bell, 145 F.R.D. 105, 108 (N.D. Cal. 1992) (compelling defendant to produce contemporaneous business documents where plaintiff argued that such documents were relevant to its claim for injunctive relief in predatory pricing case). \textit{But see} Rebel Oil Co., Inc. v. Atl. Richfield Co., 133 F.R.D. 41 (D. Nev. 1990) (limiting discovery to facts concerning barriers to entry and not permitting discovery as to pricing matters relevant to predatory pricing claims until plaintiff established the existence of barriers to entry).

\(^7\) See Fed. Trade Comm'n & U.S. Dep't of Justice, Antitrust Guidelines for Collaborations Among Competitors § 3.34(e) (2000) (expressing concern over information sharing as to competitor's "input requirements").

\(^7\) See Omri Ben-Shahar & Lisa Bernstein, \textit{The Secrecy Interest in Contract Law}, 109 Yale L.J. 1885, 1923 (2000) (arguing that protective orders do not fully ensure secrecy between contractual parties because "the lawyers who see the information subject to these orders may well play a role in subsequent negotiations between the disputing parties" and observing a need for more predictable procedural rules for such agreements); Daniel A. Crane, Exit Payments in Settlement of Patent Infringement Lawsuits: Antitrust Rules and Economic Implications, 54 Fla. L. Rev. 747, 759 (2002) (arguing that protective orders are insufficient to protect against anticompetitive information exchange in discovery between horizontal competitors); Alan Lawrence, \textit{The Value of Copyright Law as a Deterrent to Discovery Abuse}, 138 U. Pa. L. Rev. 549, 565-66 (1989) (arguing that protective orders are "highly unreliable" for the protection of trade secrets because they may be "subject to modification or complete withdrawal by the courts" and breaches are difficult to police and punish).
raised at summary judgment, or at trial, or are ultimately disclosed in judicial opinions. Thus, despite its limitations as an information-sharing device, predatory pricing litigation virtually guarantees the flow of an unhealthy amount of sensitive business information between horizontal competitors.

Predatory pricing plaintiffs may also hope to involve the courts in policing a supracompetitive pricing structure. Predatory pricing suits often last many years and trial judges may become involved in scrutinizing the parties’ pricing behavior during the pendency of the litigation. Preliminary injunctions ordering the defendant not to price below certain levels pending trial are the strongest form of judicial policing and have been ordered in predatory pricing cases.\(^7\) Even if the plaintiff ultimately loses the predatory pricing lawsuit at trial or on appeal, the plaintiff may have realized significant pricing benefits in the interim. Milder forms of policing, short of direct judicial coercion, are also possible. Plaintiffs may raise defendant’s ongoing pricing behavior in motions, briefs, or hearings, hoping to elicit cautionary comments from the court.

To be sure, predatory pricing litigation is an expensive way of sending pricing signals, collecting information on a competitor’s cost structure or business plans, or organizing a cartel. As discussed further in Part I.B, predatory pricing litigation, even for a plaintiff, is extremely costly. But a plaintiff need not incur all of the costs necessary to take a predatory pricing case through trial and appeal to realize the market benefits of the suit. Price signaling, information exchange, and judicial involvement in price setting may all occur fairly early in the litigation before the larger portion of the costs are incurred. If the case survives summary judgment and heads for trial—the most costly portion of the case—the likelihood of nons strategic benefits to the plaintiff—either a settlement or money judgment—increases significantly, thus justifying the expenditure of more money on litigation. The structure of predatory pricing litigation permits plaintiffs to make an initial limited investment in the lawsuit that may bring benefits in the market regardless of the ultimate outcome. If the litigation survives threshold motions, plaintiffs then invest greater sums and the likelihood of a favorable monetary outcome increases.

In sum, predatory pricing litigation provides opportunities for oligopolists to call a truce in a price war and exchange sufficient pric-

ing signals and information to facilitate consciously parallel pricing. Not surprisingly, claims of predatory pricing and claims of oligopolistic collusion often arise simultaneously in concentrated markets. The typical scenario in such situations involves a dominant firm using predatory pricing to discipline an unwilling cartelist.\textsuperscript{76} An overlooked possibility is that the predatory pricing lawsuit is being used to organize the cartel. Two examples of well-known predatory pricing lawsuits illustrate how predation litigation could be used to facilitate oligopoly pricing.

a. Airlines

Since deregulation in 1978,\textsuperscript{77} several high-profile charges of oligopolistic collusion have been filed against the airline industry. A well-known episode of attempted price-fixing involved a 1982 price war between American Airlines and Braniff. The Department of Justice obtained a tape recording of a conversation between Robert Crandall, president of American, and Howard Putnam, president of Braniff, in which Crandall encouraged Putnam to raise prices by twenty percent.\textsuperscript{78} In 1992, the Department of Justice sued Alaska Airlines, American, Continental, Delta, Northwest, TWA, United, and USAir, alleging that they had engaged in price signaling by disseminating future price information in a variety of ways.\textsuperscript{79} The case ended in a consent decree whereby the airlines agreed to cease a number of the challenged practices.\textsuperscript{80} In 2004, the Department of Justice filed a show cause petition alleging that American had violated the consent decree by publishing future first travel dates, apparently in order to signal price increases to competitors.\textsuperscript{81}

At the same time that the airline industry has ostensibly been a hotbed of oligopolistic cooperation to price at supracompetitive levels, some airlines also have allegedly been engaged in predatory pricing.\textsuperscript{82} American has faced predatory pricing claims by Continen-
tal and Northwest in 1992 and the Justice Department in 1999. Virgin Atlantic sued British Airways on what amounted to predatory pricing charges in 1993. Other postderegulation predation suits include Laker against Sabena and KLM in 1983 and Laker against PanAm in 1985. Further, several low-cost carriers have reportedly complained to the Department of Transportation about predatory pricing by larger airlines, including ValuJet against Delta, Frontier against United, and Reno Air against Northwest.

What is interesting about the airline cases is that at least one of the alleged dates of predatory pricing corresponded with a period in which the predator and prey were supposedly engaged in oligopolistic collusion. The Government’s 1992 price signaling case against American, Continental, Northwest, and others, concerned the same time period as American’s alleged predatory pricing campaign against Continental and Northwest. For both of these allegations to be true, American would had to have been predating against Continental and Northwest at the same time as it was colluding with them. Although a predatory pricing campaign to discipline rivals into collusion may have been plausible, the Justice Department charged that American, Continental, and Northwest were already colluding at the time that Continental and Northwest alleged that American launched its new, allegedly predatory pricing scheme. American cannot have been both predating against and colluding with the same competitors at the same moment, since predation involves pricing below cost and collusion involves pricing at supracOMPetitive levels.

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84 United States v. AMR Corp., 335 F.3d 1109, 1111 (10th Cir. 2003).
87 Laker Airways Ltd. v. Pan Am. World Airways, 607 F. Supp. 324, 325 (S.D.N.Y. 1985). It is unlikely that either of the Laker actions involved strategic use of predatory pricing law, since Laker was in liquidation in the United Kingdom at the time of the actions. See id. ("On February 5, 1982 Laker ceased doing business, due to insolvency, and on February 17, 1982, an individual residing in the United Kingdom was appointed Liquidator.").
90 See supra notes 63, 76 and accompanying text.
91 It is theoretically possible that American was colluding with Northwest and Continental on some routes and trying to drive them from other routes through predation, but that possibility seems to be factually foreclosed since American’s Value Pricing plan was a general restructuring of its fare system across all routes. See Cont’l Airlines, 824 F. Supp. at 692–93.
It is possible that one or both of the claims were mistaken—indeed, the jury found that American was not predating. It is also possible that the allegations of collusion were correct and that the predatory pricing case itself reinforced a tacit collusive scheme. Northwest and Continental may have facilitated a resumption of consciously parallel, lockstep pricing by using the predatory pricing lawsuit as both a price signaling device and a punitive measure to raise American's costs through litigation.

If so, the strategy seems to have worked. American announced the challenged pricing plan on April 9, 1992 and other major carriers quickly matched or beat American's price cut. Between April and June, fares remained relatively flat. Then Continental filed its predatory pricing lawsuit on June 9, 1992 and Northwest filed its parallel suit on June 12. Two weeks after filing suit, Northwest announced a ten percent price increase. Continental matched Northwest's increase and American followed shortly with its own 4.4% price increase. Thus began a pattern of price increases by the major airlines that lasted until the end of the year. Between July and the end of the year, while the predatory pricing case progressed, the major airlines raised prices seven times—albeit with many false starts, retreats, and delays—as the oligopolistic discipline frayed by American's April price cuts was restored. In December, while announcing another round of price increases, Continental reported publicly that its "objective [was] to get back to the fare levels that prevailed in early

93 See Cont'l Airlines, 824 F. Supp. at 692.
97 See Air Fares Set to Increase 4.4 Percent, ASSOCIATED PRESS, July 17, 1992.
99 See Jane Baird, Continental, Other Major Airlines Ready to Increase Fares, HOUSTON CHRON., Dec. 24, 1992, at 1B. The Houston Chronicle quotes an industry source who called Continental's year-end increase "the seventh major fare increase since July," when, according to the Chronicle, "fares hit bottom." Id. The source opined that "the airlines are raising their fares as fast as they can" in response to the government's price-fixing investigation. Id. Whether it was the price-fixing investigation, the predatory pricing lawsuits, some combination of the two, or neither that precipitated the higher prices cannot be determined with certainty. Given the timing of the events, however, it is not unlikely that the predatory pricing lawsuits played a role.
April, which [were] fair, market-based competitive fares.”100 Such overt price signaling through media comments frequently accompanied the upward pricing movements following the filing of the predatory pricing suits. A headline about the September fare increases in *Tour and Travel News* reported (apparently without conscious irony): “Airlines Agree on Fare-Increase Date.”101

There is little doubt that the airline fare war that began with American’s price cuts in April ended within weeks after Northwest and Continental filed their predatory pricing suits. How significant a role the predatory pricing suit played in deterring aggressive price competition and restoring lockstep price increases is uncertain. The predatory pricing lawsuit was not the only strategic tool available or utilized by competitor airlines. The competitors also took their complaint to the Senate Transportation Committee’s aviation subcommittee102 and engaged in unabashed price signaling through the media. The predatory pricing lawsuit, however, may have complemented the competitors’ other strategic tools through its unique combination of coercive opportunities, including raising their rival’s costs through litigation expenses, detailed information exchange during discovery, and the threat of a substantial adverse judgment. And the predatory pricing case may have taught American a lesson. After the jury returned a verdict for American in the predatory pricing case in the summer of 1993, American CEO Robert Crandall—the same CEO caught on tape encouraging Braniff to raise its prices—stated publicly that American “probably won’t be attempting that type of leadership again.”103

Even in cases where no private predatory pricing lawsuit was filed, but one airline complained to the Department of Justice or Department of Transportation about another’s fares, the predatory pricing complaint may have worked as a price signal. Complaining to the government about a competitor’s low prices may be one of the cheapest and most effective ways of organizing a tacit cartel, even if a government suit is relatively unlikely.104 The complaint is privileged from

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100 Id. (quoting a Continental Airlines spokesperson).
102 See Hutcheson, *supra* note 95.
103 Gattuso, *supra* note 88. Doubtlessly, the Department of Justice that sued American for predatory pricing in 1999 would disagree that American learned its lesson from the Continental and Northwest litigation, although American prevailed in the Justice Department lawsuit as well. See United States v. AMR Corp., 335 F.3d 1109, 1111 (10th Cir. 2003).
antitrust scrutiny unless blatantly fraudulent and is therefore a much safer way of sending a message than direct communication, as American Airlines learned after the Crandall-Putnam debacle.

b. Tobacco

Like the airline industry, the tobacco industry has seen repeated allegations of both collusion and predatory pricing in the last twenty years. The *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.* case, involving the generic cigarette market, turns on allegations of both predation and collusion, and provides useful factual detail to consider the relationship between oligopolistic pricing and predation claims. Plaintiff Liggett theorized that Brown & Williamson used predatory pricing to try to achieve oligopoly pricing. It alleged that Brown & Williamson sought to punish Liggett’s price cutting in the generic cigarette segment through below-cost volume rebates to Liggett wholesalers. Justice Kennedy’s Supreme Court majority opinion rejected Liggett’s arguments on the grounds that Brown & Williamson would have been unable to recoup its below-cost pricing through subsequent supracompetitive pricing, since Brown & Williamson’s eleven- to twelve-percent share of the cigarette market would have required its predation to generate around nine dollars in supracompetitive profits for every dollar invested in the scheme, just for Brown & Williamson to break even. The majority dismissed the arguments that actual recoupment had taken place, finding that the claims of postpredation price increases were either empirically unsupported or not causally linked to the allegedly predatory scheme. The dissent—and the jury—believed that actual recoupment had taken place in the form of semiannual, lockstep price increases following Brown & Williamson’s below-cost pricing.

A third possibility is that the oligopolistic pricing did emerge from the events at issue but that it was precipitated more by the predatory pricing lawsuit than by the alleged predatory pricing. Consider the sequence of events. Brown & Williamson started the price war in July of 1984 at the time it was introducing its own black and white
Liggett immediately sued alleging trademark infringement and unfair competition. In June of 1985, after it had been litigating its predatory pricing claims for just less than a year, Liggett raised its prices. Brown & Williamson followed suit in October of 1985. By the end of the year, the price war was over. By the middle of 1986, the generic segment had settled into a comfortable pattern of semiannual, lockstep price increases in line with patterns in the branded cigarette market.

Assuming that the lockstep pricing in the generic market reflects at least noncompetitive oligopoly pricing, who is to blame—Liggett or Brown & Williamson? Perhaps the answer is neither, since oligopoly pricing in the generic segment was inevitable given that the same four or five firms already marched in lockstep in the branded cigarette segment. But tacit collusion takes some subtle organizing; who was the organizer? Liggett blamed Brown & Williamson because it started the price war, but the evidence suggests that Brown & Williamson’s price strategy was profit maximizing without any expectation of recoupment through oligopoly pricing. The amount of supracompetitive profits the generic segment would have needed to generate in order to offset the costs of a predatory scheme were unattainable. Liggett, on the other hand, could help to organize lockstep pricing by filing a predatory pricing lawsuit—an expensive venture, but far less so than pricing below cost across the substantial generic cigarette market for eighteen months. Having laid out its predation theory, exchanged documents in discovery, and perhaps signaled a truce, Liggett then took the lead in raising prices. The industry soon followed. The evidence in Brooke Group is consistent with the proposition that Liggett used its

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113 See id. at 215–16 (majority opinion).
114 See id. at 216.
116 See Brooke Group, 509 U.S. at 217.
118 See Brooke Group, 509 U.S. at 243 (Stevens, J., dissenting) (characterizing price war as lasting for eighteen months, from July 1984 to the end of 1985).
119 Id. at 218 (majority opinion). The majority believed that these price increases may have been offset by coupons, stickers, and give-aways, see id. at 236, although at least one witness testified that the consumer promotions did not nearly offset the price increases, id. at 250 n.12 (Stevens, J., dissenting) (citing testimony by Liggett’s expert economist to the effect that “[the] promotional activity has been far outstripped by the list price increases”).
120 See id. at 213 (majority opinion).
121 See id. at 228.
122 Liggett, of course, hoped to gain from the predatory pricing lawsuit even if it did not help to facilitate cartel pricing. It won a $148.8 million judgment, although the district court ultimately vacated it. Id. at 218.
predatory pricing case to facilitate a pattern of oligopoly pricing. On balance, this proposition seems far more plausible than the proposition that Brown & Williamson used a predatory pricing scheme to try to discipline Liggett into tacit collusion.

The airline and tobacco cases share a common pattern of events: One firm initiated a price war, its rival(s) sued for predatory pricing, shortly after the filing of the predatory pricing lawsuit the plaintiff raised its prices, shortly thereafter the defendant followed suit, oligopoly pricing discipline was restored, and the court or jury ultimately found the predatory pricing lawsuit to be without merit. In both of these examples, it is quite possible that predatory pricing law facilitated the high prices that it is meant to deter.

B. Do Firms Actually Engage in Strategic Predatory Pricing Litigation?

It is not hard to see how a firm could use predatory pricing lawsuits strategically to chill price competition, but is there evidence that firms actually engage in strategic predatory pricing litigation? The question does not admit of a ready answer. Firms' true motivations for filing suit are not easily discoverable and even if good information were available, firms' motivations are rarely reducible to a simple dichotomy like strategic benefits in the marketplace versus money judgment or settlement. The truth is likely to be more complex.

One approach to appraising the intentions of predatory pricing plaintiffs is to examine market-structural prerequisites for successful predation and determine whether those structures are in place in cases of alleged predation. If the structural prerequisites are absent, this may suggest frivolous litigation animated by ulterior motives. Edward Snyder and Thomas Kauper took this approach in their 1991 study, which concluded that competitor plaintiffs systematically misused the antitrust laws.123 Snyder and Kauper evaluated antitrust litigation files collected in the Georgetown Study of Private Antitrust Litigation124 and determined whether the market conditions necessary for anticompetitive exclusion were present in the cases in which such exclusion was asserted.125 In particular, they contended that a market must exhibit a high degree of concentration and substantial barriers to entry in order for exclusionary conduct to be successful in achieving monopoly profits.126 Snyder and Kauper studied ten preda-

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123 See Snyder & Kauper, supra note 20, at 598.
125 See Snyder & Kauper, supra note 20, at 563-67.
126 See id. at 564.
tion cases and concluded that only two out of the ten exhibited the necessary high degree of defendant market share and barriers to entry necessary to make the predation claim plausible.\(^{127}\) Although Snyder and Kauper did not articulate any separate conclusion on the predatory pricing cases, their overall conclusion that few of the competitor cases exhibited much merit and that many of the plaintiffs were "object[ing] to actions that represent[ed] increases in competition"\(^{128}\) would appear to apply to the predation cases also.

A similar analysis suggests that many of the post-\textit{Brooke Group} predatory pricing cases are also misuses of the antitrust laws. A large number of them that were decided on the merits were thrown out based on the market screens identified by Snyder and Kauper—insufficient market concentration or low barriers to entry.\(^{129}\) This suggests

\(^{127}\) See id. at 572–73.

\(^{128}\) Id. at 576.

\(^{129}\) See Bailey v. Allgas, Inc., 284 F.3d 1237, 1250 (11th Cir. 2002) (finding that defendant's market share of 35–40% was insufficient evidence of market power in a predatory pricing case); W. Parcel Express v. United Parcel Serv. of Am., Inc., 190 F.3d 974, 975 (9th Cir. 1999) (rejecting plaintiff's predatory pricing claim on grounds that barriers to entry were not proven); Stearns Airport Equip. Co. v. FMC Corp., 170 F.3d 518, 530 (5th Cir. 1999) (same); Springfield Terminal Ry. Co. v. Canadian Pac. Ltd., 133 F.3d 103, 107–08 (1st Cir. 1997) (rejecting predatory pricing claim where defendant's market share was about 10%); Queen City Pizza, Inc. v. Domino's Pizza, Inc., 124 F.3d 430, 442 (3d Cir. 1997) (rejecting predatory pricing claim on grounds that plaintiff failed to show defendant had market power); El Aguila Food Prods., Inc. v. Gruma Corp., 301 F. Supp. 2d 612, 629 (S.D. Tex. 2003) (rejecting predatory pricing claim where defendant lacked market power); Masco Contractor Servs. E., Inc. v. Beals, 279 F. Supp. 2d 699, 707 (E.D. Va. 2003) (dismissing predatory pricing claim based on absence of barriers to entry); Berlyn, Inc. v. Gazette Newspapers, Inc., 223 F. Supp. 2d 718, 736–37 (D. Md. 2002) (rejecting predatory pricing claim where plaintiff failed to show any proof that defendant had monopoly or market power in any market); Coventry Health Care of Kan., Inc. v. Via Christi Health Sys., Inc., 176 F. Supp. 2d 1207, 1233 (D. Kan. 2001) (denying motion for preliminary injunction against defendant's pricing partly on grounds that defendant lacked market power and barriers to entry were low, and therefore plaintiff did not demonstrate a reasonable likelihood of winning on the merits); Yellow Page Solutions, Inc. v. Bell Atl. Yellow Pages Co., 2002-1 Trade Cases (CCH) ¶ 73,556, at 92,567–68 (S.D.N.Y. 2001) (dismissing predatory pricing claims because plaintiff failed to plead market power or specific entry barriers); United Magazine Co. v. Murdoch Magazines Distribution, Inc., 146 F. Supp. 2d 385, 402–03 (S.D.N.Y. 2001) (dismissing predatory pricing claim where plaintiff failed to show that defendant had market power); Peerless Heater Co. v. Mestek, Inc., 2000-1 Trade Cases (CCH) ¶ 72,917, at 87,813–14 (E.D. Pa. 2000) (granting summary judgment against plaintiff on predatory pricing claim where plaintiff's growing market share precluded any inference that plaintiff was in danger of being driven from the market); J & S Oil, Inc. v. Irving Oil Corp., 63 F. Supp. 2d 62, 68 (D. Me. 1999) (granting defendant's motion for summary judgment where defendant had low market share and barriers to entry were low); Malek Wholesaler, Inc. v. First Film Extruding, Ltd., No. 97-CV-07087, 1998 WL 142385, at *4 (N.D. Ill. Mar. 20, 1998) (dismissing predatory pricing claim where plaintiff failed to allege that defendant had market power); Bushnell Corp. v. ITT Corp., 175 F.R.D. 584, 587 (D. Kan. 1997) (dismissing predatory pricing case where defendant's market share was 30%); Anti-Monopoly, Inc. v. Hasbro, Inc., 958 F. Supp. 895, 904 (S.D.N.Y. 1996) (granting summary judgment for defendant where plaintiff failed to show high barriers to entry); Clark v. Flow Measurement, Inc., 948 F. Supp. 519, 527–28 (D.S.C. 1996) (granting summary judg-
that *Matsushita* and *Brooke Group* have not deterred continuation of some of the misuses of predatory pricing theory that occurred during the 1973–83 period of the Georgetown Study.¹³⁰

But this does not necessarily demonstrate that predatory pricing plaintiffs are using antitrust law strategically. Snyder and Kauper’s market screen analysis is useful in discovering whether the predation lawsuits had merit, but it is only tangentially relevant in determining whether predatory pricing plaintiffs are seeking to use antitrust law to chill price competition or invite a program of tacit collusion.¹³¹ Frivolous lawsuits could be filed to extort a favorable settlement, out of a misunderstanding of the governing legal rules, or even out of a less efficient firm’s misguided sense of injustice at being excluded from the market.¹³² All of these motivations may induce socially costly litigation and provide a sufficient basis for curtailing the predatory pricing cause of action, but they do not demonstrate that firms use predatory pricing law strategically to increase prices.

One way to study the possibility that many predatory pricing plaintiffs have strategic motivations independent of the ultimate success of the lawsuit is to examine the compensation structure of the plaintiffs’ attorneys. The compensation structure of plaintiffs’ attorneys in predatory pricing cases also provides a relevant check on Bolton, Brodley, and Riordan’s assertion that *Brooke Group* and *Matsushita* have created very high barriers for predatory pricing plaintiffs.¹³³ Plaintiff’s lawyers should only agree to a contingency-fee arrangement if they believe that there is a reasonable likelihood that the predatory pricing lawsuit will result in a financial payment from defendant to plaintiff, through either a money judgment or a settlement. If a predatory pricing case were very unlikely to result in a money judgment or settlement but might still bring financial benefits to the plaintiff by chilling price competition, one would expect to see an hourly-fee structure. Further, the predatory pricing theory assumes that the plaintiff is financially constrained, indeed that its ability to survive in the market is jeopardized by a lack of funds necessary to weather the

¹³⁰ See White, *supra* note 124, at 60 (describing the time period during which cases were examined).


¹³³ Bolton et al., *supra* note 8, at 2267.
defendant's below-cost pricing. Such firms are unlikely to be able to pay for expensive predatory pricing litigation on an out-of-pocket basis. One plaintiff's attorney involved in at least three recent predatory pricing cases reported that "antitrust litigation on an hourly basis is something that 99% of the injured businesses in the U.S. cannot afford." Consistent with these observations, the following hypotheses can be drawn. If firms are using predatory pricing theories for strategic purposes even in the absence of a significant possibility of obtaining a favorable judgment or settlement, there should be a low incidence of contingency-fee arrangements in purely strategic predatory pricing cases. Conversely, if a firm's capital is truly constrained by predation, it would be likely to prefer a contingency-fee structure as opposed to an hourly rate. Firms driven by predatory pricing to the verge of financial extinction should not be able to afford financing lengthy and expensive predatory pricing litigation on an hourly, out-of-pocket basis. Finally, economically rational lawyers should only agree to take predatory pricing cases on contingency if there is some reasonable prospect—Brooke Group and Matsushita notwithstanding—of a favorable plaintiff's judgment or settlement.

In order to evaluate these hypotheses, I attempted to contact the plaintiffs' attorneys involved in the predatory pricing cases filed after 1993, as identified earlier, and inquire whether their fee structure was based on an hourly rate, contingency, or some combination of the two. Out of the fifty-seven cases, some of the attorneys could not be located and some declined to respond, often on grounds of confidentiality. The responding attorneys provided fee information for twenty-four of the predatory pricing cases filed since Brooke Group. In ten of the cases, the plaintiff's attorney was compensated purely on an hourly-fee basis. In eight of the cases, the plaintiff's attorney was compensated on a pure contingency basis. In four of the cases, the plaintiffs attorney billed at an hourly rate (on two occasions at a reduced rate) with a contingency-fee "kicker" in the event of a successful

135 E-mail from Carl E. Person to Daniel Crane, Assistant Professor of Law, Cardozo Law School (Jan. 5, 2005) (on file with author, used with permission of Mr. Person).
136 See cases cited supra note 129.
138 Id.
139 Id. Several of the responding attorneys were or had been involved in more than one of the predatory pricing cases listed in note 129.
140 Id.
141 Id.
outcome.\textsuperscript{142} In two other cases, the plaintiff paid a small, up-front fee and the remainder of the compensation was on contingency.\textsuperscript{143} Assuming that the kicker cases are largely hourly-fee cases and the up-front-fee cases are largely contingency cases, this yields a 14 to 10 split in favor of hourly fees.

This is a small sample from which to draw conclusions, and a wider sample is unlikely to be attainable given the relatively small number of candidate cases and the reluctance of many attorneys to disclose fee structure information. Further, some of the cases involved claims other than predatory pricing, which could have influenced the fee structure in either direction.\textsuperscript{144} Nonetheless, this modest sample—with its limitations—permits a few conclusions.

First, despite Brooke Group and Matsushita, some predatory pricing cases continue to attract contingency-fee lawyers.\textsuperscript{145} At least some predation claims have a sufficient likelihood of succeeding on the merits such that plaintiffs' attorneys are willing to invest in them.\textsuperscript{146} This implicit evaluation of the viability of predation cases provides some indication that predation theories are not moribund in practice. Some predation suits have a significant positive expected value. If defendants' lawyers reach the same conclusion as plaintiffs' lawyers, then threats of predation claims may still affect the market behavior of potential defendants. The risk that the predatory pricing offense may chill vigorous price competition may persist despite two decades of defendant-friendly precedents.

Second, plaintiffs pay for a significant number of predatory pricing cases—perhaps a majority—\textsuperscript{147} on an hourly-fee basis. The hourly-fee method of lawsuit financing is somewhat inconsistent with the general theory of predation—that a poorly financed firm is forced out of a market because it cannot afford to compete with a better-financed rival.\textsuperscript{148} Predatory pricing litigation is an expensive and speculative investment, much like engaging in a price war to survive in a mar-

\begin{itemize}
  \item \textsuperscript{142} Id.
  \item \textsuperscript{143} Id.
  \item \textsuperscript{144} Very few cases solely involve a predatory pricing claim. Often, while the predatory pricing claims appear to be the principal complaint, the plaintiff also pleads other antitrust wrongs as well. These may be efforts to avoid the strictures on predatory pricing theories imposed by Chicago School-era case law.
  \item \textsuperscript{145} See text accompanying note 130.
  \item \textsuperscript{146} See supra notes 141-43 and accompanying text.
  \item \textsuperscript{147} There is reason to believe that a full census of predatory pricing cases would show that a higher percentage of cases are brought on an hourly-rate basis than the twenty-four cases on which data were collected would suggest. Many of the attorneys who declined to respond work for large corporate law firms that are relatively unlikely to take matters on contingency. See Interviews with Plaintiff's Attorneys, supra note 137.
  \item \textsuperscript{148} See supra note 134 and accompanying text.
\end{itemize}
If a firm lacks the funds necessary to compete in a price war, it is unclear where the firm would find the funds to finance predatory pricing litigation on an out-of-pocket basis. Conversely, the fact that many firms engage in predatory pricing litigation on an hourly-fee basis is consistent with the theory that some firms use predatory pricing cases strategically to chill price competition even in cases that have relatively little chance of resulting in a plaintiff's verdict or monetary settlement.

In sum, the available information on lawyer fee structures in post-Brooke Group predatory pricing cases supports two hypotheses regarding the Chicago School predatory pricing precedents: First, that the potential for substantial plaintiff's verdicts in predatory pricing cases remains, and second, that some firms use predatory pricing complaints strategically to diminish price competition by competitors.

II

THE SOCIAL COSTS OF CHILLING PRICE COMPETITION

The courts have accepted as a given that predatory pricing law would be socially costly if it elevated prices above competitive levels. Conversely, if it were possible to detect with precision those instances in which a dominant firm sought to cut prices to levels that could exclude or discipline equally efficient competitors and facilitate supracompetitive pricing, social welfare would be best served by deterring such behavior. Both of these propositions share the common assumption that social welfare is optimized if prices are established by competitive market forces and not by monopolistic coercion by dominant firms or misguided invocation of governmental coercion in predatory pricing litigation. Structuring predatory pricing law thus

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149 Estimates of the costs of predatory pricing lawsuits vary considerably. In 1981, Joshua Greenberg estimated the mean litigation cost of a predation case to be $30 million and, at the same conference, Frank Easterbrook estimated it to be $3 million. Frank H. Easterbrook, *Predatory Strategies and Counterstrategies*, 48 U. CHI. L. REV. 263, 335 & n.157 (1981). Easterbrook reported that AT&T spent $100 million to defend itself against charges of predation every year—a large aggregate amount, but one that is distributed over multiple lawsuits. *See id.* at 334. Based on the Georgetown Study, Salop and White concluded that private antitrust lawsuits cost, on average, $75,000 per party in 1984 dollars, or the equivalent of about $135,000 in 2005 dollars. *See Steven C. Salop & Lawrence J. White, Economic Analysis of Private Antitrust Litigation, 74 GEO. L.J. 1001, 1015 (1986).* For more complex cases, the average legal cost per party was $194,000, again in 1984 dollars, or over $350,000 in 2005 dollars. *Id.* at 1014. These numbers seem relatively low for predatory pricing litigation, which may be more resource intensive than average antitrust litigation. Other estimates of the costs of antitrust legal fees—which may be more in line with average costs in predatory pricing cases—include Fisher and Lande's estimate of a total cost of $700,000 to $1.4 million for merger cases in 1983 dollars. Alan A. Fisher & Robert H. Lande, *Efficiency Considerations in Merger Enforcement*, 71 CAL. L. REV. 1580, 1673 n.308 (1983).

150 *See supra* notes 5–7 and accompanying text.

151 *See supra* notes 8–9 and accompanying text.
THE PARADOX OF PREDATORY PRICING

requires a comparison of the likely costs of deviating from a competitive market model through monopolistic behavior or through misguided state coercion.

To perform such a comparison, this Article starts with an ideal pricing model in a competitive market. Part II.A establishes the socially optimal pricing point against which deviations should be measured. Part II.B presents the theoretical model of deviation from the norm caused by the existence of predatory pricing law and compares the likely costs of monopolistic predation to the likely costs of diminished price competition resulting from the threat of liability for predatory pricing. Part II.C reports the results of a survey of in-house counsel that I conducted to explore the degree to which predatory pricing law influences pricing behavior by business executives.

A. The Socially Optimal Pricing Point

Neoclassical price theory holds that in perfect competition, firms price at marginal cost, which leads to optimal deployment of social resources.152 This assumption underlies the influential Areeda-Turner “average variable cost” formulation for predatory pricing.153 Phillip Areeda and Donald Turner assume that “pricing at marginal cost is the competitive and socially optimal result”154 and therefore organize their proposed predatory pricing rules around marginal cost normativity.155 They choose average variable cost as the measuring legal criterion, which is used as a proxy for marginal cost—an economic construct that is difficult to determine from business records.156

There is substantial literature rejecting or attempting to refine Areeda and Turner’s proposed marginal cost rule, but it largely agrees with Areeda and Turner’s normative assumption that marginal cost pricing is socially optimal under static circumstances. This competing body of scholarship tends to stress the dynamic effects of strategic pricing and the potential that a marginal cost legal rule would be both underinclusive and overinclusive with respect to predatory pricing. F.M. Scherer, Areeda and Turner’s most immediate critic, concurs that marginal cost pricing is socially optimal, but asserts that their proposed legal rule ignores the long-run welfare effects of strategic short-run pricing above marginal cost but below total cost.157

153 See Areeda & Turner, supra note 25, at 709–12.
154 Id. at 711.
155 See id. at 709–12.
156 See id. at 716.
157 See F.M. Scherer, Predatory Pricing and the Sherman Act: A Comment, 89 Harv. L. Rev. 869, 883–85 (1976); see also Phillip Areeda & Donald F. Turner, Scherer on Predatory Pricing:
liamson agrees that "[m]arginal cost pricing on a continuing basis has the optimality properties to which Areeda and Turner refer,"158 but is concerned that their proposed legal rule would immunize short-term predatory price cuts that would lead to later supracompetitive pricing.159 Similarly, William Baumol agrees with the underlying premise that marginal cost pricing optimizes social welfare, but adds the additional caveat that marginal cost pricing is "chimerical" in most real markets since "pricing at marginal cost will not produce revenues equal to total production costs."160 Where marginal cost pricing is unsustainable in the long run, Baumol would institute Ramsey pricing as the optimal deviation from marginal cost that predatory pricing law should seek to attain.161 Under Ramsey pricing, prices deviate from marginal cost only as much as to make continued production remunerative, and deviations from marginal cost are distributed to products with the least elastic demand in order to minimize deadweight losses.162 Thus, despite differences over the legal standards that should govern predatory pricing claims, there is substantial agreement that the more closely pricing approximates marginal cost in a sustainable manner, the more that efficiency is optimized.163

A related question is whether a nonpredatory price can ever be suboptimally low because it induces overconsumption. This could occur if a firm erroneously priced below marginal cost. Although the firm may lose money on its sales, it might not threaten competition if the firm lacked a sufficiently large share of the market, assuming barriers to entry were very low, or if other structural prerequisites excluding competition were absent. Or a potential predator might launch an unsuccessful scheme to exclude a rival, which results only in lower prices without the probability of higher prices in the future.164 Such

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158 Williamson, supra note 28, at 290.
159 See id.
161 See id. at 20–22.
163 See Edlin, supra note 8, at 951 ("If the monopoly charges a price in excess of its marginal cost, the monopoly creates an inefficiency compared to an ideal world because output is restricted."); Paul L. Joskow & Alvin K. Klevorick, A Framework for Analyzing Predatory Pricing Policy, 89 Yale L.J. 213, 223 ("[A]ny [predatory pricing] standard that encourages entry by forcing price to be kept above long-run marginal cost for a period of time necessarily runs the risk of preserving inefficient firms . . . .").
164 Attempted monopolization through unsuccessful predatory pricing is punished in order to deter such conduct. See supra note 3 and accompanying text. The probabilistic
nonpredatory below-cost pricing is allocatively inefficient, even if it does not lead to, or threaten, later supracompetitive pricing, because it induces the consumption of goods by some consumers who value them at less than the cost of production, creating a deadweight loss.\textsuperscript{165}

It is not clear whether the subsidization of consumers by inept or misguided producers should be of significant concern under the antitrust laws. The answer depends in part on whether allocative efficiency or consumer welfare is the primary goal of antitrust enforcement.\textsuperscript{166} Below-cost, nonexclusionary prices may benefit consumers even if they are costly to producers. If consumer welfare is the primary focus, then such mistaken below-cost pricing may be a harmless fortuity. However, even if consumer welfare is the primary focus, below-cost, nonexclusionary prices may harm consumers by sending false price signals that result in poor consumption planning by consumers.\textsuperscript{167} Moreover, spillover effects in other markets cannot be ignored.\textsuperscript{168} If a firm begins selling at below-cost prices it may increase its demand for raw inputs used for the production of other goods and thereby increase the price of those other goods.

From these considerations two assumptions, one strong and one weak, can be drawn. The strong assumption concerns prices above marginal cost: Social welfare is optimized by competitive behavior that drives prices down toward a long-run marginal cost equilibrium, given the constraint that where long-run marginal cost pricing would be unremunerative, Ramsey pricing is the next best substitute. The weak assumption concerns prices below marginal cost: Even in the absence of a likelihood that sub-marginal cost pricing will exclude competitors and lead to supracompetitive pricing, sub-marginal cost pricing is allocatively inefficient and from an economic standpoint should be harm in such cases justifies the invocation of legal sanctions to deter it. A separate issue arises when an attempt to monopolize through predatory pricing has no significant likelihood of succeeding and leads to lower prices. Such instances of "stupid predation" might still be thought to cause resource misallocation because they would lead to the consumption of the goods by some consumers who valued the goods at less than their cost of production.

\textsuperscript{165} See, e.g., Joskow & Klevorick, supra note 163, at 224 n.31 ("If price is less than short-run marginal cost, and if demand is at all elastic, the price will not give consumers the proper signal about the scarcity value of the good. Thus, consumers will purchase too much of the good and as a result, too many resources will be devoted to producing the particular good in the short run."); Scherer, supra note 157, at 885 ("Resource misallocation occurs when there is a divergence between the cost of additional output and the value of that output to consumers. Output is too low when production stops short of the level at which price equals marginal cost; it is too high when marginal cost exceeds the price.").


\textsuperscript{167} See Williamson, supra note 28, at 291.

discouraged. It is thus against marginal cost pricing as a presumptive baseline that the effects of both predatory pricing and the availability of a predatory pricing theory must be assessed.

B. The Tendency of Predatory Pricing Law to Induce Deviations from Marginal Cost Pricing

Part I described the possibility that firms would deliberately use predatory pricing law to induce their rivals to deviate from competitive pricing. Such strategic use of predatory pricing law has obvious adverse social welfare effects since it induces upward deviation from marginal cost pricing. The only remaining question is an empirical one—whether such strategic gamesmanship is common and effective. If it is, then predatory pricing law has a significant strike against it. Unfortunately, determining whether firms engage in strategic predatory pricing litigation or threats—litigation or threats in which the likelihood of a successful judicial outcome is very small, but where price competition can be chilled regardless of the judicial outcome—is difficult. As discussed in the preceding Part, some available data are consistent with the hypothesis that some firms use predatory pricing litigation strategically, but direct proof is limited.

Predatory pricing law may induce socially costly deviations from marginal cost pricing even when predation theories are not strategically misused. In order for predatory pricing law to induce a firm to deviate from optimal competitive pricing, it is sufficient that the firm expect that the costs of any further price reduction due to predatory pricing law will exceed the gains from lowering its price and increasing its market share. Consider the profit-maximizing firm faced with a choice between reducing its price to expand market share and achieve economies of scale or maintaining its current price. The firm will only reduce its price so long as its market share and efficiency gains exceed its expected costs due to predatory pricing litigation expenses and a potential adverse judgment. At the point where any further price reduction would create greater expected losses than gains, predatory pricing law places a floor on the firm’s movement toward marginal cost pricing. Thus, predatory pricing law may keep prices above competitive levels even if it is not intentionally misused.

Although predatory pricing law’s creation of such a pricing floor appears to impose social costs, it is necessary to take into account the possibility that the pricing floor is optimal because any further price cuts would be unsustainable and therefore would result, in the long run, in monopoly pricing even further distanced from the marginal cost optimum. Thus, if predatory pricing law placed a pricing floor at the Ramsey pricing level, social welfare might still be optimized, given the constraint that firms need to cover total costs. Typically, however,
it will be difficult to determine whether a particular firm accused of predation has engaged in Ramsey pricing since predatory pricing litigation focuses on whether the defendant’s product is competitive with the plaintiff’s product, and not on the demand elasticities for all products in the defendant’s product portfolio.\textsuperscript{169} Any claim that predatory pricing law achieves the social optimum by forcing a firm to price above marginal cost and therefore ensures that equally efficient competitor firms, pricing at the same level, could cover a pro rata share of joint and common costs is generally unverifiable in the context of predatory pricing litigation.\textsuperscript{170}

Even conceding that some pricing floor above marginal cost would be optimal in some cases, there remains the possibility that predatory pricing law may set the floor above the optimal level. Conversely, the absence of predatory pricing law could result in prices falling temporarily below the Ramsey price, and even below marginal cost, creating an initial allocative inefficiency due to overconsumption, and ultimately resulting in monopoly pricing after weaker firms are excluded from the market and then an even greater long-run allocative inefficiency due to deadweight losses. The optimal pricing point is a generally unknowable abstraction that can rarely be pinpointed in actual cases. Wherever the optimal point resides, though, it is clear that the presence or absence of predatory pricing law could exert an upward pull away from the optimal pricing point.

The potential of predatory pricing law to induce deviations from optimal pricing has been previously considered, but with more limited assumptions than those postulated here. Paul Joskow and Alvin Klevorick consider the social costs of predatory pricing law as a question of false positives and false negatives.\textsuperscript{171} Their discussion largely assumes that the social costs of predatory pricing rules arise from er-

\textsuperscript{169} The process of adjudicating predatory pricing cases differs considerably from establishing optimal prices for regulated industries. See Kenneth E. Train, Optimal Regulation: The Economic Theory of Natural Monopoly 115–40 (1991) (discussing Ramsey pricing solutions for regulated industries); see also Jerry Hausman & Howard Shelanski, Economic Welfare and Telecommunications Regulation: The E-Rate Policy for Universal-Service Subsidies, 16 Yale J. on Reg. 19, 34–36 (1999) (discussing the distributional costs and welfare-maximizing benefits of Ramsey pricing solutions in telecommunications regulation). In a predatory pricing case, the court is not called upon to determine the optimal pricing in the relevant market given elasticities of demand in all other affected markets, but only focuses on the single market under consideration.

\textsuperscript{170} See Bolton et al., supra note 8, at 2272 (noting that allocating joint and common costs is an “undertaking that lacks a precise methodology and is particularly unsuited to jury resolution”). Ramsey pricing requires allocation of the joint and common costs by reference to the demand elasticities of the various products in the firm’s portfolio. See supra note 162 and accompanying text. But the difficulty of discovering the socially optimal pricing point goes beyond merely finding a rational way to allocate joint and common costs.

\textsuperscript{171} See Joskow & Klevorick, supra note 163, at 223.
ror in the ultimate disposition of predation cases.\textsuperscript{172} Similarly, Easterbrook considers the costs of legal action for predation to arise from false positives that "choke off desirable price reductions."\textsuperscript{173} While these observations are correct, they do not describe all of predation law's effects on pricing behavior. The mere availability of a predatory pricing cause of action for ostensibly injured competitors would create social costs even if the predation offense were perfectly defined and adjudication always accurate. As discussed in the previous section, a firm could make its rival reluctant to engage in nonpredatory price cutting by threatening to raise the rival's costs through litigation or engage in strategic predatory pricing litigation to organize a cartel. Further, whether or not a competitor strategically misused predatory pricing law, the costs of predatory pricing litigation could induce a firm to refrain from price cutting because the litigation costs would exceed any profitability gains from the price cutting. Thus, even specification of the correct substantive rule of predatory pricing and perfection in adjudicatory results would entail social costs because the mere fact that courts will hear predation suits will induce some firms to forgo procompetitive price cuts.

If predatory pricing law exists at all, it will inevitably exert a pull away from optimal pricing. If the predation cause of action were abolished, the absence of predatory pricing law would also induce a deviation from optimal pricing. Ideally, one would like to know whether the existence or absence of predatory pricing law would exert a greater deviation. To study that empirically, however, one would need to compare an economy in which predation was perfectly legal with one in which it was illegal. The incidence and costs of predatory pricing in a regime without any predatory pricing prohibition has been the matter of considerable academic controversy, but remains highly speculative.\textsuperscript{174} It is unlikely to be ascertained empirically except by reference to historical case studies of particular firms from the time period before the adoption of the Sherman Act,\textsuperscript{175} since predatory

\textsuperscript{172} Joskow and Klevorick acknowledge the possibility of "harassing litigation . . . brought by competitors seeking to protect themselves," but believe that these costs would be minimized by the types of per se rules they reject. \textit{Id.} at 242.

\textsuperscript{173} Easterbrook, \textit{supra} note 149, at 322.

\textsuperscript{174} \textit{Compare} Bork, \textit{supra} note 1, at 144 (arguing that "[u]nsophisticated theories of predation . . . [have led] to drastic overestimations of its likelihood"), \textit{and} Easterbrook, \textit{supra} note 149, at 264 (opining that "there is no sufficient reason for antitrust law or the courts to take predation seriously" and that predatory pricing strategies may be so common "for the same reason that 600 years ago there were a thousand positions on what dragons looked like"), \textit{with} Bolton et al., \textit{supra} note 8, at 2241 (arguing that predatory pricing is significantly more common than Chicago School proponents have argued).

\textsuperscript{175} In particular, there has been a well-known debate over whether Standard Oil engaged in predatory pricing in the pre-Sherman Act period. \textit{Compare} John S. McGee, \textit{Predatory Price Cutting: The Standard Oil (N.J.) Case}, 1 J.L. & ECON. 137 (1958) (arguing that Standard Oil did not engage in predatory pricing), \textit{with} Elizabeth Granitz & Benjamin
pricing has long been illegal in the United States and in most other countries with similar economic cultures.\textsuperscript{176} Any studies of business behavior today are affected by the fact that predatory pricing is illegal.\textsuperscript{177}

Short of eliminating the predation theory to test Bork and Easterbrook’s view that predation would rarely occur in an unregulated state, it is impossible to be certain how pervasive predation would be or how long its effects would endure. Given that predation remains unlawful and the experiment suggested is unlikely to be carried out, the most salient question is how predatory pricing law’s pull away from marginal cost pricing can be minimized. Consideration of various factors affecting the administration of the predatory pricing remedy and the incentives they create with respect to pricing provides a framework for assessing the optimality of predatory pricing law, given its effects on firms’ incentives to engage in vigorous price competition and disincentives to engage in predation. For convenience, these factors are addressed in two parts. The first concerns the incentives created by the likelihood of detection, the amount of gain or loss resulting from both predatory and nonpredatory price cuts, and the effects of the treble damages remedy. The second part concerns the effects on pricing behavior of unpredictability in legal outcomes, risk aversion, and systematic biases toward false positives or negatives.

1. \textit{Likelihood of Detection, Gain/Loss Asymmetries, and the Treble Damages Remedy}

Consider the perspective of a firm with a large market share that is considering cutting its prices to meet competition from a new entrant. In Scenario A, the firm’s intentions are predatory and the price cut will only be profitable if it succeeds in excluding the new entrant and permitting the firm to price above competitive levels. In Scenario B, the price cut is not predatory and is profit-maximizing simply as a response to new competition.


\textsuperscript{177} See, e.g., Roland H. Koller, \textit{The Myth of Predatory Pricing: An Empirical Study}, Antitrust L. \\& Econ. Rev., Summer 1971, at 105 (examining litigated cases of alleged predatory pricing and determining that they did not in fact involve predation); Snyder & Kauper, supra note 20, at 572–73 (same).
In Scenario A, whether the firm decides to cut its price is a function of (i) the likelihood that its predation will be detected, (ii) the expected cost if it is detected, and (iii) the profitability if it is not detected. As to (i), predatory pricing is relatively likely to be detected if it occurs. Most of the behavioral and game theory literature that has sought to rehabilitate predatory pricing's status has relied on reputation effects to bolster the plausibility of the offense. For example, Bolton, Brodley, and Riordan's argument that predation is more likely to occur than the Supreme Court and Chicago School theorists have asserted is largely based on signaling strategies, reputation effects, and the communication of information to financial markets. Thus, the silent, unobserved predator is inconsistent with today's most popular theories of predation.

There is one possible exception. Under the cost signaling theory, "a predator drastically reduces price to mislead the prey into believing that the predator has lower costs, inducing the prey to exit the market." Since this theory of predation assumes deception by the predator, it is possible that the prey will wrongly assume that its exclusion from the market was due to its own inefficiency. The deceived prey never becomes aware of the predation and consequently never brings suit, thus allowing the predatory pricing to go undetected. However, even under the cost signaling theory, the deception is short-lived because of the predator's need to recoup the costs of the concealed predation scheme. Once the predator begins to recoup, it runs the risk of revealing the deception to the prey, as well as other firms. However, by this time reentry barriers might become high enough to successfully prevent the deceived prey from challenging the predator's hegemony. This "deceit, followed by realization too

178 See Easterbrook, supra note 149, at 330.
179 See Bolton et al., supra note 8, at 2299–310 (devoting an entire section to discussing a reputation-effect predatory pricing strategy); Yun Joo Jung et al., On the Existence of Predatory Pricing: An Experimental Study of Reputation and Entry Deterrence in the Chain-Store Game, 25 RAND J. ECON. 72, 73 (1994) (stating that the chain-store game experiment it conducted supports the reputation-based argument); Alvin K. Klevorick, The Current State of the Law and Economics of Predatory Pricing, 83 AM. ECON. REV. (PAPERS & PROCS.) 162, 163 (1993) (observing recent scholarship that analyzed how an incumbent could use predation to build a reputation for toughness and thus discourage potential new market entrants); David M. Kreps & Robert Wilson, Reputation and Imperfect Information, 27 J. ECON. THEORY 253 (1982) (analyzing the reputation effect in the predatory pricing situation); Paul Milgrom & John Roberts, Predation, Reputation and Entry Deterrence, 27 J. ECON. THEORY 280 (1982) (using game theory analysis to show that predation may be rational against new entrants because it yields a reputation that deters entrants); John Roberts, A Signaling Model of Predatory Pricing, 38 OXFORD ECON. PAPERS (SUPPLEMENT) 75 (1986).
180 See Bolton et al., supra note 8, at 2299–320.
181 Id. at 2318.
182 Id. at 2320.
183 Id. (discussing possible scenarios where the reentry barriers are high enough to prevent the deceived prey's reentry).
late" story may account for the success of predation schemes in some cases, but it does not provide a basis to believe that many predation schemes ultimately go undetected. Once the prey learns of the concealed predation scheme during the recoupment era, nothing prevents it from acting on that knowledge and bringing a predatory pricing suit.

Unlike a backroom cartel agreement that will often escape notice, and therefore requires a heightened sanction to deter its commission, predatory pricing, in most cases, will work only if rivals observe and understand it as a predatory commitment that the predator is willing to replicate in the future.\(^\text{184}\) Predator firms should expect that their conduct will not go unnoticed. And, if a competitor observes the conduct and realizes that it is predatory pricing, it is likely that the competitor will sue, which will subject the predator to expensive predatory pricing litigation regardless of the outcome. As to factor (i) in the predator's calculus, then, the likelihood of detection must be considered to be high.

Factors (ii) and (iii) depend on the probability of an adverse judgment. The probability of an adverse judgment, in turn, depends both on whether the Supreme Court and appellate courts have properly calibrated the governing legal standards and whether the courts and jury applying the law to the particular case make any mistakes. In the event of an adverse judgment, the predator will have to pay treble damages and attorney's fees. This amount is likely to be substantially larger than any gain that the firm might make through monopoly pricing after successfully excluding its competitor.\(^\text{185}\) The monopoly gain to the defendant would be higher than the loss to the plaintiff from exclusion, since the defendant would obtain monopoly rents and the plaintiff only a share of the market at the competitive price. But since the damages would be trebled and attorney's fees added, it would take a highly inelastic demand curve for the predator to ensure that the expected monopoly profits could offset potential damages and attorney's fees. Further, as discussed above, if courts or juries ex-

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\(^{185}\) See, e.g., supra notes 50–59 and accompanying text.
hibit leniency toward plaintiffs in computing damages, defendants may expect to see inflated damages calculations.

Given the legal status quo, unless the substantive legal standards are significantly wrong or the adjudication system is systematically biased in favor of false negatives, predatory pricing would seem to be generally unprofitable conduct. It is thus not surprising that so few plaintiffs prevail in predatory pricing cases. There probably are not very many cases of bona fide predatory pricing given the incentives created by the Sherman Act and the courts. Even if Chicago School adherents like Bork, Easterbrook, and McGee are wrong to suppose that predatory pricing would rarely, if ever, occur in an unregulated state, predatory pricing is unlikely to occur frequently, given the likelihood of detection and thus a costly lawsuit, as well as the potential treble damages remedy.

Now consider the firm’s incentives in Scenario B—an innocent price cut by a dominant firm in reaction to new entry. Whether the firm decides to cut its price is a function of (i) the likelihood that it will be wrongly sued for predatory pricing, (ii) the expected costs of the suit (including both costs that are independent of the ultimate outcome and the possibility of an erroneous adverse judgment), and (iii) the profits that the firm will earn if it cuts its price.

As to (i), many nonpredatory price cuts by firms with a large market share give rise to unmeritorious lawsuits, some of which are dismissed early in the litigation, but many of which are dismissed only at the summary judgment stage after many litigation costs have already been incurred. The unmeritorious lawsuit is particularly likely to arise where the dominant firm has achieved economies of scale or other efficiencies that a new entrant has not achieved, and thus the price cut threatens the profitability of the new entrant. By filing the predatory pricing suit against the dominant firm, the new entrant borrows sufficient time to become viable. The strategic benefits of predatory litigation probably increase the incidence of predation suits that are unlikely to succeed on the merits. Hence, the dominant but

186 See supra text accompanying notes 40–44.
187 See Bolton et al., supra note 8, at 2258–59 (discussing poor success rate of predatory pricing cases in the last decade).
188 See, e.g., Bork, supra note 1 (arguing that predation should be unregulated because predatory pricing is rare).
189 Bolton et al., supra note 8, at 2259–60.
190 Edlin sees the incumbent firm’s greater economies of scale as a reason to prohibit price cuts for twelve to eighteen months following the new firm’s entry. See Edlin, supra note 8, at 968–69. Elhauge responds that the incumbent’s price cuts may be justified as a response to the fact that the new entry disrupts optimal price-discrimination schemes and lowers the incumbent firm’s efficiency. Elhauge, supra note 25, at 745–46.
191 See Edlin, supra note 8, at 965 (stating that the new entrant needs time to recover entry costs and become viable).
innocent firm that considers cutting its price in response to new competition must take into account the very real possibility of an unmeritorious predation suit.

As to factors (ii) and (iii), the costs of false positives to the defendant are high—leniency in proof of damages, which are then trebled, and attorney’s fees.\(^{192}\) By lowering its price, the defendant will only obtain profits at a competitive rate of return since the price cut is not one that creates monopoly power. In order for the price cut to create an expectation of profits, the expected profits from the increase in sales must exceed the expected probability of the suit times the cost of defending the suit plus the probability-adjusted costs of an adverse judgment. Since litigation costs and the costs of an adverse judgment are many times larger than the profits from the price cut, even relatively small likelihoods of suit and of an adverse judgment can give the price cut a negative expected value.

These two scenarios suggest that, given the current legal status quo, predatory pricing is highly unlikely to occur, while predatory pricing law is likely to chill procompetitive price cutting in many cases. The next question is whether firms’ preferences with respect to risk, the uncertainty of adjudication, and the presence of systematic directional biases in the adjudication of predatory pricing cases ameliorate or aggravate predatory pricing law’s tendency to create deviations from socially optimal marginal cost pricing.

2. Unpredictability, Risk Aversion, and Adjudicatory Error

Predatory pricing litigation is an unpredictable enterprise. The legal standards governing predation claims require examination of complex economic facts, such as whether costs exceeded revenues and whether defendant would have been able to recoup the costs of below-cost pricing.\(^{193}\) Even tests meant to provide clear guidance on permissible and impermissible pricing behavior leave open significant space for adjudicatory ambiguity. For example, Areeda and Turner’s average variable cost test\(^{194}\) is often thought to meet Areeda’s admonition that antitrust rules should provide “clarity [that] guides conduct, simplifies planning, minimizes conflict, [and] reduces resort to the courts.”\(^{195}\) But the meaning of the average variable cost test is not as clear, either in concept or application, as Areeda and Turner might have hoped; there is secondary literature by prominent economists on

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\(^{192}\) See supra text accompanying notes 40–46.


\(^{194}\) Areeda & Turner, supra note 25, at 716–18.

what it means for a cost to be fixed or variable. Further, determining which costs are fixed or variable in a particular case requires complex expert testimony. Other proposed legal frameworks for adjudicating predatory pricing claims tend to be even more complex and create even greater adjudicatory uncertainty.

The structure of predatory pricing law does not provide business executives a high degree of certainty about the legal reception of price cuts. The social welfare effects of this uncertainty are not necessarily negative—uncertainty could keep firms from straying too close to the line. But predatory pricing is not like many forms of tortious conduct where discouraging activity on the borders of illegality is socially beneficial because the borderline activity is of low social value. On the contrary, price cuts that drive prices down toward marginal cost are of high social value. They create ever-increasing gains until they reach the tipping point where they exclude competitors and threaten to cause long-run price increases.

Risk aversion also contributes to firm behavior with respect to price cuts. Even if the likelihood that the firm will be condemned as a predator is relatively low, given the inherent uncertainty in the law of predation, it is a possibility that relatively few dominant firms can rule

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196 See, e.g., William J. Baumol, Predation and the Logic of the Average Variable Cost Test, 39 J.L. & ECON. 49 (1996) (concluding that any individual price that is not below the average variable cost is not predatory, if variable costs are understood as avoidable costs).

197 McGahee v. N. Propane Gas Co., 858 F.2d 1487, 1504 n.38 (11th Cir. 1988) ("When average variable cost is appropriate to use, as well as determining what costs are variable, is an issue of fact requiring expert testimony."); Broadway Delivery Corp. v. United Parcel Serv. of Am., 651 F.2d 122, 131 (2d Cir. 1981) (rejecting plaintiff's argument that defendant priced below average variable cost where plaintiff failed to present expert testimony to this effect).

198 For example, Edlin defends his proposed test requiring the incumbent firm not to cut its prices for twelve to eighteen months following entry by a new firm that prices at least 20% below the incumbent's price on the grounds that it eliminates complex price-quality comparisons and would be more easily administrable. See Edlin, supra note 8, at 949. Elhauge argues that Edlin's rule would create significant new complexities and difficulties of administration. See Elhauge, supra note 25, at 808–21.

199 See generally John E. Calfee & Richard Craswell, Some Effects of Uncertainty on Compliance with Legal Standards, 70 Va. L. Rev. 965 (1984) (arguing that uncertainty in a legal standard will induce individuals to overcomply in order to reduce the chance of being held liable).

200 There may be circumstances where vagueness in liability rules or remedial schemes are superior to predictable rules in deterring undesirable conduct. See Tom Baker et al., The Virtues of Uncertainty in Law: An Experimental Approach, 89 Iowa L. Rev. 443, 449–68 (2004) (using experiments to show that uncertainty in sanctioning increases deterrence). Predatory pricing is not one of these circumstances, because the undesirable conduct is so intertwined with highly desirable conduct. See generally Richard A. Posner, Economic Analysis of Law 243–44 (5th ed. 1998) (arguing that one reason for a ceiling on criminal punishments is because "a savage penalty will induce people to forgo socially desirable activities at the borderline of the criminal activity").
out. Risk aversion also should affect the incidence of predatory price cuts. Managers may be averse to predation strategies both because the chances of successful recoupment are remote, even if the competitor is excluded, and because the probability of detection and an adverse judgment is relatively high. That is to say, predation is a risky strategy in an unregulated state and an even riskier strategy in a regulated state. If losing money in a failed predation strategy and losing money in a large adverse judgment are both psychologically perceived to be risks, then managers may exhibit a bias against predation strategies that have a positive expected value. Thus, while risk aversion may decrease the probability that managers will engage in predatory pricing, it may also increase the costs of predatory pricing law by increasing the probability that managers will forgo nonpredatory price cuts. If managers are sufficiently risk averse, then heavy penalties for predatory pricing may cause substantial social harm by reducing the need to deter predatory pricing and increasing the chilling of innocent price cuts.

Are the corporate managers for dominant firms—the ones mostly likely to engage in predatory pricing or be chilled by predatory pricing law from cutting prices—likely to be significantly risk averse? Dominant firms are generally diversified and are therefore unlikely to be institutionally risk averse. But pricing decisions for particular products are often made by managers with responsibility for only the particular products at issue, not the firm's overall portfolio. Those managers are likely to be risk averse with respect to pricing decisions that affect their personal compensation and reputation within the firm. The firm may try to overcome this agency cost by aligning the managers' interests with the firm's interest by giving the managers stock options and long-term employment contracts. Whether such

201 See Calfee & Craswell, supra note 199 (showing that uncertainty about the legal consequences of conduct and risk aversion can lead to suboptimal behavior).
203 Gerla argues that managers in the dominant firm facing new entrants may see not engaging in predatory pricing as a risky strategy because taking no action will result in a loss of market share. See id. at 761-62; see also Harry S. Gerla, A Micro-Microeconomic Approach to Antitrust Law: Games Managers Play, 86 Mich. L. Rev. 892, 906-07 n.69 (1988) (discussing manager behavior in the antitrust context); Chris Guthrie, Prospect Theory, Risk Preference, and the Law, 97 Nw. U. L. Rev. 1115, 1154-55 (2003) (discussing Gerla's manager-focused approach to firm conduct in the antitrust context). But, in analyzing manager's incentives in considering price cuts, it is not sufficient to focus on gains or losses in the market. Expected gains or losses arising by virtue of predatory pricing law itself must also be considered in formulating an optimal legal regime with respect to predatory pricing.
compensation structuring occurs at a sufficient level to overcome individual managers' risk aversion is uncertain. John Lott's empirical study found no significant difference between the executive compensation structures of firms accused of predation and those of comparable firms not accused of predation.\(^{205}\) Lott also found that firms do not structure compensation packages to reward managers for predatory behavior.\(^{206}\) By the same token, there is no reason to believe that dominant firms provide their executives with strong incentives to engage in nonpredatory, but nonetheless legally risky, price cuts.

A final factor to consider is whether there is a systematic bias in the judicial structuring of predatory pricing law or in the adjudication of predatory pricing cases toward either false positives or false negatives. Here, the biases of factfinders and judges may tend in opposite directions.

It would surely be surprising to find that jurors actually understand the substance of predatory pricing law, when the very definition of predation and its elements have long been, and continue to be, debated by the brightest minds in both economics and law. Arthur Austin's interviews of jurors in four antitrust trials, including \textit{Brooke Group}, revealed that "the jurors were overwhelmed, frustrated, and confused by testimony well beyond their comprehension. . . . [A]t no time did any juror grasp—even at the margins—the law, the economics, or any other testimony relating to the allegations or defense."\(^{207}\) Austin reports:

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\text{[A]t no time have I ever encountered a juror who had the foggiest notion of what oligopoly, market power, or average variable costs meant, much less how they applied to the case. Typical is the response I received when I asked a juror whether he remembered average variable cost. The juror replied, "Yes, explain it to me. I still don't know what it means."}^{208}\]

Based on his study of the \textit{Brooke Group} jury, Austin concluded that the jury's verdict for Liggett was based upon sentiments inflamed by a "smoking gun" document from Brown & Williamson's files "in which B&W executives made comments like 'bury them' and 'put a lid on Liggett.'"\(^{209}\)

If jurors are unable to understand the economic requirements of predatory pricing law, then they largely have nothing but a "morality play" involving a dominant firm, often with superior resources and

\begin{itemize}
    \item \textit{John} R. Lott, Jr., \textit{Are Predatory Commitments Credible?} 36–49 (1999).
    \item Id. at 49.
    \item Arthur Austin, \textit{The Jury System at Risk from Complexity, the New Media and Deviancy}, 73 \textit{DENV. U. L. REV.} 51, 54 (1995).
    \item Id.
    \item Id. at 56.
\end{itemize}
files full of smoking gun documents that Posner calls "compelling evidence of predatory intent to the naive," and a smaller, often younger firm that has been "damaged" by the dominant firm's behavior. Although the damage may have resulted from socially beneficial price competition or the smaller, younger firm's comparative inefficiency, it may be that all the jurors understand or care about is that the defendant is a large corporation that damaged a smaller corporation through a series of tactical price cuts.

The Supreme Court's *Matsushita* decision, which directs district courts to play a strong gatekeeping role in antitrust cases in general and predatory pricing cases in particular, evinces a deep suspicion that antitrust juries will be systematically biased against dominant firms and aggressive pricing behavior. *Matsushita* invites district courts in the first instance, and courts of appeal in the second, to scrutinize the economic logic of predatory pricing cases and only permit theoretically sound cases to proceed to the jury. Several courts of appeals have interpreted *Matsushita* and subsequent cases as creating a presumption against predatory pricing claims. *Matsushita* thus creates a counterweight to anticorporate jury tendencies in the form of heightened judicial scrutiny of plaintiffs' predatory pricing claims. This gatekeeping function is separate from the courts' obligation to specify the liability rules governing predation claims. Even if the courts have specified the optimal norms defining predatory and nonpredatory behavior, they may still exhibit a systematic bias against predation claims in their role as arbiters of the plausibility of predatory pricing in particular cases.

This state of affairs leaves, finally, the question of whether U.S. courts—the Supreme Court in particular—exhibit any systematic bias in the creation of liability rules governing predatory pricing. It is difficult to answer this question without engaging the highly contested debate over what should count as predatory or nonpredatory, because one's view of the Court's bias will be largely informed by what one

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213 See, e.g., Advo, Inc. v. Phila. Newspapers, Inc., 51 F.3d 1191, 1196 (3d Cir. 1995) ("Matsushita . . . created a legal presumption, based on economic logic, that predatory pricing is unlikely to threaten competition."); Sitt Spark Plug Co. v. Champion Spark Plug Co., 840 F.2d 1253, 1255 (5th Cir. 1988) ("The *Matsushita* Court [held] that the economic disincentives to predatory pricing often will justify a presumption that an allegation of such behavior is implausible.").
thinks of the Court's precedents. Further, if there is a bias toward underinclusion, it may be an artifact of judicial concern that predatory pricing lawsuits could chill vigorous price competition and be used strategically by competitors.\textsuperscript{214} It is possible that the courts are unbiased in their diagnosis of what conduct is predatory, but nevertheless deliberately tend in the direction of underinclusion following crude intuitions about the likely effects of predation rules on price competition. If so, then the observed bias against predation claims should not count as error, but rather as a deliberate structuring of predatory pricing law to minimize social costs by allowing some marginal cases of predation to go unremedied.

There is no reason to believe that the Supreme Court shares the biases of juries, or the corrective biases of lower courts, in its creation of predatory pricing rules. The Court is certainly influenced by schools of thought and evolving attitudes toward the robustness of markets—the Chicago School has undoubtedly had a significant effect—but this influence does not equate to a general predisposition to err in creating liability rules governing predatory pricing. If an observable adjudicatory bias exists, it is at the level of factfinding and review of facts, not at the level of the creation of legal norms.

3. \textit{Summary of Directional Influences on Pricing Behavior}

How far from the socially optimal pricing point—namely, marginal cost or Ramsey pricing—do predatory pricing laws induce market pricing to stray? Taken together, the various factors discussed above suggest that predatory pricing laws induce a substantial deviation from optimal pricing. To summarize, predation is likely to be detected if it occurs, and antitrust law, with the treble-damages remedy, fee shifting, and liberality in proving damages, provides a heavy sanction if it is. The incentives to engage in predatory pricing—namely, monopoly profits—would have to be enormous to overcome these disincentives to predate. Furthermore, the strategic benefits to plaintiffs of predatory pricing litigation and the magnitude of recoverable damages induce many plaintiffs to file meritless predation suits. Even if plaintiffs' likelihood of success is small, defendants have strong incentives to forgo price cutting both because the costs of defending a meritless suit are large and also because even a small probability of an adverse judgment translates into a significant expected cost given the magnitude of possible damages. Predicting the outcome of a predatory pricing lawsuit is difficult given the inherent complexity in the legal standard and in adjudication. Adjudicatory uncertainty coupled with risk aversion may lead potential predators to forgo predation and

\textsuperscript{214} See \textit{supra} text accompanying notes 5–7.
potential innocent price cutters to forgo price cuts. Finally, there is almost certainly a systematic jury bias against dominant firms that engage in aggressive price cutting, which the Matsushita gatekeeping function of the courts may or may not correct.

Most of these factors point toward the conclusion that if predatory pricing liability rules drew a line at exactly the dividing point between socially beneficial and socially harmful price discounting, they would induce more deviation from optimal pricing than necessary in order to deter predation and would chill many socially beneficial price cuts. In theory, at least, even a very modest form of predatory pricing law might deter socially costly behavior, but a more robust form of predatory pricing law might backfire by chilling aggressive but beneficial pricing behavior. Before considering normative conclusions about the optimal content and structure of predatory pricing law, however, it is worth considering the extent to which theoretical considerations track the influence of predatory pricing law on business culture and practice.

C. Results of In-House Counsel Survey on Influence of Predatory Pricing Law

The literature on predatory pricing law, whether supportive of less or more governmental intervention, generally evinces the assumption that the specification of predatory pricing legal norms will affect the ways in which firms set prices. Those who believe that predatory pricing is relatively common and effective at quashing competition assume that a more aggressive regulatory norm would discourage firms from embarking on predatory campaigns. Those who believe that predatory pricing is relatively uncommon and ineffective believe that the existence of predatory pricing laws induces firms to forgo beneficial price cuts out of fear of getting sued. But what if predatory pricing law, as interpreted by the courts, rarely works its way into the decision-making processes of executives charged with pricing decisions and instead only appears as an ex post revelation when a firm’s lawyers advise it to sue? Then predatory pricing law would have neither a general deterrent effect on predators nor a chilling effect on nonpredators.

Business schools teach little, if anything, about antitrust law in general, and probably particularly little about predatory pricing, which is a specialized and often misunderstood field within antitrust. If business executives are responsive to the incentives that predatory pricing law creates, it is usually because in-house lawyers communicate

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those incentives. To gather data on the extent to which predatory pricing law affects actual business decisions, I conducted a survey of in-house counsel asking a series of questions about the extent to which predatory pricing law is communicated to business executives responsible for pricing decisions.\footnote{16} Although the response rate was poor, the responses given provide some modestly useful information about the influence of predatory pricing law on executive decision making.

In January of 2005, I sent a twenty-five question questionnaire to 919 in-house lawyers selected from the Martindale-Hubbell directory of corporate counsel.\footnote{17} I selected only one attorney per corporation, and I instructed respondents to restrict their responses to matters related to their current employers. I excluded corporations that were highly unlikely ever to encounter predatory pricing issues, such as rate-regulated firms, nonprofit corporations, industry associations, and holding companies. Where possible, I selected the addressee attorney based on a description of the attorney's job functions that included antitrust matters. Since most in-house counsel rosters do not list individuals with antitrust responsibilities,\footnote{18} I sent the survey to many lawyers who might not have any antitrust responsibility and were therefore unlikely to respond.

Seventy in-house attorneys sent back the questionnaire.\footnote{19} All but two identified themselves as individuals responsible for antitrust matters and provided useable responses. While this 8% response rate is low and places limits on the conclusions that one can draw from the responses, there is reason to believe that the respondents represent a more significant proportion of the in-house attorneys with exposure to predatory pricing matters than the general pool of all in-house lawyers: The majority of the respondents work for manufacturing (42%), wholesale (9%), or retail (6%) companies. Further, the majority of the respondents work for large corporations—59% had over $1 billion in annual revenues and 29% had between $200 million and $1 billion in annual revenues. The attorneys who responded were probably more willing than the general population of in-house attorneys to fill out the questionnaire because their firms did face predatory pricing matters. This probable response bias suggests that the survey results provide little information on the effects of predatory pricing law.

\footnote{16} Questionnaire from Daniel Crane, Assistant Professor of Law, Cardozo Law School, to In-House Counsel (Jan. 2005) (on file with author).

\footnote{17} Id. The Martindale Hubbell directory is available at http://www.martindale.com/xp/Martindale/Lawyer_Locator/Search_Lawyer_Locator/corp_search.xml.

\footnote{18} Many smaller corporate law departments probably have no one with antitrust expertise, particularly if the firm seldom faces antitrust matters.

\footnote{19} See Results of Questionnaire from Daniel Crane, Assistant Professor of Law, Cardozo Law School, to In-House Counsel (Apr. 2005) (on file with author).
on corporations generally, they may, however, reflect the situation in large corporations of the kind that are likely to be affected by predatory pricing law.

I designed a series of questions in the questionnaire to uncover the extent to which in-house lawyers communicate with business executives about predatory pricing law in nonlitigation circumstances. Seventy-eight percent of respondents reported that their firms had formalized antitrust compliance manuals or policies. Of the firms that had such policies, a majority—65%—had policies with respect to predatory pricing. A similar majority of respondents—66%—reported that they or other lawyers acting on behalf of their companies had provided advice to business executives about predatory pricing matters. Overall, only 9% of respondents' firms had ever been involved in predatory pricing litigation, which may suggest that information about predatory pricing is frequently communicated to business executives in nonlitigation contexts.

A related series of questions in the questionnaire sought information about the content of the predatory pricing advice provided to business executives. In particular, I was interested to learn the extent to which in-house lawyers provide advice on the appropriate measure of cost below which prices should not be set. Of the firms that have an antitrust compliance manual that contains a provision about predatory pricing, only 32% had manuals that contained information about what measure of cost should be considered in setting prices. Of those, five firm policy manuals establish “cost,” without further description, as the appropriate measure, three establish “average variable cost” as the appropriate measure, and four adopt some other, unspecified measure of cost. When the surveyed lawyers gave direct advice to business executives on predatory pricing, as opposed merely to including it in a policy manual, they were more likely to give instruction on the appropriate measure of cost. Seventy-one percent of the time they gave advice on the appropriate measure of cost. Thirty-two percent of the lawyers advised that “cost” without further description was the appropriate measure, 19% advised that “average variable cost” was appropriate, and the remainder advised that some other measure of cost was appropriate.

220 Indeed, the vast majority of corporations are unlikely ever to confront a predatory pricing issue because there is no dominant firm in their market or because their industry cost structure does not lend itself to predation or predation claims.

221 Predatory pricing was defined in the questionnaire to include “any claim that a price was too low and therefore exclusionary of competition.” See Questionnaire from Daniel Crane, supra note 216. International dumping claims were excluded from this definition. In order to exclude responses concerning the pre- Matsushita and Brooke Group era, respondents were instructed to limit their responses to matters within the past fifteen years. See id.
Another line of questions sought to elicit information relevant to a theoretical claim made earlier in this paper—namely, that firms can strategically misuse predatory pricing law to chill price competition. I asked respondents: "Has your company ever received a communication (whether formal or informal) from a competitor or other company to the effect that your company was charging a predatory price?" Nineteen percent responded "yes," 78% responded "no," and 3% responded that they did not know. Interestingly, litigation followed the predatory pricing complaint only 54% of the time, which is consistent with the view that firms may seek to stymie price competition by merely invoking predatory pricing law in response to a competitor's price cuts.\(^2\)  
I also asked the respondents whether their own company had ever complained to a competitor that its prices were predatory. Seven percent stated affirmatively that their companies had done so, 32% stated that they did not know, and 61% stated that their company had not. Only one respondent had ever received a predatory pricing complaint from the government.

A follow-up question asked the respondents who had received a competitor complaint whether the complaint had resulted in the respondent's company charging a higher price. Only one out of twelve respondents who had received a competitor complaint believed that it had resulted in their company charging higher prices. The entire group of respondents was also asked whether they believed that the existence of a predatory pricing offense had any effect on the manner in which their company set its prices. Seventeen percent answered "yes," 76% answered "no," and 7% said they did not know. A follow-up question to those who believed that predatory pricing law had affected the manner in which their company set prices asked whether it had resulted in higher prices, lower prices, or simply "differently" set prices. Only three out of ten respondents chose "higher"; the other seven chose "differently."\(^3\)  
The respondents were also asked whether they believed that predatory pricing law had any effect on the way in which their competitors priced. Only four respondents said "yes"; the others split between "no" (50%) and "don't know" (44%).

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\(^2\) A further series of questions in the questionnaire sought information on the outcome of litigation if any did occur. In the six cases where private litigation occurred, the defendant won summary judgment four times, one case ended in a settlement, and one case resulted in some other, unspecified outcome. See Results Questionnaire from Daniel Crane, supra note 219.

\(^3\) The implications of the “differently” response are unclear. Most likely, respondents who chose this category were unwilling to commit to the view that their firms had charged higher prices as a result of predatory pricing law, although they had seen evidence that the firm had restructured some pricing scheme—for example, by eliminating a price discrimination mechanism or a bundled rebate program—in response to predatory pricing law.
Although the poor response rate and small response pool limit the conclusions that can be drawn, the responses suggest the following tentative observations: At least some rudiments of predatory pricing law are broadly communicated to executives in large corporations involved in pricing decisions in manufacturing, retail, and wholesale industries. Not surprisingly, given the division among lower courts on the appropriate measure of cost governing predation claims, the advice given to corporate executives often does not include specification of a particular cost threshold below which revenues must not fall. Although some firms have adopted average variable cost as the presumptive standard, the advice usually appears to be more general. Competitor complaints about aggressive pricing are not pervasive, but occur with some regularity. They result in litigation only about half of the time but may have effects on pricing even when litigation does not occur. Finally, it is difficult for in-house lawyers to find a direct causal relationship between predatory pricing law and higher prices. Pricing decisions are complex and multifaceted, and even when predatory pricing law induces a firm to change its pricing structure, it will not always be clear that a net price increase results.

Missing from this survey is one critical question that the respondents would not have been in a position to answer objectively: whether their firms had ever considered or actually engaged in predatory pricing. If they had, the competitor threats that never resulted in litigation may count as a virtue and the counseling about predatory pricing may have beneficial effects. This question is hard to answer as long as the definition of predation remains unsettled and the economic attributes of exclusion and recoupment highly contested. The most that surveys of this kind can tell us is that predatory pricing law has a high or low degree of influence on business behavior. Whatever the answer to that question, one must still determine what degree of influence on pricing behavior is optimal given the constraints inherent in adjudication. To that question we turn in the final Part.

III
OPTIMAL PREDATORY PRICING POLICY IN LIGHT OF MARKET EFFECTS

Although much has been written about predatory pricing law and the courts have developed a complex body of governing law, many of the hardest and most fundamental questions await conclusive answers. Are predation theories available only to equally or more efficient competitors, or can less efficient competitors whose efficiency development was stymied by predation also assert claims? What is the

\[^{224}\text{See supra notes 24–25 and accompanying text.}\]
appropriate measure of cost below which prices cannot be set?\textsuperscript{225} Does predation necessarily entail the sacrifice of short-run profits, or is predation without sacrifice possible?\textsuperscript{226} Do the same predation rules apply to multiproduct discounting as to single product discounting?\textsuperscript{227} These questions were largely unanswered following the first wave of predatory pricing scholarship in the 1970s and early 1980s and the Supreme Court decisions confronting this issue in the late 1980s and early 1990s, which adopted the Chicago School perspective that predation was rare and predation theory a threat to robust price competition.\textsuperscript{228} Answers to these questions are being, and will continue to be, formulated in the courts and in legal scholarship in a second wave of predatory pricing theory. The second wave of scholarship and judicial development is likely to draw on advances in economic theory, particularly in behavioral economics and game theory,\textsuperscript{229} and these influences may push courts in a direction of greater receptiveness to predation claims.

But even if evolving theoretical insights show predation to be a more common and effective strategy than some had thought, that is an insufficient ground to justify a more robust predatory pricing doctrine. In light of the features of antitrust law and management decision-making that cause predatory pricing law to induce deviations from socially optimal pricing, any movement toward strengthening predation theory must be justified by the creation of net efficiency gains and not merely deterrence of some additional instances of predation. Indeed, even the anemic status quo may go too far if the innocent price cutting it deters, coupled with the costs of predatory...

\textsuperscript{225} See, e.g., supra notes 193–98 and accompanying text.


\textsuperscript{227} See, e.g., Crane, supra note 12 (discussing multiproduct discounting in the antitrust context).

\textsuperscript{228} See supra text accompanying notes 5–7.

\textsuperscript{229} See generally Bolton et al., supra note 8 (developing predatory pricing models using signaling and other strategic-behavior theories); Tor, supra note 8 (applying behavioral theories to predatory pricing).
pricing counseling and litigation, exceeds the costs of predatory price cutting deterred by the existing legal rules.

It is not my purpose here to propose an optimal legal test for predation. Rather, this final Part addresses two different categories of rules that could be applied or modified to alleviate the adverse market effects of predation law. The first set of rules specify decisional criteria courts and antitrust agencies could employ (and perhaps already do, to some extent) in framing predatory pricing liability rules. The second set of rules are ancillary to the substance of predation law and relate to the remedial aspects of predatory pricing litigation in the United States.

A. Decisional Rules

When judges or antitrust regulators are called upon to determine liability rules that may condemn prices as too low, or to determine that a particular firm's pricing behavior was predatory, they wander into a thicket of complex economic theories and dense factual records. The likelihood that they will emerge from that thicket with a pristine set of rules or adjudicatory results creating the right incentives to drive prices toward marginal cost is low. Before entering the thicket, courts and regulatory agencies can choose decisional rules that serve as precommitment strategies to minimize the costs of errors and unintended effects.\footnote{Cf. Meir Dan-Cohen, \textit{Decision Rules and Conduct Rules: On Acoustic Separation in Criminal Law}, 97 \textit{HARV. L. Rev.} 625 (1984) (discussing the choice of initial rules in the criminal law context).}

I suggest three such decisional rules for predatory pricing cases.

1. \textit{Deliberate Underinclusion in Liability Rules}

The over- or underinclusiveness of predatory pricing rules is a frequent topic in scholarship on predation. Aaron Edlin observes, "When setting a legal standard intended to distinguish procompetitive from anticompetitive low prices, courts must balance the possibility of being underinclusive against that of being overinclusive."\footnote{Edlin, \textit{supra} note 8, at 952.} Edlin further argues that "[t]he probabilities of these two types of errors depend . . . upon the underlying plausibility of predatory pricing."\footnote{Id.} But underinclusion need not be an error at all, even if predatory pricing is plausible and frequent. Herbert Hovenkamp aptly notes, "Until antitrust tribunals are able to identify above cost prices as anticompetitive in a reliable manner, a consumer-oriented antitrust policy has no choice but to adhere to the admittedly underdeterrent below cost prices."\footnote{Cf. \textit{Meir Dan-Cohen, Decision Rules and Conduct Rules: On Acoustic Separation in Criminal Law}, 97 \textit{HARV. L. Rev.} 625 (1984) (discussing the choice of initial rules in the criminal law context).}
pricing requirements of the Areeda-Turner or some similar rule.”

Underinclusion—prohibiting less than all predatory and socially costly conduct—could be an optimal decisional strategy if prohibiting the marginal instances of predation would invite greater strategic misuse of predatory pricing law or more self-policed failures to engage in innocent price cuts. Further, the Supreme Court has quite reasonably justified its current approach to predatory pricing as deliberately underinclusive, even without regard to the possibility of false positives, because “above-cost predatory pricing schemes [are] ‘beyond the practical ability of a judicial tribunal to control.’” Even if the exact line separating predation from beneficial price cuts could be identified with analytical precision, courts would be ill-advised to draw the legal line in the same place as the analytical line if the collateral costs to the legal line drawing were great.

Suppose that a court could identify with absolute precision that in x circumstances a price cut would be socially costly in the long run because of its exclusionary impact on competitors. For reasons discussed in Part II, specifying x as the governing legal norm would not be the optimal solution given the structural status quo of antitrust law. Firms tempted to predate by engaging in x would face strong disincentives to do so, given the inherent riskiness of predation strategies, the high likelihood of detection, treble damages, leniency in proof of the amount of damages, mandatory unilateral fee shifting, the costs of defending a predatory pricing lawsuit, and managerial risk aversion. To deter firms from engaging in conduct x, it might be sufficient to specify x + 1 as the liability standard. On the other hand, setting x as the legal standard would induce innocent price cutters in circumstances x – 1 and perhaps even x – 5 to forgo socially beneficial price cuts, given the risk of adjudicatory error, the costs of defending even a successful suit to conclusion, and the disproportionate costs in the event of an adverse judgment. Further, setting the liability rule at exactly x would provide greater opportunities for firms to use predatory pricing law strategically to organize tacit collusion schemes than if the liability rule were set at x + y. Thus, even if a court were absolutely confident in x as the correct analytical line, setting the substantive liability rule at x + y would produce a more efficient outcome.

233 Hovenkamp, supra note 11, at 314–15.
235 The risk of adjudicatory error simply cannot be eliminated by courts, even if courts have a high degree of confidence in the correctness of the substantive liability rule.
Courts and antitrust enforcement agencies should adopt a decisional rule with respect to predatory pricing that mandates deliberate underinclusion in the specification of the liability rule. The degree of the deliberate underinclusion should be determined not only by the court's certainty in the soundness of its decision-making but also by an appreciation of the degree to which predatory pricing law discourages innocent price cuts. If, as I have suggested here, predatory pricing law's tendency to induce deviations from optimal pricing is strong, then the additive factor should be substantial.

2. Deliberate Underinclusion in Adjudication

The underinclusion rule just described would apply to the specification of the governing liability rules. A similar set of principles could be—and may already be—applied to judicial supervision of the adjudicatory process. Although liability rules might be thought to operate on incentives ex ante and adjudicatory rules only ex post, the predictions that business executives make with respect to the outcome of predatory pricing adjudications will also influence their incentives ex ante. Particularly if executives perceive—probably with good reason—that jurors are systematically predisposed to false positives in predatory pricing cases, the effects on price competition could be deleterious.

As discussed in Part II, Matsushita suggests that the solution to juror bias is for courts to scrutinize carefully the soundness of predation theories at the summary judgment stage. While this may work out to a mandate of deliberate adjudicatory underinclusion of cases given to juries, there are more explicit ways to achieve the same result. For example, standards establishing the necessary quantum of evidence can operate to optimally calibrate social behavior when adjustments in the liability rule are inadvisable. If there are expressive or operational constraints on deliberate underinclusion in the specification of the liability rule for predatory pricing, then the costs of maintaining a prohibition on predatory pricing could be minimized by requiring plaintiffs to prove predation by some heightened quantum of proof—for example, clear and convincing evidence. Specifying a heightened quantum of proof would still result in deterrence of predatory pricing, given the significant costs of an adverse judgment, and it would make some innocent price cuts less likely to be precluded by the existence of predatory pricing law.

237 See id. (online manuscript at 23).
Both forms of deliberate underinclusion could be used simultaneously to create an optimal structure of incentives. For example, adopting the average variable cost test as a necessary condition for predation and requiring proof of predation by clear and convincing evidence might produce superior results even if there were clearly identifiable instances of above average variable cost predation and even though the evidentiary rule would sometimes excuse below average variable cost price cutters.

3. Bright-Line Liability Rules

Ex ante uncertainty over adjudicatory results combined with managerial risk aversion makes it likely that some firms will forgo innocent price cuts that come close to the predation line, even in the absence of a competitor's threat to sue. If the predation line is fuzzy, the chilling effects are compounded. As the survey results discussed in Part II.C reveal, business executives in industries susceptible to predation and predation claims are being told that they must not price below cost, but they often are not being told what cost means. If the academic and judicial debates over the conceptualization of predation have shown anything, it is that the differences between various possible cost standards are highly significant. If business executives are internalizing the general predation advice they are given, they could be led to self-police according to a widely varying range of interpretations of what predation means.

Despite its concern over chilling vigorous price competition, the Supreme Court has been reticent to establish a bright-line cost standard. Three times it has declined to adopt a specific measure of cost.\textsuperscript{238} Although these specific cases could be justified on the grounds that the cost issue was not directly presented,\textsuperscript{239} the Court has also shown no interest in granting certiorari in cases where the issue was squarely presented.\textsuperscript{240} The Supreme Court's reticence to establish bright-line predation standards is not limited to the question of the appropriate cost measure. The Court recently denied certiorari in a case involving the appropriate treatment of bundled rebates—a form of multiproduct price discounting—after the Solicitor General, Justice Department, and Federal Trade Commission advised that it would be better to deny certiorari because the issues presented were

\textsuperscript{238} See supra note 10.

\textsuperscript{239} For example, in \textit{Brooke Group} the parties agreed that average variable cost was the appropriate measure. See 509 U.S. at 222 n.1. This is as one would expect given that Philip Areeda represented Liggett and Robert Bork represented Brown & Williamson. See id. at 211.

“novel and difficult” and because the Third Circuit’s en banc "ruling
does not conflict with the decisions of any other court of appeals."\textsuperscript{241}

A policy favoring incremental decision-making, lengthy incubation of experimentation in the lower courts, and multifactored balancing tests may be appropriate in many circumstances, but these are poor strategies for the administration of a predatory pricing regime. Uncertainty over the governing legal standards imposes barriers to efficient price competition. Particularly given the desirability of underinclusion, the courts should precommit to draw bright-line, underinclusive predation rules at the earliest opportunity. Examples of desirable predation rules include complete immunity against predation claims for firms with market shares below particular thresholds, per se legality for prices above the specified cost threshold, and well-defined safe harbors for mixed bundling schemes.\textsuperscript{242}

Given the uncertainty costs of predation law and the glacial pace of Supreme Court rulemaking in antitrust, it is doubtful that the creation of predation liability rules through incremental common-law development is desirable. Agency rulemaking of prospective pricing rules would be superior, although neither the Justice Department nor the Federal Trade Commission (FTC) currently has the statutory authority to make predation rules that would apply to private predation lawsuits, the primary source of concern.\textsuperscript{243} If the predatory pricing cause of action is to be maintained, Congress should consider delegating such rulemaking authority to the FTC.

Bright-line rules are not a panacea in predation law. As discussed above, even when the cost standard is clearly articulated, its meaning and application is complex and uncertain. However, a greater degree of clarity in the specification of the predation offense would be a beneficial incremental step toward minimizing the chilling effects of predation law.

B. Remedial Rules

Much of the reason that predation law exerts a pull away from optimal pricing, requiring the suggested adjustments to liability and adjudicatory rules suggested above, has to do with the remedial structure of U.S. antitrust law. In particular, the treble damages remedy,


\textsuperscript{242} See, e.g., Thomas A. Lambert, Evaluating Bundled Discounts, 89 MINN. L. REV. 1688 (2005) (discussing possible theories of predatory pricing in the bundled discounts context).

\textsuperscript{243} The FTC has the authority to promulgate substantive competition rules, although any such rules would not apply to private lawsuits under the Sherman Act. See Nat'l Petroleum Refiners Ass'n v. FTC, 482 F.2d 672 (D.C. Cir. 1973).
unilateral fee shifting, competitor enforcement, and liberal discovery rules provide opportunities for abuse. Alterations of some of these features of antitrust law in predatory pricing cases could have significant positive effects without losing the primary deterrent value of predatory pricing law.

1. Eliminating the Treble Damages Remedy

The incentive dislocations caused by the treble damages remedy in predatory pricing cases have long been observed. As discussed in Part II.B, the traditional justifications for the treble damages remedy in antitrust have little force as applied to predatory pricing, which is unlikely to go undetected. Further, as Easterbrook has shown, trebling in predatory pricing cases takes place over a baseline damages award typically measured by a competitor's lost profits, which bears no relationship to the optimal damages necessary to deter predation. And this observation works apart from the fact described in Part I.A that the culture of antitrust damages awards—strictness on causation and antitrust injury but liberality on proof of amount of damages—systemically inflates damages awards in predatory pricing cases. Together, these features of antitrust law have costly consequences for firms' incentives to engage in vigorous price competition.

It is difficult to see the justification for keeping the treble damages remedy in predatory pricing cases, given its tendency to discourage price cuts approaching the legally established price floor. One possible argument is that single damages would lead to undeterrence because if predatory pricing has a less than 100% detection rate, the expected gains from predation would be positive. This argument not only wrongly assumes that a competitor's lost profits are a fitting starting place for deterring would-be predators, but it also ignores the fact that other features of antitrust litigation—statutory fee shifting, the defendant's costs of defense, reputational costs with customers and shareholders, and managerial risk aversion—provide significant deterrent weight over the amount of the damages award. Further, if liberality in proof of damages continues to be the practice in those cases where predatory pricing is established, then little more incentive is necessary to deter predation given the likelihood that it will be detected. Eliminating the trebling rule for predation cases.

244 See Baumol & Ordover, supra note 21, at 263 ("One should consider both the use of a multiple smaller than three, at least in those types of cases, such as predatory pricing . . . and in some types of cases one might even consider [single damages]."); Easterbrook, supra note 149, at 329–30.
245 See Easterbrook, supra note 149, at 327.
246 See id.
would be a simple way of minimizing the costs of predatory pricing law.

2. Eliminating Competitor Standing

The chilling effects of predation law do not arise exclusively from the fact that competitors are the primary enforcers, but almost so. Virtually every private predatory pricing case is brought by a competitor, and competitors have unique incentives to misuse predatory pricing law to chill price competition. Competitors want to see higher prices both in the short run and in the long run. The law tolerates their complaint that prices were too low because of their further allegation that the low prices would eventually lead to higher prices. But the law does not require proof of actual higher prices. In an attempted-monopolization-through-predatory-pricing case, it is sufficient to prove that defendant’s low prices created a dangerous probability of subsequent higher prices. Thus, competitor-plaintiffs are often in the position of asserting that defendant’s prices were anticompetitively low merely based on the speculation that, left unchecked, defendant would have driven plaintiff from the market and raised its prices—even though that never actually happened.

Giving firms the standing to challenge their rivals’ prices as too low on the theory that higher prices might eventually emerge is like asking the fox to guard the henhouse. Consumers—the intended beneficiaries of antitrust law—have exactly the opposite incentives as competitors. They prefer sustainably low prices and therefore make far better-intentioned predation enforcers than business rivals of the predator. If predatory pricing were a frequent and successful enterprise, one would expect to see many class action lawsuits by overcharged consumers. Such lawsuits are extremely rare, which is probably more a testament to the absence of successful predation schemes than to consumers’ deficiencies as enforcers. The collective action problems necessary to organize such suits are unlikely to be

247 See supra note 3.
248 See Herbert Hovenkamp, Tying Arrangements and Class Actions, 36 Vand. L. Rev. 213, 236–37 (1983) (discussing the possibility of class action lawsuits for overcharges following predatory pricing and recoupment).
249 Such a class action is pending against 3M following a jury verdict by 3M’s rival, LePage’s, in a case involving allegedly exclusionary bundled rebates. See supra note 12. The case has a number of difficulties. At least one of 3M’s ostensibly injured customers and plaintiff class members—Staples—joined an amicus curiae brief urging the Supreme Court to reverse LePage’s jury verdict. See Brief for The Boeing Co.; Brunswick Corp.; Caterpillar Inc.; Honeywell International Inc.; Northwest Airlines, Inc.; Staples, Inc.; and Xerox Corp. as Amici Curiae in Support of Petitioner, 3M Co. v. LePage’s Inc., 124 S. Ct. 2992 (2004) (No. 02-1865), 2003 WL 22428377. Further, since 3M never succeeded in driving LePage’s from the market, the customers were beneficiaries of the allegedly predatory prices without having to endure a period of recoupment.
significantly greater than those for collusion cases brought by consumers, which are not at all infrequent. Consumers may be ill-positioned to detect predation as compared to competitors, but that should not be a serious obstacle to reliance on consumers as the primary predatory pricing enforcers. Injured competitors would still have an incentive to be on the lookout for instances of predatory pricing and could communicate that information to plaintiffs’ class action lawyers who also share those incentives.

Of all the remedial proposals suggested here, Easterbrook’s suggestion that “[w]e should abandon reliance on competitors’ suits to enforce the rule against predation” would produce the most immediate and profound social gains. Except for the possibility of government enforcement, this would effectively eliminate liability for attempted monopolization through predation, since consumers would have no standing to complain of below marginal cost prices that failed to exclude a competitor or led to recoupment. As discussed in Part II.A, such pricing is allocatively inefficient, but of less concern than monopoly pricing, because the harmful effects on consumers are less certain. The law’s interest in deterring monopoly pricing is much stronger than its interest in deterring mistaken, nonpredatory below-cost prices, which are likely to be quickly self-correcting.

Eliminating competitor predation suits would make predation an actual recoupment offense. This would eliminate the bizarre feature of many predatory pricing cases where the only misconduct alleged is prices that were too low and no proof is offered of resultant higher prices, except in a speculative, predictive sense. It would focus predatory pricing law on the conduct that is actually undesirable—monopoly pricing—and make the conduct that is generally desirable—price cutting—merely a step in the necessary proof. Dominant firms would be incentivized to worry about raising their prices if a competitor exited the market following a price war, but would be far less worried about the initial price-cutting decision. This would put the incentives in the proper places: Price cuts would be encouraged and price hikes following a rival’s exit discouraged. Making consumers the exclusive private enforcers of predation law would result in far fewer predation cases, but with far greater average merit than competitor suits, and

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250 See Easterbook, supra note 149, at 331.
251 Id.
252 Theoretically, consumers could sue for an injunction against attempted monopolization through predation, but the likelihood that consumers would seek equitable remedies in cases without damages is remote.
would vastly diminish the problems of competitor misuse and chilling innocent price cuts.\textsuperscript{258}

3. \textit{Bilateral Fee Shifting}

Part I.A described the possibility that less efficient firms strategically invoke predatory pricing law to raise the costs of their more efficient rivals and thereby discourage aggressive price competition. If this indeed occurs, a simple solution is to make fee shifting bilateral in predatory pricing cases. This would make filing a meritless predatory pricing lawsuit a negative expected value event and drastically undercut the attractiveness of predation as a strategic tool to chill price competition. A bilateral fee-shifting rule would make it impossible for a firm to raise its rival’s costs through predatory pricing litigation unless the underlying claim had significant merit. In an unmeritorious case, the plaintiff would only expect to raise its own costs. If as I suggested in Part I.A, defendants tend to pay more to defend predatory pricing cases than plaintiffs pay to prosecute them, then a bilateral fee-shifting rule would more than double the expected costs of initiating predatory pricing suits, which would help to winnow predation litigation to those cases where a substantial damages award is a significant possibility. Those are the cases in which we should be least worried about chilling price competition and most interested in chilling predation.

By increasing the costs of predatory pricing litigation as a cartel-organizing tool, a bilateral fee-shifting rule would also discourage firms from using predatory pricing lawsuits to try to organize tacit collusion schemes. Firms might still conclude that the expected cost of having to pay both their own fees and their rivals’ litigation expenses would be less than the gains from securing a tacit understanding on pricing, but bilateral fee shifting would significantly reduce the temptation.

A loser-pays fee-shifting regime for predation cases would discourage injured rivals and consumers from suing except in very strong predation cases, particularly given that the defendant’s litigation expenses are likely to exceed the plaintiff’s.\textsuperscript{254} While this might eliminate some meritorious and socially beneficial predation suits, the effects of bilateral fee shifting would be very much like that of requiring proof of predation by clear and convincing evidence, as discussed

\textsuperscript{253} As discussed in the text accompanying notes 104–05, competitors can strategically misuse even government-enforced predation law, and, even if consumers had exclusive private standing, competitors could manipulate their customers for anticompetitive ends. However, eliminating competitor standing would substantially reduce the incidence of strategic misuse by taking away a firm’s right to seek treble damages and attorney’s fees for injuries resulting from its competitor’s low prices.

\textsuperscript{254} See supra notes 35–38 and accompanying text.
above. Given defendants' risk aversion and the costs of being found liable for predation, a remedial scheme that restricted predation suits to those very likely to succeed would still have deterrent effects on predatory conduct closer to the line of legality.

4. Prohibiting Discovery on Pricing and Costs Until Threshold Showing of Market Screens

Part I.B described the possibility that firms use predatory pricing litigation to exchange sensitive business information in discovery and thereby facilitate tacit collusion. Whether or not firms intentionally initiate predation suits in order to seek competitor information for nefarious purposes, predatory pricing litigation almost invariably results in undesirable levels of information exchange. A partial solution to this problem is for courts to order bifurcated discovery "sua sponte," limiting discovery to facts concerning threshold market screens—market power, barriers to entry, and the like—until the plaintiff shows based on these facts that predation was plausible in the relevant market.\(^{255}\) Only after passing the market screen would plaintiff and defendant be allowed information on one another's prices, costs, strategic plans, and other sensitive competitive information. Even then, discovery should be conducted under court-mandated and strictly enforced protective orders limiting access to essential litigation decision-makers only.

There is already some precedent for such bifurcation in predation cases. The parties have consented to it in some cases\(^{256}\) and in other cases it has been ordered by the court.\(^{257}\) Given the large number of predation cases that are dismissed based on market screens,\(^{258}\) this practice would decrease the costs of litigation by initially limiting discovery to issues that are likely to be dispositive. This would save the parties litigation expenses, prevent a free flow of competitive information, and diminish the attractiveness of predatory pricing litigation as a strategic tool.

\(^{255}\) The rule proposed here would correspond with Joskow and Klevorick's proposal for a two-tiered analysis in predation cases. In the first tier, a court would inquire whether the relevant market was structurally susceptible to predation. If the court concluded that it was, the court would proceed to the second tier and consider whether the defendant's pricing behavior was exclusionary. See Joskow & Klevorick, \textit{supra} note 163, at 242–62.

\(^{256}\) \textit{W. Parcel Express v. United Parcel Serv. of Am.}, 190 F.3d 974, 975 (9th Cir. 1999) (reporting that defendant prevailed on summary judgment after the initial phase of discovery, which was limited by stipulation of the parties to the issue of defendant's market power).

\(^{257}\) \textit{Rebel Oil Co., Inc. v. Atl. Richfield Co.}, 133 F.R.D. 41, 45 (D. Nev. 1990) (limiting discovery to facts concerning barriers to entry and not permitting discovery as to pricing matters relevant to predatory pricing claims until plaintiff established the relevant market and the existence of barriers to entry).

\(^{258}\) \textit{See supra} note 129.
A practice of bifurcated discovery in predation cases is the easiest to implement of the remedial modifications suggested here because it would not require congressional action. It is also the least effective of the four changes I suggest and would be largely mooted by the elimination of competitor standing and, to a lesser degree, by making fee shifting bilateral. Of the first three proposed changes, eliminating competitor standing would produce the deepest changes in the incentive structure of predation law and would largely remake predatory pricing into an actual recoupment offense. Eliminating competitor suits would also make bilateral fee shifting and permitting only single damages relatively less necessary. If competitors are to continue asserting predation suits, then bilateral fee shifting and eliminating treble damages are a worthwhile pair of remedial statutory changes.

CONCLUSION

The paradox of predatory pricing is that both prohibition and nonregulation unavoidably result in social harm of the same kind—upward deviation from optimal pricing. Left unregulated, some firms would lower their prices to predatory levels to drive out rivals and subsequently recoup through monopolistic prices. At the same time, any prohibition on predatory pricing—no matter how carefully crafted—will cause some firms to forgo socially beneficial price cuts because of risk aversion, adjudicatory uncertainty, and the devilishly tempting opportunity for rivals to abuse a liability rule condemning excessively low prices. Predatory pricing law is, inescapably, a "damned if you do, damned if you don't" enterprise. This observation is not unique to predatory pricing law. Many antitrust liability rules inescapably create disincentives to engage in socially beneficial behavior and provide opportunities for rent-seeking rivals to abuse the legal system to stymie efficient competition. Predatory pricing provides a particularly compelling example of this phenomenon because the benefits of price reduction to consumers are so immediate and obvious and the potential for abuse so correspondingly great.

Much of the disagreement over the optimal content of predatory pricing liability rules seems to be influenced by the degree to which one believes in the risks of false positives and false negatives and, beyond adjudicatory error, the general disposition of firms to deviate from optimal pricing because of, or in the absence of, a legal prohibition on predation. This Article has attempted to give a fuller account of the costs of overdeterrence—particularly as they relate to strategic misuse and the remedial features of U.S. antitrust law. To be sure, overdeterrence is only half of the story, but it is the half that has received less than half of the attention, even though it may account for more than half of the problem. As the theoretic inquiry about the
optimal structure of predatory pricing law continues, it is a part of the story that deserves equal time.

Predatory pricing has been heavily theorized but underexplored empirically. Most of the empirical work on predation has concerned litigated cases—which may not be representative of the wider influences of predation law—and older cases (for example, Standard Oil and the Gunpowder Trust\textsuperscript{259}), which may not reflect present economic realities. Reaching a broad consensus on optimal liability and remedial rules to govern predatory pricing would be much aided by more detailed empirical inquiry into the extent to which firms engage and succeed in pricing strategies designed to exclude rivals or strategically misuse predation law to chill price competition. This Article has suggested several useful lines of inquiry and taken some modest steps toward providing data on the penetration of predation law into business culture and consciousness. Much more work along these lines awaits. In the meantime, deliberate underinclusion in defining and adjudging the predation offense seems the wisest way to handle the predatory pricing paradox.